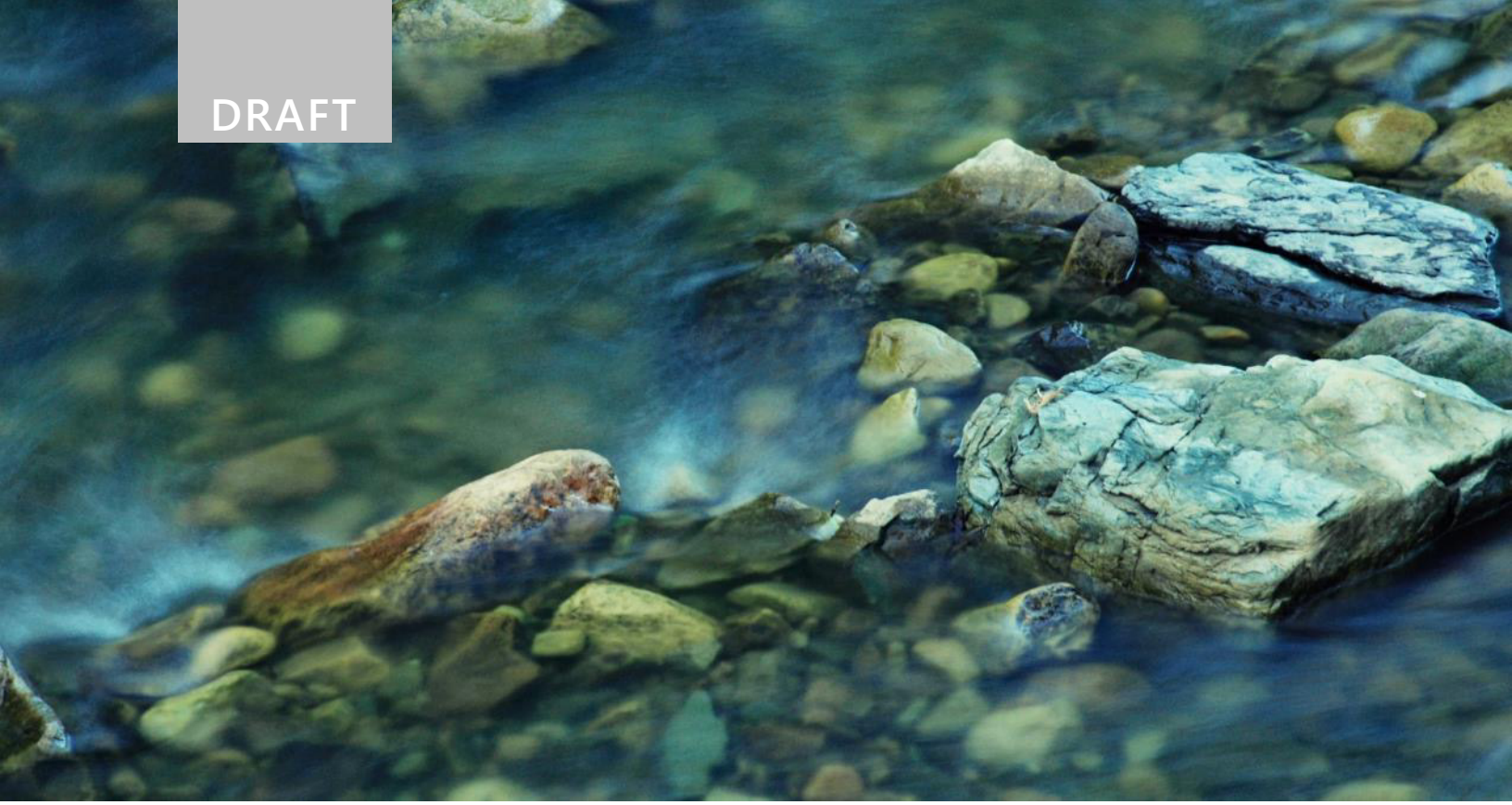
DRAFT



January 2026
Port of Tacoma – Tru-Grit

ANCHOR QEA

Sediment Characterization Report

Prepared for the Port of Tacoma

DRAFT

January 2026
Port of Tacoma – Tru-Grit

Sediment Characterization Report

Prepared for
Port of Tacoma
One Sitcum Plaza
Tacoma, Washington 98401

Prepared by
Anchor QEA
949 Market Street, Suite 700
Tacoma, Washington 98402

Project Number: 240092-03.08

DRAFT

TABLE OF CONTENTS

1 Introduction and Project Summary 1

2 Background 3

3 Sampling Methods, Observations, and Deviations 5

3.1 Sampling Overview 5

3.2 Fall 2024 Investigation 6

3.3 Spring 2025 Investigation 7

3.4 Summer 2025 Investigation 8

3.5 Archaeological Monitoring 8

3.6 SQAPP Deviations 9

4 Quality Assurance/Quality Control 11

4.1 Field Quality Assurance/Quality Control 11

4.2 Laboratory Quality Assurance/Quality Control 11

5 Sediment Testing Results 13

5.1 Conventional and Physical Analyses 13

5.2 Grain Size 13

5.2.1 Lower Slope 13

5.2.2 Upper Slope 14

5.3 Atterberg Limits 14

5.4 Chemical Analyses and Screening 14

5.4.1 Lower Slope 15

5.4.2 Upper Slope 16

5.4.3 Blair Federal Navigation Channel Side Slopes 18

5.4.4 Distribution of Regional Contaminants 19

5.5 Dredged Material Waste Profile Testing 19

5.5.1 80-12 Biological Results 19

5.5.2 Toxicity Characteristic Leaching Procedure 20

5.5.3 Synthetic Precipitation Leaching Procedure 20

6 Conclusion and Next Steps 21

6.1 Site Boundary 21

6.2 Lower Slope Contamination 22

6.3 Upper Slope Considerations 22

7 References 23

TABLES

Table 3-1a Sample Locations, IDs, Coordinates, Elevations, and Intervals Summary – Tru-Grit

Table 3-1b Sample Locations, IDs, Coordinates, Elevations, and Intervals Summary – Landau

Table 3-1c Sample Locations, IDs, Coordinates, Elevations, and Intervals Summary – Blair Federal Navigation Channel Side Slopes

Table 5-1a Sediment Analytical Results Compared to DMMP Criteria – Tru-Grit

Table 5-1b Sediment Core Summary Statistics Compared to DMMP Criteria - Tru-Grit

Table 5-1c Sediment Grab Summary Statistics Compared to DMMP Criteria - Tru-Grit

Table 5-2a Sediment Analytical Results Compared to SMS Criteria – Tru Grit

Table 5-2b Sediment Core Summary Statistics Compared to SMS Criteria - Tru-Grit

Table 5-2c Sediment Grab Summary Statistics Compared to SMS Criteria - Tru-Grit

Table 5-3 Sediment Analytical Results Compared to DMMP Criteria – Landau

Table 5-4 Sediment Analytical Results Compared to SMS Criteria – Landau

Table 5-5 Sediment Analytical Results Compared to DMMP Criteria – Blair Federal Navigation Channel Side Slopes

Table 5-6 Sediment Analytical Results Compared to SMS Criteria – Blair Federal Navigation Channel Side Slopes

Table 5-7 Sediment Core Sample Grain Size Results – Tru-Grit

Table 5-8 Surface Sediment Sample Grain Size Results – Landau

Table 5-9 Sediment Core Sample Grain Size Results – Blair Federal Navigation Channel Side Slopes

Table 5-10 Sediment Core Sample Atterberg Limits Results – Tru-Grit

Table 5-11 Summary of Dredged Material Waste Profile Testing Composites and Biological Testing Results

Table 5-12 TCLP Results

Table 5-13 SPLP Results

FIGURES

Figure 1-1	Vicinity Map
Figure 2-1	Site Physical Setting
Figure 2-2	Historical Features and Previous Sampling Locations
Figure 2-3	Proposed and Actual Sampling Locations
Figure 5-1a	Extent of Site-Associated Heavy Metals Contaminants: Arsenic
Figure 5-1b	Extent of Site-Associated Heavy Metals Contaminants: Chromium
Figure 5-1c	Extent of Site-Associated Heavy Metals Contaminants: Copper
Figure 5-1d	Extent of Site-Associated Heavy Metals Contaminants: Lead
Figure 5-1e	Extent of Site-Associated Heavy Metals Contaminants: Zinc
Figure 5-1f	Distribution of Other Site-Associated Contaminants: Total PCB Aroclors
Figure 5-1g	Distribution of Other Site-Associated Contaminants: Tributyltin
Figure 5-2a	Vertical Distribution of Site-Associated Contaminants
Figure 5-2b	Vertical Distribution of Dioxin/Furans
Figure 5-3	Exceedances Summary for Site Contaminants
Figure 5-4	Distribution of Regional Contaminant Dioxin/Furan Contamination

APPENDICES

Appendix A-1	SQAPP
Appendix A-2	SQAPP Addendum #1
Appendix A-3	SQAPP Addendum #2
Appendix B	Historical Sediment Chemistry
Appendix C-1	Daily Logs
Appendix C-2	Health and Safety Logs
Appendix C-3	Collection Logs
Appendix C-4	Processing Logs
Appendix C-5	Photo Log
Appendix D	Archaeological Monitoring Results Memoranda
Appendix D-1	2024 Archaeological Monitoring Results Memorandum
Appendix D-2	2025 Archaeological Monitoring Results Memorandum
Appendix E	Data Report Index
Appendix F	Analytical Laboratory Reports
Appendix G	Data Validation Reports

ABBREVIATIONS

µg/kg	microgram per kilogram
AET	Apparent Effects Threshold
ARL	Analytical Resources, LLC
bml	below mudline
BT	bioaccumulation trigger
CanAm	CanAm Minerals, Inc.
COC	contaminant of concern
CSL	cleanup screening level
D/F	dioxin/furans
DGPS	differential GPS
DMMP	Dredged Material Management Program
DMMU	Dredge Material Management Unit
Ecology	Washington State Department of Ecology
Enthalpy	Enthalpy Analytical
FNC	federal navigation channel
Gravity	Gravity Marine Services
H:V	horizontal to vertical
HPAH	high-molecular-weight polycyclic aromatic hydrocarbon
Lower Slope	lower slope of the Tru-Grit Site
mg/kg	milligram per kilogram
MLLW	mean lower low water
MSS	Marine Sampling Systems, LLC
NAD83	North American Datum of 1983
ng/kg	nanogram per kilogram
OC	organic carbon
PCB	polychlorinated biphenyls
QA	quality assurance
QC	quality control
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
Port	Port of Tacoma
SCO	sediment cleanup objective
SCR	sediment characterization report
SL	screening level
Slough Area	sediment in the vicinity of the FNC boundary that will slide downslope during and after dredging

SMS	Sediment Management Standard
SP	State Plane
SPLP	synthetic precipitation leaching procedure
SQAPP	*Sampling and Quality Assurance Project Plan*
SVOC	semivolatile organic compound
TBT	tributyltin
TCLP	toxicity characteristic leaching procedure
TEQ	toxic equivalency quotient
TOC	total organic carbon
TS	total solids
TVS	total volatile solids
Tru-Grit	Tru-Grit Abrasives, Inc.
Upper Slope	upper slope of the Tru-Grit Site
USACE	U.S. Army Corps of Engineers

1 Introduction and Project Summary

This Sediment Characterization Report (SCR) presents the results of the 2024 and 2025 sediment investigations performed pursuant to the *Sampling and Quality Assurance Project Plan* (SQAPP; Anchor QEA 2024a; Appendix A-1), SQAPP Addendum #1 (Anchor QEA 2025a; Appendix A-2), and SQAPP Addendum #2 (Anchor QEA 2025b; Appendix A-3), for sampling in the Tru-Grit Abrasives, Inc. (Tru-Grit), site (Site).

The Site is located on the northeastern side of the Blair Waterway, with the upland addressed at 1110 East Alexander Avenue, Tacoma, Washington (Figure 1-1). The Site includes areas of contaminated marine sediment along the shoreline and nearshore of Tru-Grit and the Graymont Inc facility to the east, as well as within a portion of side slopes of the proposed federal navigation channel (FNC) in the Blair Waterway. The upland portion of the Site includes the Tru-Grit facility and portions of the adjacent Orion Marine Group, Inc., lease area, which Tru-Grit used briefly for material storage (Landau 2021).

The U.S. Army Corps of Engineers (USACE) is currently planning to deepen the FNC in the Blair Waterway to -57 feet mean lower low water (MLLW) plus a 2-foot overdredge (final elevation -59 feet MLLW; USACE FNC Deepening Project). In advance of the FNC dredging, the Port of Tacoma (Port) currently plans to remove contaminated sediments known to be located within the Site. Removal of those contaminated sediments will prevent them from sloughing into the FNC during or after waterway deepening.

The purpose of the sediment investigations was to delineate the horizontal and vertical extent of contaminated sediments. A total of three sampling events have occurred and spanned from October 2024 to August 2025. Core locations were divided into two areas, the lower slope of the Tru-Grit Site (Lower Slope) and upper slope area of the Tru-Grit Site (Upper Slope), based on their proximity to the anticipated slough boundary and potential impacts to the USACE FNC Deepening Project. The Lower Slope area is anticipated to slough during the USACE FNC Deepening Project; therefore, contamination associated with the Site present in the Lower Slope will be removed prior to the USACE FNC deepening as part of the proposed Interim Action as discussed in the Interim Action Plan (Anchor QEA 2026). Locations in the Upper Slope area were collected to delineate the Site and extent of contamination to the shoreline. Additional actions may be required to address remaining contaminated sediment in the Upper Slope of the Tru-Grit Site that will not interfere with the USACE FNC Deepening Project.

This SCR summarizes the chemical and biological results from three recent sediment sampling efforts at the Site to determine what material would need to be removed by the Port prior to the Blair Waterway FNC deepening work. Using the site delineation detailed in this SCR, the Interim Action Plan (Anchor QEA 2026) discusses details of the cleanup design, including removal areas and volumes.

DRAFT

The SCR is organized into the following sections:

- Section 1: Introduction and Project Summary
- Section 2: Background
- Section 3: Sampling Methods, Observations, and Deviations
- Section 4: Quality Assurance/Quality Control
- Section 5: Sediment Testing Results
- Section 6: Conclusion and Next Steps
- Section 7: References

2 Background

As described in the SQAPP (Anchor QEA 2024a), the sampling summarized in this SCR builds on previous investigations that identified areas of surface and subsurface sediment contamination at the Site. Figure 2-1 shows the physical setting of the Tru-Grit Site inclusive of property boundaries and adjacent ownership. Previous investigations at the Site have included both upland and in-water areas. Figure 2-2 shows historical features of the Site as well as historical sampling locations. The primary sediment contaminants at the Site include arsenic, copper, and zinc associated with grit/abrasive materials present in sediments. Copper and zinc are the most prevalent contaminants in surface sediments. Arsenic contamination is present primarily in subsurface sediments. Sources of the metals and grit/abrasive contamination include the following:

- The most recent source of contamination was a minerals offloading facility operated by Tru-Grit and its parent company, CanAm Minerals, Inc. (CanAm). That facility operated between 1990 and 2022 under leases with the prior property owner and later with the Port. The Tru-Grit offloading facility has been relocated and is no longer present on the property.
- Prior sources of contamination included former shipyards operated by the Martinolich Shipbuilding Corp. and later by the Sexton Shipbuilding Corp. and Sea-Tac Alaska Shipbuilding, Inc. These shipyards operated between approximately 1970 and 1983. Abrasive sandblasting materials were used and discharged to sediments during shipyard operations.

Investigations completed by Landau Associates (Figure 2-2) provide an understanding of heavy metals distribution in surface and subsurface sediments near the former Tru-Grit operations. These studies documented the presence and distribution of grit material and associated metals in surface and shallow subsurface sediments. Available chemical data from these investigations are included as Appendix B. The Landau investigations did not include testing for contaminants other than heavy metals.

Surface samples collected between 2008 and 2018 had concentrations of arsenic, copper, and zinc exceeding Sediment Management Standard (SMS) numeric sediment cleanup objective (SCO) values. Exceedances of SMS interpretive criteria were also observed during confirmational bioassay. The highest percentages of grit content encountered were west of the Tru-Grit dock within a relatively flat bathymetric area and coinciding with the Tru-Grit ship-to-shore conveyance system area. Concentrations of heavy metals decreased with distance from the pier. Background locations showed either low or no grit and lower metals concentrations, though some exceedances of screening levels (SLs) did occur in the background samples.

Taken together, the Landau investigation results indicated that the heavy metals associated with Tru-Grit operations (copper and zinc) are spatially concentrated around the Tru-Grit Dock area and diminish outward, with vertical distribution generally limited to the upper several feet of sediment

where Tru-Grit materials were deposited (Landau 2009, 2019, 2021). Grit and heavy metals contamination containing arsenic from historical operations not associated with Tru-Grit were present generally at deeper sediment intervals.

Although not a focus of previous investigations, polychlorinated biphenyls (PCBs) and tributyltin (TBT) are also Site contaminants of concern (COCs) in addition to metals based on historical shipyard-related activities conducted at the Site.

Dioxin/furan (D/F) compounds have been detected during previous dredge material characterization events in the outer Blair Waterway (e.g., at the Husky Terminal), within the Middle Blair Waterway (e.g., at the Georgia-Pacific Gypsum berth area and within the Lincoln Avenue ditch areas), and within the head of the Blair Waterway (e.g., at the Pierce County Terminal). These observations suggested that D/F may be present as a regional contaminant throughout the Blair Waterway.

The presence of D/F as a regional contaminant was confirmed more recently during the 2025 sediment testing performed in support of the USACE FNC Deepening Project. That testing confirmed that D/F were sporadically present at elevated concentrations within certain waterway side slope/berth areas and throughout much of the Blair Waterway turning basin. The distribution of D/F suggests the influence of historical and regional source inputs, with reductions in concentrations associated with past cleanup and navigation dredging efforts.

The previous investigations led by CanAm were extensive (Figure 2-2), but they did not fully delineate the extent of contamination located in subsurface areas within the Site and adjacent to the FNC. The 2024-2025 investigations included a grid-based core sampling effort (Figure 2-3) extending from the FNC up into the Upper Slope area to complete that delineation both within and above the area of projected sloughing.

3 Sampling Methods, Observations, and Deviations

Sediment vibracores and surface grab samples were collected in accordance with the methods outlined in the SQAPP and SQAPP Addenda #1 and #2, submitted to the Washington State Department of Ecology (Ecology) in July 2024 (Anchor QEA 2024a), March 2025 (Anchor QEA 2025a), and August 2025 (Anchor QEA 2025b), respectively. The following subsections provide a sampling overview; a summary of each field mobilization, including sampling vessel, navigation, and positioning; sampling locations; sample collection; sample processing; a summary of archaeological monitoring that was conducted; and deviations from the SQAPP that occurred. Sample IDs, coordinates, mudline elevations, core penetrations, core recoveries, number of attempts, sample intervals, and analytical parameters tested are summarized in Table 3-1a (recent Tru-Grit investigations). Previous Tru-Grit investigations conducted by Landau are included in Table 3-1b, and Blair FNC side slope samples collected in the Slough Area are included in Table 3-1c. Field forms from all three investigations, including daily logs, collection and processing logs, health and safety forms, and field photographs are included in Appendix C. Analytical results from all three investigations are discussed in Section 4.

3.1 Sampling Overview

Two sampling areas, the Lower Slope and the Upper Slope, were identified for these field investigations. Thirty-one unique coring locations, six reoccupied locations, and eight surface grab locations were targeted across three mobilizations. The six reoccupied cores were collected during the second mobilization to target locations collected during the first mobilization where core lengths were insufficient to complete vertical delineation of the Site. Therefore, a total of 37 cores were collected and processed.

The Lower Slope area, consisting of 15 unique core locations of 16 cores, and one surface grab (TG-SG30), overlaps with the USACE FNC Deepening Project and follows the eastern boundary of the navigation channel. The Upper Slope area, consisting of 16 unique core locations of 21 cores, and seven surface grabs, is landward and is not expected to overlap with the USACE FNC Deepening Project. Figure 2-3 shows the proposed and actual core locations from all three field investigations.

Cores from the Lower Slope area are expected to either overlap with the FNC or be affected by sloughing from the side slopes post-dredge (Figure 2-2). The Slough Area is defined as the sediment in the vicinity of the FNC boundary that will slide downslope during and after dredging. To delineate the Slough Area, Anchor QEA assumed that dredging will occur along the FNC and in the 10-foot buffer landward of the FNC boundary identified by USACE. When this vertical cut is made, sediment above it is anticipated to slough at an approximately 2-horizontal-to-1-vertical (2H:1V) slope ratio. Therefore, Figure 2-2 illustrates the lateral extent of material that will slough given the target dredge depth (-57 feet MLLW) and maximum allowable overdredge depth (-59 feet MLLW), respectively.

A total of 37 sediment cores were collected and sampled in an upland processing area in 2-foot intervals beginning at the mudline, and eight surface sediment grabs were collected and sampled at the top 0.3 foot.

Analytical testing was tiered as defined in the SQAPP and SQAPP Addenda, with Tier 1 testing of heavy metals and total solids (TS) in all surface and subsurface samples. Tier 2 testing parameters were analyzed in selected core archive samples to complete the delineation of the other Dredge Material Management Program (DMMP; DMMP 2025) and Washington State SMS (Ecology 2025) parameters.

A total of 179 samples were submitted for Tier 1 analyses, which included metals and TS, and a subset of samples were also submitted for grain size, as shown in Table 3-1a. Additional sample mass for each sample was also collected and stored in a frozen archive pending Tier 1 results. Geotechnical samples for the purpose of dredge design were also collected, including representative samples for grain size analysis and Atterberg limit analysis.

Following review of Tier 1 results, a total of 34 samples were triggered for Tier 2 analyses. Six samples were additionally tested for D/F and total organic carbon (TOC) only, and three samples were tested for D/F, PCBs, and TOC. Five surface samples are currently undergoing full Tier 2 testing, and those results will be presented in a forthcoming SCR Addendum once testing is complete and results have undergone validation. The full chemical and geotechnical testing results of all Tru-Grit samples are discussed in Section 5.

3.2 Fall 2024 Investigation

The first investigation at the Site took place from October 25 to November 14, 2024, targeting sample locations TG-SC01 through TG-SC24 (Table 3-1a; Anchor QEA 2024a). Cores were collected aboard the research vessel *RV Tieton*, operated by the subcontractor Gravity Marine Services (Gravity). All sediment cores were collected using vibracore equipment. Gravity used a differential GPS (DGPS) unit located on top of the vessel's A-frame for positioning, with accuracy +/- 2 feet. The software was used to navigate to the proposed sampling stations and record the actual sampling position at the time of sampling (Figure 2-3). Coordinates were recorded digitally and on core collection field logs in feet to two decimal places using North American Datum of 1983 (NAD83) State Plane (SP) South (Table 3-1a and Appendix C).

The water elevation at each station was measured using a survey package that includes a real-time kinematic survey DGPS and survey-grade fathometer. A survey reference marker was identified from the Washington State Reference marker network and used to calibrate the onboard real-time kinematic survey DGPS remeasurement of water elevation. As a quality control (QC) check, preliminary observed water levels (feet MLLW) for Tacoma, Washington (National Oceanic and

Atmospheric Administration Station 9446484), were also checked, and water depth was measured using a lead line at the time of core collection.

Mudline elevations (feet MLLW) were calculated in the field by subtracting the water depth from the water level. Core collection logs recorded water depth, water level, and elevation to the nearest tenth at each sampling station (Table 3-1a and Appendix C).

Due to limited equipment capability and field conditions, several sediment cores advanced within the Site met refusal before reaching the penetration goal of 16 feet below mudline (bml). Supplemental core collection was planned to complete the characterization at those locations where adequate penetration was not achieved to complete sampling objectives, as discussed in Section 3.3.

3.3 Spring 2025 Investigation

The second investigation at the Site took place from March 27 to May 12, 2025, with the goal of completing vertical delineation at locations where adequate penetration was not achieved during the fall 2024 investigation, and to further delineate the horizontal extent of contamination near the eastern boundary of the Site (Anchor QEA 2025a). A total of 10 cores were collected during this investigation. Seven cores were collected in the Upper Slope area, including five reoccupation locations (TG-SC05RE, TG-SC09RE, TG-SC10RE, TG-SC11RE, and TG-SC12RE) and two new locations (TG-SC25 and TG-SC27). Three cores were collected in the Lower Slope area, including one reoccupation location (TG-SC15RE) and two new locations (TG-SC26 and TG-SC28).

Cores were collected aboard the research vessel *Nancy Anne*, operated by the subcontractor Marine Sampling Systems, LLC (MSS). All sediment cores were collected using vibracore equipment. MSS determined horizontal positioning in the field using a Trimble MPS865 Multifunction Differential coupled to a Xylem Hypack 2023 navigation program to navigate to/geolocate to the sediment core target coordinates. A real-time kinematic correction signal broadcasted from the Washington State Reference Network was interfaced to Trimble units, and the position was fed to a computer running software enabling real-time plan view navigation to the sampling locations. The global navigation satellite system receiver onboard the vessel was located directly over the A-frame used to deploy the sampling equipment, so location corrections were not required. Horizontal accuracy using this system is approximately +/- 10 centimeters. Horizontal checks were conducted at a minimum of twice per day: once prior to sampling and once at the end of the day. The horizontal control checkpoint was established in the Blair Waterway prior to sampling and was used to ensure the accuracy of the positioning and navigation systems (Anchor QEA 2025a). Coordinates were recorded digitally and on core collection field logs in feet to two decimal places using NAD83 State Plane Zone South (Table 3-1a and Appendix C).

Mudline elevations were calculated using depth soundings from MSS's Lowrance HDS7 Depth Sounder at each sediment core station performed at the time of core collection as well as real-time data provided by the National Oceanic and Atmospheric Administration automated tide gauge station number 9446484, located in Commencement Bay in Tacoma, Washington. Depth soundings were checked using a weighted measuring tape. Mudline elevations (feet MLLW) were calculated in the field by subtracting the water depth from the water level. Core collection logs recorded water depth, water level, and elevation at each sampling station (Appendix C).

Improved equipment capability and field conditions allowed sediment cores advanced within the Site to reach the penetration goal outlined in the SQAPP Addendum #1 (Anchor QEA 2025a). However, core samples on the eastern side of the Site south of the Powers Dock had contamination. Therefore, horizontal delineation of contamination in the Site was not fully achieved, and additional investigation was required to further delineate eastward, as discussed in Section 3.4.

3.4 Summer 2025 Investigation

The third investigation at the Site took place August 25 and 26, 2025, with the goal of completing horizontal delineation along the eastern boundary of the Site in the vicinity of the A.H. Powers Dock (Anchor QEA 2025b). A total of three cores and eight surface grabs were collected during this investigation. Two cores (TG-SC29 and TG-SC31) and all eight surface grabs (TG-SG06, TG-SG12, TG-SG25, TG-SG27, and TG-SG29 through TG-SG32) were collected in the Upper Slope area. One core was collected in the Lower Slope area (TG-SC30). Cores and grabs were collected aboard the research vessel *Nancy Anne*, operated by MSS. All sediment cores were collected using vibracore equipment. Surface grabs were collected by a 0.06-cubic meter, hydraulically driven power grab from the boat and composited aboard the vessel following the procedures outline in the SQAPP Addendum #2 (Anchor QEA 2025b). Horizontal positioning was conducted and mudline elevations were calculated as described in Section 3.3.

3.5 Archaeological Monitoring

Eight sediment cores and three surface grab samples were collected at depth at or shallower than -10 feet MLLW:

- Sediment cores: TG-SC01 through TG-SC06 during the fall 2024 investigation, TG-SC05RE during the spring 2025 investigation, and TG-SC31 during the summer 2025 investigation
- Surface grabs: TG-SG06, TG-SG31, and TG-SG32 during the summer 2025 investigation

These cores and grabs were monitored for archaeological resources in accordance with the *Archaeological Monitoring and Inadvertent Discovery Plan* (Anchor QEA 2024b). Monitoring was completed as required, and no cultural resources were identified, as detailed in Appendix D.

Monitoring was not required for sediment cores or surface grabs that were collected at elevations deeper than -10 feet MLLW.

3.6 SQAPP Deviations

This section details any deviations from the SQAPP, including changes in sample collection and processing methods, accepted core recoveries, relocation of proposed sample locations, and laboratory analysis. Details are provided in this section.

Samples were collected as specified in the SQAPP, except for the following:

- **Core did not meet target depth after three attempts:** The SQAPP (Anchor QEA 2024a) established a target penetration depth of 16 feet, with the exception of the underpier location (TG-SC04), which established a target penetration depth of 6 feet. None of the 23 cores with the 16-foot penetration target accepted and processed during the fall 2024 sampling event reached this target depth. This collection issue was due to field conditions (reaching refusal) and field equipment limitations. After discussion with the Port, the required drive depth during the fall 2024 event was shortened to achieve the best recovery possible with the conditions and field equipment available at the time.

  SQAPP Addendum #1 (Anchor QEA 2025a) changed the target penetration depth from 16 to 14 feet. However, six cores hit refusal and were not driven to 14 feet during the spring and summer 2025 sampling events. During the spring 2025 event, TG-SC12RE had a drive length of 12.4 feet, TG-SC15RE had a drive length of 12.5 feet, TG-SC26 had a drive length of 12.2 feet, and TG-SC27 and TG-SC28 each had drive lengths of 13.9 feet. TG-SC31, collected during the summer 2025 sampling event, was accepted with a drive of 12.6 feet. All other accepted cores were driven to at least 14 feet in accordance with the SQAPP Addendum #1 (Anchor QEA 2025a).

- **Core accepted below 75% recovery after three attempts:** Due to the field equipment limitations discussed above, three cores collected during the fall 2024 investigation did not achieve the required percent recovery of 75% after three attempts. The fourth attempt at TG-SC01 was accepted with 25% recovery, the second attempt at TG-SC02 was accepted with 60% recovery, and the second attempt at TG-SC13 was accepted with 50% recovery. All other accepted cores had a minimum recovery of 75% of the drive distance, in accordance with the SQAPP (Anchor QEA 2024a).

  During the spring 2025 event, the third attempt at TG-SC05RE was accepted with 70% recovery, and the fourth attempt at TG-SC10RE was accepted with 52% recovery. All other accepted cores had a minimum recovery of 75% of the drive distance, in accordance with the SQAPP Addendum #1 (Anchor QEA 2025a).

- **Actual locations relocated and sampled outside of the 10-foot target radius:** Multiple cores were collected more than 10 feet from the target location due to field conditions and/or obstructions. During the fall 2024 event, TG-SC01 was relocated 65 feet south from the target location for a fourth attempt due to rocky shoreline conditions, after discussion with the Anchor QEA project manager. TG-SC02, TG-SC03, and TG-SC07 were also relocated waterward (11.3, 25.6, and 11.3 feet off target, respectively) under the same permissions to avoid rocky conditions. TG-SC04 was collected 12.0 feet from the target due to its original location under the Tru-Grit pier, which made collection difficult despite use of Gravity's remote floating platform. TG-SC06 was collected 26.2 feet from the target location due to underwater debris, which obstructed access and made coring in the area unsafe. TG-SC21 was collected 19.3 feet from the target due to refusal at the first and second attempt locations.

  During the spring 2025 event, TG-SC11RE and TG-SC15RE were collected 11.5 and 10.9 feet from target, respectively, because of GPS uncertainty. All other cores and grabs were collected within a 10-foot radius of their target location in accordance with the SQAPP Addendum #1 (Figure 2-3; Anchor QEA 2025a)**.**

Laboratory analysis was conducted at the laboratories specified in the SQAPP and Addenda, except for the following:

- **Subbed samples to another laboratory:** Twenty samples were subbed by Analytical Resources, LLC (ARL), to Enthalpy Analytical (Enthalpy) for D/F analysis to meet project turnaround time. Enthalpy is accredited by Ecology and meets the DMMP criteria for laboratory detection limits. Enthalpy laboratory reports have been submitted in their entirety within the ARL laboratory reports.

Laboratory reporting limits met the requirements specified in the SQAPP, except for the following:

- **Sample result non-detect above the screening limit:** The dieldrin result for one sample (TG-SC31-06-08-250826) collected during the summer 2025 event was reported by the laboratory as non-detect, with a reporting limit slightly above the DMMP SL. The elevated reporting limit was determined to be due to low percent solids (50.10%) in the associated sample, and a lower reporting limit would not have been achievable by the laboratory. After further discussion with the laboratory, it was determined that the result should not be considered an exceedance, as the result was below the limit of detection, which the laboratory reports as the method detection limit.

4 Quality Assurance/Quality Control

This section provides information on data quality, including field and laboratory QC measures, data validation findings, and completeness.

4.1 Field Quality Assurance/Quality Control

Anchor QEA personnel labeled samples in a consistent manner to ensure that field samples were traceable. Chain-of-custody forms were appropriately populated to provide all information necessary for the laboratory to conduct the required analyses properly. Samples were placed in coolers with ice and received at the laboratory within the recommended temperature range.

4.2 Laboratory Quality Assurance/Quality Control

Analytical chemistry data were validated at a Stage 2B (EPA 2009) level following procedures and requirements listed in the SQAPP. Grain size and Atterberg limits were reviewed for completeness at a Stage 1 (EPA 2009) validation level, and qualifiers were not assessed. The laboratory followed the specified analytical methods, all requested sample analyses were completed, and quality assurance (QA)/QC samples and procedures were analyzed at required frequencies. Sample IDs, sample delivery group numbers, and validation IDs are included in Appendix E. Chain-of-custody forms and laboratory reports are included in Appendix F. Data validation reports are included in Appendix G. Key findings are summarized as follows:

- 4-chloroaniline in one sample (TG-SC-RB241031), benzyl alcohol in one sample (TG-SC08-00-02-241114), and TBT in one sample (TG-SC01-00-01-241113) were rejected due to the laboratory QC samples recovering below the expanded lower acceptance limit.
- Some TOC and TS results were qualified as estimated due to the laboratory analyzing the samples past the SQAPP-required hold time.
- Twelve D/F, 10 semivolatile organic compounds (SVOCs), and 15 selenium results were qualified as non-detect, and 3 D/F results were qualified as estimated, due to detections in the associated method or calibration blanks.
- Some pesticides, PCBs, SVOCs, polycyclic aromatic hydrocarbons (PAHs), TBT, D/F, metals, and TOC results were qualified as estimated due to calibration or laboratory QC results outside of method, laboratory, or SQAPP-specified control limits.
- Some D/F congener results were qualified because they were reported as estimated maximum potential concentration results by the laboratory.

Since analytical chemistry data are used for organic carbon (OC) normalization, the associated OC-normalized sample results have also been qualified per the validation of the parent sample result, if applicable. The OC-normalized results are not included in the above findings, and they have not been used in the calculation to determine analytical data completeness.

Almost all results are usable as reported or as qualified. Two SVOC results and one TBT result were rejected due to laboratory QC recoveries. Analytical data completeness was greater than the SQAPP-required objective of 95% for all parameters.

5 Sediment Testing Results

This section summarizes the results of sediment conventional and physical analyses and chemical analyses, including screening against DMMP and SMS criteria. Sediment samples for the 2024-2025 Tru-Grit investigations screened against DMMP criteria are shown in Table 5-1a, and summary statistics for sediment cores and grabs are shown in Tables 5-1b, and 5-1c, respectively. The same dataset screened against SMS criteria is shown in Table 5-2a, and summary statistics for sediment cores and grabs are shown in Table 5-2b, and 5-2c, respectively. Previous investigations conducted by Landau screened against DMMP and SMS criteria are also presented in this SCR and are shown in Tables 5-3 and 5-4, respectively. Side slope samples within the vicinity of the Site from the Blair FNC investigation screened against DMMP and SMS criteria are also presented in this SCR and are shown in Tables 5-5 and 5-6, respectively. Grain size for the 2024 Tru-Grit investigation, previous investigations conducted by Landau, and adjacent Blair FNC side slopes are presented in Tables 5-7, 5-8, and 5-9, respectively. Table 5-10 presents Atterberg limits for the 2024 Tru-Grit investigation. No Atterberg limits testing was conducted on the Blair FNC side slopes in the vicinity of the Site.

5.1 Conventional and Physical Analyses

Samples were submitted to ARL in Tukwila, Washington, for conventional parameter analysis. One hundred and thirty-seven subsurface sediment samples received testing for TS, 34 subsurface samples received testing for total volatile solids (TVS), and 43 subsurface samples received testing for TOC. Conventional parameter results from the 2024-2025 Tru-Grit investigations are shown in Tables 5-1a and 5-2a and are summarized as follows:

- TS averaged 74%, ranging from 47% to 91%, for subsurface samples and averaged 65%, ranging from 59% to 71%, for surface samples.
- TVS averaged 2.8%, ranging from 0.92% to 13%, for subsurface samples and averaged 3.3%, ranging from 2.3% to 4.1%, for surface samples.
- TOC averaged 0.61%, ranging from 0.05% to 5.3%, for subsurface samples and averaged 0.76%, ranging from 0.33% to 1.4%, for surface samples.

5.2 Grain Size

Forty-four samples were sent to ARL for grain size analysis, who subcontracted the analysis to AmTest Laboratories in Kirkland, Washington. Grain size results from the 2024 Tru-Grit investigation are shown in Table 5-7.

5.2.1 Lower Slope

Lower Slope cores were similarly composed of primarily sand (average of 60%) and silt (average of 27%) with minor components of clay (average of 1.4%) and gravel (average of 1.4%). Sands were primarily medium grain. Lower Slope area sediments ranged from 7.1% to 91% sand and from 6.4%

to 91% fines. As shown in Appendix C, native substrate was generally encountered within the top 5 feet of sediment.

5.2.2 Upper Slope

Upper Slope cores were composed of primarily sand (average of 63%) and silt (average of 22%) with lesser components of gravel (average of 8.3%) and clay (average of 7.3%). Sand was primarily medium grain. Upper Slope area sediments ranged from 7.1% to 91% sand and from 5.1% to 93% fines. Native substrates were generally, but not always, encountered within the top 6 feet of sediment.

5.3 Atterberg Limits

Five samples were sent to ARL for Atterberg limits analysis, who subcontracted the analysis to Materials Testing & Consulting, Inc. in Olympia, Washington. The liquid limit ranged from 26.2% to 82.4% and averaged 48%. The plastic limit ranged from 11.8% to 43.5% and averaged 22%. The plasticity index ranged from 13.9% to 38.9% and averaged 21%. Atterberg limit results from the 2024 Tru-Grit investigation are shown in Table 5-10. Atterberg limits were not tested for the Blair FNC side slope samples adjacent to the Site.

5.4 Chemical Analyses and Screening

Samples were submitted to ARL, in Tukwila, Washington, for chemical analyses. A total of 137 samples were analyzed for Tier 1 parameters, including metals and TS as detailed in the SQAPP and Addenda (Anchor QEA 2024a, 2025a, 2025b). A total of 34 samples were analyzed for Tier 2 parameters, including TBT, SVOCs, PAHs, pesticides, PCBs, and D/F as detailed in the SQAPP and Addenda (Anchor QEA 2024a, 2025a, 2025b). Six samples were additionally tested for D/F and TOC only, and three samples were tested for D/F, PCBs, and TOC. Five surface sediment samples are currently undergoing full Tier 2 testing, and those results will be presented in a forthcoming SCR Addendum once testing is complete and results have undergone validation. Analytical results are screened against DMMP criteria (DMMP 2025; Table 5-1a) and against SMS criteria (Ecology 2025; Table 5-2a). For chemicals that have OC-normalized SMS criteria, samples with TOC in the range of 0.5% to 3.5% are compared to the OC-normalized SMS criteria, while samples with TOC outside of that range are compared to the dry-weight Apparent Effects Thresholds (AETs). A data report index, laboratory analytical reports, and data validation reports are included in Appendices E, F, and G, respectively.

DMMP exceedances occurred for metals, SVOCs, PAHs, PCB Aroclors, TBT, and D/F. SMS exceedances occurred for metals, SVOCs, PAHs, and PCB Aroclors. Figures 5-1a through 5-1g show exceedances for Site-associated contaminants, including arsenic, chromium, copper, lead, zinc, total PCB Aroclors, and TBT, respectively. Figures 5-2a and 5-2b show the vertical extent of contamination for Site-associated contaminants and D/F, respectively. Figure 5-3 summarizes the horizontal extent

of exceedances across the Site (regardless of depth) and depicts two Action Areas based on vertical and horizontal extent of contamination that overlap with the USACE FNC Deepening Project: Area A and Area B. These Action Areas are described in detail in the Interim Action Plan (Anchor QEA 2026), which is being submitted concurrently with this SCR. The SCO exceedance boundary was established to encompass all DMMP and SMS exceedances of Site-associated contaminants. D/F are not associated with the contaminant releases that resulted in the Tru-Grit Site, but are present throughout the Blair Waterway at concentrations above natural background levels, as discussed in Section 2 and Section 6.1.

5.4.1 Lower Slope

Twenty-one of the 84 samples analyzed to characterize the Lower Slope core and grab locations exceeded at least one analyte. Several analytes were detected at concentrations above DMMP and/or SMS criteria, as summarized in Tables 5-1a and 5-2a and as follows:

- Metals
- PCB Aroclors
- D/F

5.4.1.1 Subsurface Sediment Cores

Twenty sediment core samples in the Lower Slope area exceeded at least one analyte. Full analytical results are included in Tables 5-1a and 5-2a.

Metal exceedances in the Lower Slope area consisted of antimony, arsenic, copper, lead, and zinc. Antimony exceeded the DMMP SL (150 milligrams per kilogram [mg/kg]) in one sample (TG-SC15), from 0 to 2 feet bml (160 mg/kg). Arsenic exceeded the DMMP SL and SMS SCO (57 mg/kg) in six samples, five of which also exceeded the SMS cleanup screening level (CSL; 93 mg/kg). Three of those results also exceeded DMMP bioaccumulation trigger (BT; 507.1 mg/kg), two of which also exceeded the DMMP maximum level (700 mg/kg). Three exceedances occurred at TG-SC15 and reoccupied TG-SC15RE between 0 and 4 feet bml, ranging from 641 to 1,620 mg/kg. The remaining three exceedances were also within 4 feet bml and ranged from 83.6 mg/kg (TG-SC16) to 146 mg/kg (TG-SC17). Copper exceeded the DMMP SL and SMS SCO (390 mg/kg) in four samples from 0 to 6 feet bml, which ranged from 397 mg/kg at TG-SC26, 4 to 6 feet bml, to 1,260 mg/kg at TG-SC15, 0 to 2 feet bml. Three of these four SCO exceedances occurred at the same samples that exceeded arsenic at TG-SC15 and reoccupied TG-SC15RE.

Lead exceeded the DMMP SL and SMS SCO (450 mg/kg) and SMS CSL (530 mg/kg) in three samples at TG-SC15 and TG-SC15RE between 0 and 4 feet bml. One sample (TG-SC15-00-02) also exceeded the DMMP BT (975 mg/kg) and maximum level (1,200 mg/kg). Concentrations ranged from 569 mg/kg (TG-SC15RE-02-04) to 1,290 mg/kg (TG-SC15-00-02). Zinc exceeded the DMMP SL and SMS SCO (410 mg/kg) in six samples, three of which also exceeded the SMS CSL (960 mg/kg). Like

arsenic, copper, and lead, three of the six samples to exceed the zinc SMS SCO included the same samples from TG-SC15 and reoccupied TG-SC15RE. Concentrations ranged from 495 mg/kg (TG-SC15) to 2,850 mg/kg (TG-SC15), between 0 and 4 feet bml.

Butylbenzyl phthalate exceeded the SMS SCO (4.9 mg/kg-OC) in TG-SC28 from 0 to 2 feet bml (5.99 mg/kg-OC), but this sample had low TOC (0.82%) and did not exceed the SMS dry weight AET (63 microgram per kilogram [µg/kg]). Therefore, this is not considered an exceedance under SMS. Non-detect exceedances occurred for hexachlorobenzene at 10 locations (nine cores and one grab—TG-SG30) and for 1,2,4-trichlorobenzene at four locations from 0 to 2 feet bml.

PCB Aroclors exceeded the DMMP SL (130 µg/kg) and SMS SCO (12 mg/kg-OC) in one sample (TG-SC18) from 0 to 2 feet bml (140 µg/kg; 23 mg/kg-OC).

D/F exceeded the DMMP SL (4 nanograms per kilogram [ng/kg] toxic equivalency quotient [TEQ]) in 11 samples, three of which also exceeded the DMMP BT (10 ng/kg TEQ). Seven exceedances were found in the 0- to 2-foot interval. Exceedances ranged from 4.7 ng/kg TEQ (TG-SC14) at 2 to 4 feet bml to 23 ng/kg TEQ (TG-SC18) at 0 to 2 feet bml.

5.4.1.2 Surface Sediment Grabs

One sediment grab was collected in the Lower Slope area, and D/F exceeded the DMMP SL (4 ng/kg TEQ) in this sample with a concentration of 7.70 ng/kg TEQ. One non-detect exceedance also occurred for hexachlorobenzene. No other DMMP or SMS exceedances occurred in this sample.

5.4.2 Upper Slope

Thirty-three of the 95 samples analyzed to characterize the Upper Slope cores and sediment grabs exceeded at least one analyte. Several analytes were detected at concentrations above DMMP, SMS, and/or AET Marine criteria (Tables 5-1a and 5-2a).

- Metals
- SVOCs
- PAHs
- TBT
- PCBs
- D/F

5.4.2.1 Subsurface Sediment Cores

Twenty-six sediment core samples in the Upper Slope area exceeded at least one analyte. Full analytical results are included in Tables 5-1a and 5-2a.

Metal exceedances in cores of the Upper Slope area consisted of arsenic, chromium, copper, and zinc. Arsenic exceeded the DMMP SL and SMS SCO (57 mg/kg) in eight samples, four of which also

exceeded the SMS CSL (93 mg/kg). Depths ranged from 0 to 6.7 feet bml; the highest exceedance was in the deepest interval at TG-SC09 from 6 to 6.7 feet bml (221 mg/kg). Chromium exceeded the DMMP SL and SMS SCO (260 mg/kg) and SMS CSL (270 mg/kg) in one sample (TG-SC10) at 4 to 5.2 feet bml (488 mg/kg). Copper exceeded the DMMP SL, SMS SCO, and SMS CSL (390 mg/kg) in four samples. The highest exceedance was at TG-SC25 from 0 to 2 feet bml (1,060 mg/kg). Zinc exceeded the DMMP SL and SMS SCO (410 mg/kg) in nine samples, two of which also exceeded the SMS CSL (960 mg/kg). The highest exceedance was at TG-SC25 from 0 to 2 feet bml (2,970 mg/kg).

One sample (TG-SC31-04-06) had four non-detect results exceed the DMMP SL, two of which also exceeded the SMS SCO, for various SVOCs. Three additional non-detect results exceeded the SMS SCO in this sample for three other SVOCs (1,2,4-trichlorobenzene, 1,2-dichlorobenzene, and 1,4-dichlorobenzene). Other non-detect SVOC exceedances occurred in the 0- to 2-foot intervals in TG-SC06, TG-SC07, and TG-SC08. TG-SC06 also had a non-detect SVOC exceedance in the 2- to 4-foot interval. No detected results exceeded any criteria for SVOCs in the Upper Slope cores.

One sample (TG-SC31-04-06) exceeded the SMS SCO for six individual PAHs as well as total high-molecular-weight PAHs (HPAHs). The concentration of total HPAH was 1,100 mg/kg-OC compared to the SMS SCO (960 mg/kg-OC). Benzo(g,h,i)perylene (87.1 mg/kg-OC) also exceeded SMS CSL (78 mg/kg-OC). However, this sample had low TOC (0.58%), and four of those individual PAHs did not exceed their respective SMS dry weight AETs. Therefore, these four PAHs (benzo(a)pyrene, benzo(g,h,i)perylene, dibenzo(a,h)anthracene, and indeno(1,2,3-c,d)pyrene) are not considered exceedances under SMS. Additionally, two non-detect exceedances occurred for acenaphthene and dibenzofuran in this sample.

Total PCB Aroclors exceeded the DMMP SL (130 µg/kg) in three samples (TG-SC06-00-02, TG-SC25-08-10 and TG-SC27-04-06), one of which also exceeded the DMMP BT (38 mg/kg-OC; TG-SC27-04-06 at 136 mg/kg-OC). Although TG-SC27-04-06 has a TOC result of 0.39% and is considered out of range for OC-normalization (0.5% to 3.5%), per the DMMP guidance, the OC-normalized value is used when screening against the DMMP BT for total PCBs regardless of TOC percentage. TG-SC06-00-02 also exceeded the SMS SCO (12 mg/kg-OC). TOC was outside of the OC-normalized range for TG-SC25-08-10 and TG-SC27-04-06, and dry-weight concentrations exceeded the AET SCO (130 µg/kg) in these samples.

D/F TEQ exceeded the DMMP SL (4 ng/kg TEQ) in 14 samples, 11 of which also exceeded the DMMP BT (10 ng/kg TEQ). The highest exceedance was at TG-SC27 from 6 to 8 feet bml (270 ng/kg TEQ).

5.4.2.2 Surface Sediment Grab Results

All seven sediment grabs in the Upper Slope area exceeded at least one analyte. Full analytical results are included in Tables 5-1a and 5-2a.

Arsenic exceeded the DMMP SL (57 mg/kg) and SMS CSL (93 mg/kg) in one sample (TG-SG06) with a result of 127 mg/kg. Copper and zinc both exceeded the DMMP SL and SMS CSL in the same sample (TG-SG25) with concentrations of 728 mg/kg and 2,180 mg/kg, respectively. All other metals were within DMMP and SMS screening limits in the Upper Slope surface sediment grabs.

TBT exceeded the DMMP SL (73 µg/kg) in three of the surface grab samples in the Upper Slope area (TG-SG06, TG-SG12, and TG-SG31). Concentrations ranged from 92.8 µg/kg (TG-SG06) to 243 µg/kg (TG-SG12).

Four non-detect DMMP SVOC exceedances occurred in one grab sample (TG-SG06); SVOCs included 2,4-dimethylphenol, benzyl alcohol, hexachlorobenzene, and hexachlorobutadiene. Five non-detect SMS SCO exceedances also occurred in this sample; SVOCs included 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzne, hexachlorobenzene, and hexachlorobutadiene. Five other grab samples (TG-SG12, TG-SG25, TG-SG27, TG-SG29, and TG-SG30) had non-detect SMS SCO exceedances for hexachlorobenzene.

One sample (TG-SG06) exceeded the DMMP SL and SMS SCO for several PAHs, two of which also exceeded the SMS CSL (fluoranthene and benzo(a)anthracene) and one of which also exceeded the DMMP BT (fluoranthene at 11,400 µg/kg). Total HPAH also exceeded the DMMP SL (12,000 µg/kg) in this sample, with a concentration of 25,000 µg/kg. Total HPAH calculated under SMS criteria also exceeded the SMS SCO (960 mg/kg-OC), with a concentration of 4,600 mg/kg-OC. However, this sample had low TOC (0.55%), and five of those individual PAHs did not exceed their respective SMS dry weight AETs. Therefore, these five PAHs (benzo(a)pyrene, benzo(g,h,i)perylene, dibenzo(a,h)anthracene, indeno(1,2,3-c,d)pyrene, and total benzofluoranthenes) are not considered exceedances under SMS.

One sample (TG-SG06) exceeded the DMMP SL (130 µg/kg), BT (38 mg/kg-OC), and SMS SCO (12 mg/kg-OC) for total PCB Aroclors with a result of 337 µg/kg and 61.3 mg/kg-OC, respectively.

All samples (TG-SG06, TG-SG12, TG-SG25, TG-SG27, TG-SG29, TG-SG31, and TG-SG32) exceeded the DMMP SL (4 ng/kg) for total D/F TEQ with results ranging from 5.21 ng/kg TEQ (TG-SG06) to 8.98 ng/kg TEQ (TG-SG27).

5.4.3 Blair Federal Navigation Channel Side Slopes

Blair FNC side slope Dredged Material Management Units (DMMUs) D116 through D120 are adjacent to and overlap with the Site. Sample results and location information are described in the Blair Waterway FNC Deepening SCR (Anchor QEA 2025c) and are detailed herein in Tables 3-1c, 5-5, and 5-6. Samples BW-D119CS-A (10.3 ng/kg TEQ from BW-SC88) and D120CS-A (219 ng/kg TEQ from BW-SC94) exceeded both the DMMP SL (4 ng/kg TEQ) and DMMP BT (10 ng/kg TEQ). No other exceedances were encountered in these DMMUs.

5.4.4 Distribution of Regional Contaminants

Figure 5-4 summarizes the distribution of D/F TEQ concentrations in surface and subsurface sediments near the Site within the middle reach of the Blair Waterway, as follows:

- D/F TEQ concentrations were less than 10 ng/kg dry weight in all of the 2024-2025 cores collected within the FNC, with the exception of one sample that had a concentration of 10.1 ng/kg. The FNC was historically dredged during the cleanup performed in the early 1990s.
- D/F TEQ concentrations were detected at concentrations exceeding 10 ng/kg sporadically in sediments within both the Upper Slope and Lower Slope areas at the Site. The detected concentrations in most samples ranged from less than 10 to 82 ng/kg TEQ. One sample contained a detected concentration of 270 ng/kg TEQ. The distribution of D/F TEQ exceedances did not correlate with concentrations of heavy metals and, in some cases, was present at deeper depths.
- The range of D/F TEQ concentrations within the Site were similar to those detected during dredge material characterizations performed in the adjacent Graymont berth areas during 2024 and 2025 (maximum concentration of 219 ng/kg TEQ at DMMU120) and in the prior characterization of sediments located within the Georgia-Pacific Gypsum berth areas prior to the 2016 dredging of that area (D/F TEQ concentration of 110 ng/kg in the shallow DMMU1 composite prior to dredging) and in berth areas across the Blair Waterway from the former Lincoln Avenue ditches (D/F TEQ concentrations of 61.7 ng/kg and 160 ng/kg in shallow DMMUs D147 [BW-SC142] and D148 [BW-SC143], respectively). Much higher concentrations have been detected located farther southeast in the Lincoln Avenue ditch areas, with concentrations as high as 42,700 ng/kg TEQ.

5.5 Dredged Material Waste Profile Testing

Dredged material profiling was conducted according to the SQAPP (Anchor QEA 2024a) to support upland landfill disposal authorization. Profiling included Static Acute Fish Toxicity testing following Ecology Biological Testing Methods 80-12 (Ecology 2024), toxicity characteristic leaching procedure (TCLP) metals, and synthetic precipitation leaching procedure (SPLP) metals. Three composite samples were made for each waste profiling analysis, with one composite developed from samples selected within the Lower Slope area and two composites developed from samples within the Upper Slope area. Method 80-12 bioassay composites were developed using high concentrations of arsenic and copper, and TCLP/SPLP composites were developed using high concentrations of arsenic and lead. Discrete samples within each composite are listed in Table 5-11.

5.5.1 80-12 Biological Results

Bioassay laboratory reports are provided in Appendix F. The samples were submitted in three batches to EcoAnalysts in Port Gamble, Washington, for the 96-hour acute 80-12 test with rainbow trout.

The tests were performed consistently with SQAPP requirements with one exception. The test temperature exceeded the method maximum for all three batches. The maximum test temperature recorded was 14.4°C, and the required test temperature range is 12 + 2°C. This slight temperature exceedance is still within the tolerance range of the organisms and should not have affected the test outcome as there were no mortalities in any test treatment.

Biological testing results are summarized in Table 5-11. There was 100% mean survival in all three samples in all test concentrations. Therefore, none of the three samples are designated as dangerous or extremely hazardous waste based on acute fish toxicity.

5.5.2 Toxicity Characteristic Leaching Procedure

Three composite samples were analyzed for TCLP Priority Pollutant metals to characterize the extent of metals leachability within the Site. Results were screened against Resource Conservation and Recovery Act criteria for TCLP metals. The majority of results were non-detect, and no exceedances were present. Of the 13 Priority Pollutant metals tested, the following five were detected in at least one sample (TG-COMP-A-B): arsenic, copper, lead, nickel, and zinc. Nickel was detected in two samples, and zinc was detected in all three samples. Of the five metals detected, only arsenic and lead have screening criteria, and these results were well below the threshold. TCLP results are shown in Table 5-12.

5.5.3 Synthetic Precipitation Leaching Procedure

In addition to TCLP metals, the same three composite samples were also analyzed for SPLP Priority Pollutant metals. The majority of results were non-detect. Of the 13 Priority Pollutant metals tested, four were detected in at least one sample (TG-COMP-A-B): antimony, copper, nickel, and zinc. Similar to the TCLP results, composite TG-COMP-A-B had the most detections. Copper was detected in one other sample, and antimony was detected in all three. SPLP results are shown in Table 5-13.

6 Conclusion and Next Steps

Tru-Grit sediments were characterized to inform cleanup of the Site under MTCA. As shown in Figure 5-3, confirmed sediment contamination is present within the area of expected sloughing adjacent to the former Tru-Grit facility, depicted as Area A and Area B.

Details on sediment removal, including disposal options and volume amounts that may need to be removed by the Port in advance of the USACE FNC Deepening Project, are provided in the Interim Action Plan (Anchor QEA 2026), which is being submitted concurrently with this SCR.

Full Tier 2 testing of five surface samples is scheduled for winter 2025 to further characterize the surface in the Upper Slope area. The five samples triggered for additional analyses include the 0- to 2-foot interval at SC04 and the 0- to 2-foot intervals at reoccupied locations SC05RE, SC09RE, SC10RE, and SC11RE. Results will be presented in a forthcoming SCR Addendum once testing is complete and results have undergone validation.

6.1 Site Boundary

Thirty-five of the 45 locations sampled (27 cores and all eight grabs) exceeded at least one analyte in at least one interval. Thirteen of these locations only exceeded the DMMP SL or DMMP BT for total D/F TEQ, which is a regional contaminant with concentrations above natural background levels throughout the Blair Waterway. The deepest exceedance for both D/F and Site COCs was 10 feet bml in two samples (SC25 and SC27), both of which are in the Upper Slope area and were delineated to clean in the following deeper intervals.

All locations in the Lower Slope area were bounded with samples below DMMP and SMS criteria, with the exception of one core (SC17) and one grab (SG30), both of which only exceeded the DMMP SL for total D/F TEQ (4 ng/kg TEQ) in the deepest interval. Samples were bounded in the easternmost locations and all locations closest to the Blair Waterway. The deepest exceedance present in the Lower Slope area was 8 feet bml at one location (SC26), which was vertically bounded with results below DMMP and SMS criteria in the following interval.

Similarly, all locations in the Upper Slope area were bounded with samples below DMMP and SMS criteria, with the exception of two cores (SC04 and SC08), both of which only exceeded DMMP SL or DMMP BT for total D/F TEQ in the deepest interval. Three of the seven grabs collected in the Upper Slope area only exceeded the DMMP SL for total D/F TEQ. The four grabs with Site COC exceedances were all on the eastern half of the site, surrounding the A.H. Powers Dock (Figure 2-3; SG06, SG12, SG25, and SG31).

6.2 Lower Slope Contamination

Sediment contamination exceeding DMMP criteria must be removed prior to the USACE FNC Deepening Project to prevent sloughing of contamination associated with the Tru-Grit Site into the Blair Waterway. Within the Lower Slope area, and based on the 2024 and 2025 investigations, the extent of site-associated COCs above SMS and DMMP criteria have been bounded, with one exception of TG-SC17 where the deepest interval had a DMMP SL exceedance for total D/F TEQ. This location is included in Area A, which will be removed prior to FNC deepening activities. D/F will also be removed within the removal footprint. Once existing COC contamination is removed from the Lower Slope area, the Blair Waterway should not be impacted by any sloughing anticipated during the USACE FNC Deepening Project.

6.3 Upper Slope Considerations

Any contamination present in the Upper Slope area is not anticipated to be affected by the USACE FNC Deepening Project due to its distance from the slough boundary. Additional actions may be required to address remaining contaminated sediment in the Upper Slope area after the USACE FNC Deepening Project is completed.

7 References

Anchor QEA, 2024a. *Sampling and Quality Assurance Project Plan*. Tru-Grit Site Data Gaps Field Investigation. Prepared for Port of Tacoma. July 2024.

Anchor QEA, 2024b. *Archaeological Monitoring and Inadvertent Discovery Plan.* Blair Waterway Tacoma Harbor Deepening Program Sediment Sampling. Prepared for Port of Tacoma. October 2024.

Anchor QEA, 2025a. *Sampling and Quality Assurance Project Plan Addendum #1*. Tru-Grit Site Data Gaps Field Investigation. Prepared for Port of Tacoma. March 2025.

Anchor QEA, 2025b. *Sampling and Quality Assurance Project Plan Addendum #2*. Tru-Grit Site Data Gaps Field Investigation. Prepared for Port of Tacoma. August 2025.

Anchor QEA, 2025c. *Blair Waterway Federal Navigation Channel Deepening Sediment Characterization Report.* Prepared for Port of Tacoma. November 2025.

Anchor QEA, 2026. *Interim Action Plan.* Port of Tacoma – Tru-Grit Site. Prepared for Port of Tacoma. January 2026.

DMMP (Dredged Material Management Program), 2025. *Dredged Material Evaluation and Disposal Procedures User Manual.* Prepared by the Dredged Material Management Office, U.S. Army Corps of Engineers, Seattle District. November 2025.

Ecology (Washington State Department of Ecology), 2024. *Biological Testing Methods 80-12 for the Designation of Dangerous Waste.* Static Acute Fish Toxicity Test. Publication 80-12. Hazardous Waste and Toxics Reduction Program, Washington State Department of Ecology, Olympia, Washington. Revised March 2024.

Ecology, 2025. *Sediment Cleanup User's Manual (SCUM): Guidance for Implementing the Cleanup Provisions of the Sediment Management Standards, Chapter 173-204 WAC*. Fourth Revision. Toxics Cleanup Program Publication No. 12-09-057. December 2025.

EPA (U.S. Environmental Protection Agency), 2009. *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use.* Office of Solid Waste and Emergency Response. USEPA 540-R-08-005. January 2009.

Landau (Landau Associates, Inc.), 2009. *Tru-Grit Facility Sediment Sampling and Analysis Results,* Tacoma, Washington. July 2009.

Landau, 2019. *Agency Review Draft Feasibility Study, Tru-Grit Facility, Tacoma, Washington.* Prepared for CanAm Minerals, Inc. December 2019.

DRAFT

Landau, 2021. *Remedial Investigation Report, Tru-Grit Abrasives, Inc.* Prepared for CanAm Minerals, Inc. December 2021.

Tables

Table 3-1a

Sample Locations, IDs, Coordinates, Elevations, and Intervals Summary – Tru-Grit

Location/ Purpose	Location ID	Accepted Attempt No.	Total No. of Attempts	Station Coordinates (Washington SP NAD83 South Zone)		Mudline Elevation (ft MLLW)	Drive Penetration (ft bml)	Core Collection Recovery Length (ft)	Core Collection Recovery (%)	Processed Core Length (ft)	Sample ID	Analyses										
				Easting (ft)	Northing (ft)							TS/TVS/TOC	Metals	Grain Size	Atterberg Limits	Butyltins	SVOCs	Pesticides	PCBs	D/F	Chemistry Archive	Bioassay Archive
Upper Slope	TG-SC01	4	4	1168428.72	712752.49	-2.67	5.10	1.30	25%	1.30	TG-SC01-00-01-241113	X	X	X	--	X	X	X	X	X	X	--
	TG-SC02	2	3	1168492.13	712726.57	-6.27	4.00	2.40	60%	2.40	TG-SC02-00-1.7-241108	X	X	X	--	X	X	X	X	X	X	--
	TG-SC03	3	3	1168576.22	712621.92	-12.09	8.00	6.60	83%	6.60	TG-SC03-0.8-6.3-241108	--	--	X	X	--	--	--	--	--	--	--
											TG-SC03-00-0.8-241108	--	--	X	--	--	--	--	--	--	--	--
											TG-SC03-00-02-241108	X	X	--	--	X	X	X	X	X	X	--
											TG-SC03-02-04-241108	X	X	--	--	--	--	--	--	--	X	--
											TG-SC03-04-06-241108	X	X	--	--	--	--	--	--	--	X	--
											TG-SC03-06-6.3-241108	X	X	--	--	--	--	--	--	--	X	--
	TG-SC04	2	2	1168685.57	712562.29	0.10	7.00	6.90	99%	6.90	TG-SC04-00-02-241029	X	X	--	--	--	--	--	--	--	X	--
											TG-SC04-02-04-241029	X	X	X	--	--	--	--	--	--	X	--
											TG-SC04-04-06-241029	X	X	X	--	X	X	X	X	X	X	--
											TG-SC04-5.8-06-241029	--	--	--	X	--	--	--	--	--	--	--
	TG-SC05	2	3	1168779.18	712461.22	-0.47	1.30	1.30	100%	1.30	TG-SC05-00-1.6-241113	--	X	X	--	--	--	--	--	--	--	--
	TG-SC05RE	3	3	1168779.01	712454.66	-0.14	14.00	9.80	70%	9.40	TG-SC05RE-00-02-250401	X	X	--	--	--	--	--	--	--	X	--
											TG-SC05RE-02-04-250401	X	X	--	--	X	X	X	X	X	X	--
											TG-SC05RE-04-06-250401	X	X	--	--	--	--	--	--	--	X	--
											TG-SC05RE-06-08-250401	X	X	--	--	--	--	--	--	--	X	--
											TG-SC05RE-08-9.4-250401	X	X	--	--	--	--	--	--	--	X	--
	TG-SC06	2	2	1168845.29	712371.62	-11.24	8.00	7.30	91%	7.30	TG-SC06-00-02-241108	X	X	--	--	X	X	X	X	X	X	--
											TG-SC06-02-04-241108	X	X	--	--	X	X	X	X	X	X	--
											TG-SC06-04-06-241108	X	X	--	--	--	--	--	--	--	X	--
											TG-SC06-06-07-241108	X	X	--	--	--	--	--	--	--	X	--
											TG-SC06-1.5-2.7-241108	--	--	X	--	--	--	--	--	--	--	--
											TG-SC06-3.1-06-241108	--	--	X	X	--	--	--	--	--	--	--
	TG-SC07	3	3	1168359.21	712767.11	-18.96	6.80	6.30	93%	6.30	TG-SC07-00-02-241113	X	X	--	--	X	X	X	X	X	X	--
											TG-SC07-00-3.6-241113	--	--	X	--	--	--	--	--	--	--	--
											TG-SC07-02-04-241113	X	X	--	--	--	--	--	--	--	X	--
											TG-SC07-04-5.9-241113	--	X	--	--	--	--	--	--	--	X	--
											TG-SC07-3.6-5.9-241113	--	--	X	--	--	--	--	--	--	--	--
	TG-SC08		1	1168463.08	712691.57	-25.30	7.90	6.40	81%	6.40	TG-SC08-00-02-241114	X	X	--	--	X	X	X	X	X	X	--
											TG-SC08-00-4.9-241114	--	--	X	--	--	--	--	--	--	--	--
											TG-SC08-02-04-241114	X	X	--	--	--	--	--	--	--	X	--
											TG-SC08-04-06-241114	X	X	--	--	--	--	--	--	X	X	--
											TG-SC08-4.9-06-241114	--	--	X	--	--	--	--	--	--	--	--
	TG-SC09	1	1	1168550.16	712596.74	-26.43	7.90	7.10	90%	7.10	TG-SC09-00-02-241113	X	X	--	--	--	--	--	--	--	X	--
											TG-SC09-00-5.8-241113	--	--	X	--	--	--	--	--	--	--	--
											TG-SC09-02-04-241113	X	X	--	--	--	--	--	--	--	X	--
											TG-SC09-04-06-241113	X	X	--	--	--	--	--	--	--	X	--
											TG-SC09-06-6.7-241113	X	X	--	--	--	--	--	--	--	X	--
											TG-SC09-5.8-6.7-241113	--	--	X	--	--	--	--	--	--	--	--
	TG-SC09RE	1	1	1168547.81	712592.18	-26.53	14.00	12.40	89%	12.00	TG-SC09RE-00-02-250327	--	--	--	--	--	--	--	--	--	X	--
											TG-SC09RE-02-04-250327	--	--	--	--	--	--	--	--	--	X	--
											TG-SC09RE-04-06-250327	--	--	--	--	--	--	--	--	--	X	--
											TG-SC09RE-06-08-250327	X	X	--	--	--	--	--	--	--	X	--
											TG-SC09RE-08-10-250327	X	X	--	--	X	X	X	X	X	X	--
											TG-SC09RE-10-12-250327	X	X	--	--	--	--	--	--	--	X	--
	TG-SC10	3		1168646.82	712514.63	-19.27	7.20	5.50	76%	5.50	TG-SC10-00-02-241112	X	X	--	--	--	--	--	--	--	X	--
											TG-SC10-00-5.2-241112	--	--	X	--	--	--	--	--	--	--	--
											TG-SC10-02-04-241112	X	X	--	--	--	--	--	--	--	X	--
											TG-SC10-04-5.2-241112	X	X	--	--	--	--	--	--	--	X	--
	TG-SC10RE	4	4	1168649.95	712504.21	-19.28	14.00	7.30	52%	6.90	TG-SC10RE-00-02-250328	--	--	--	--	--	--	--	--	--	X	--
											TG-SC10RE-02-04-250328	--	--	--	--	--	--	--	--	--	X	--
											TG-SC10RE-04-06-250328	X	X	--	--	--	--	--	--	--	X	--
											TG-SC10RE-06-6.9-250328	X	X	--	--	X	X	X	X	X	X	--

Table 3-1a

Sample Locations, IDs, Coordinates, Elevations, and Intervals Summary – Tru-Grit

Location/ Purpose	Location ID	Accepted Attempt No.	Total No. of Attempts	Station Coordinates (Washington SP NAD83 South Zone)		Mudline Elevation (ft MLLW)	Drive Penetration (ft bml)	Core Collection Recovery Length (ft)	Core Collection Recovery (%)	Processed Core Length (ft)	Sample ID	Analyses										
				Easting (ft)	Northing (ft)							TS/TVS/TOC	Metals	Grain Size	Atterberg Limits	Butyltins	SVOCs	Pesticides	PCBs	D/F	Chemistry Archive	Bioassay Archive
Upper Slope	TG-SC11	1	1	1168739.86	712411.84	-18.16	6.00	4.80	80%	4.80	TG-SC11-00-02-241111	X	X	X	--	--	--	--	--	--	--	--
											TG-SC11-02-4.4-241111	X	X	X	--	X	X	X	X	X	X	--
	TG-SC11RE	1	1	1168728.15	712425.22	-17.65	14.00	11.60	83%	11.30	TG-SC11RE-00-02-250327	--	--	--	--	--	--	--	--	--	X	--
											TG-SC11RE-02-04-250327	X	X	--	--	--	--	--	--	--	X	--
											TG-SC11RE-04-06-250327	X	X	--	--	--	--	--	--	X	X	--
											TG-SC11RE-06-08-250327	X	X	--	--	--	--	--	--	X	X	--
											TG-SC11RE-08-10-250327	X	X	--	--	--	--	--	--	--	X	--
											TG-SC11RE-10-11.3-250327	X	X	--	--	--	--	--	--	--	X	--
	TG-SC12	1	1	1168829.62	712329.32	-20.33	5.00	5.00	100%	5.00	TG-SC12-0.9-4.5-241111	--	--	X	--	--	--	--	--	--	--	--
											TG-SC12-00-0.9-241111	--	--	X	--	--	--	--	--	--	--	--
											TG-SC12-00-02-241111	X	X	--	--	--	--	--	--	--	X	--
											TG-SC12-02-4.5-241111	X	X	--	--	--	--	--	--	--	X	--
	TG-SC12RE	1	1	1168828.17	712339.01	-18.48	12.40	11.60	94%	11.20	TG-SC12RE-00-02-250328	--	--	--	--	--	--	--	--	--	X	--
											TG-SC12RE-02-04-250328	--	--	--	--	--	--	--	--	--	X	--
											TG-SC12RE-04-06-250328	X	X	--	--	X	X	X	X	X	X	--
											TG-SC12RE-06-08-250328	X	X	--	--	--	--	--	--	X	X	--
											TG-SC12RE-08-10-250328	X	X	--	--	--	--	--	--	X	X	--
											TG-SC12RE-10-11.2-250328	X	X	--	--	--	--	--	--	--	X	--
	TG-SC25	3	3	1168914.82	712238.16	-19.06	14.00	12.20	87%	11.80	TG-SC25-00-02-250328	X	X	--	--	--	--	--	--	--	X	--
											TG-SC25-02-04-250328	X	X	--	--	--	--	--	--	--	X	--
											TG-SC25-04-06-250328	X	X	--	--	X	X	X	X	X	X	--
											TG-SC25-06-08-250328	X	X	--	--	--	--	--	--	--	X	--
											TG-SC25-08-10-250328	X	X	--	--	X	X	X	X	X	X	--
											TG-SC25-10-11.8-250328	X	X	--	--	--	--	--	X	X	X	--
	TG-SC27	1	1	1169014.40	712152.58	-23.53	13.90	13.20	95%	12.70	TG-SC27-00-02-250512	X	X	--	--	--	--	--	--	--	X	--
											TG-SC27-02-04-250512	X	X	--	--	--	--	--	--	--	X	--
											TG-SC27-04-06-250512	X	X	--	--	X	X	X	X	X	X	--
											TG-SC27-06-08-250512	X	X	--	--	--	--	--	X	X	X	--
											TG-SC27-08-10-250512	X	X	--	--	--	--	--	X	X	X	--
											TG-SC27-10-12-250512	X	X	--	--	--	--	--	--	--	X	--
	TG-SC29	1	1	1169092.28	712070.25	-22.50	14.00	12.70	91%	12.00	TG-SC29-00-02-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC29-02-04-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC29-04-06-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC29-06-08-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC29-08-10-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC29-10-12-250826	X	X	--	--	--	--	--	--	--	X	--
	TG-SC31	2	3	1169055.98	712197.73	-9.45	12.60	10.60	84%	10.20	TG-SC31-00-02-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC31-02-04-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC31-04-06-250826	X	X	--	--	X	X	X	X	X	X	--
											TG-SC31-06-08-250826	X	X	--	--	X	X	X	X	X	X	--
											TG-SC31-08-10-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC31-10-10.7-250826	X	X	--	--	--	--	--	--	--	X	--

Table 3-1a

Sample Locations, IDs, Coordinates, Elevations, and Intervals Summary – Tru-Grit

Location/ Purpose	Location ID	Accepted Attempt No.	Total No. of Attempts	Station Coordinates (Washington SP NAD83 South Zone)		Mudline Elevation (ft MLLW)	Drive Penetration (ft bml)	Core Collection Recovery Length (ft)	Core Collection Recovery (%)	Processed Core Length (ft)	Sample ID	Analyses										
				Easting (ft)	Northing (ft)							TS/TVS/TOC	Metals	Grain Size	Atterberg Limits	Butyltins	SVOCs	Pesticides	PCBs	D/F	Chemistry Archive	Bioassay Archive
Lower Slope	TG-SC13	2	3	1168317.82	712730.070	-34.84	7.80	3.90	50%	3.90	TG-SC13-00-02-241113	X	X	--	--	X	X	X	X	X	X	--
											TG-SC13-00-1.9-241113	--	--	X	--	--	--	--	--	--	--	--
											TG-SC13-02-3.3-241113	X	X	--	--	--	--	--	--	--	X	--
											TG-SC13-1.9-3.3-241113	--	--	X	--	--	--	--	--	--	--	--
	TG-SC14	1	1	1168418.29	712643.01	-28.96	8.00	6.10	76%	6.10	TG-SC14-00-02-241114	X	X	--	--	--	--	--	--	--	X	--
											TG-SC14-00-3.6-241114	--	--	X	--	--	--	--	--	--	--	--
											TG-SC14-02-04-241114	X	X	--	--	X	X	X	X	X	X	--
											TG-SC14-04-6.1-241114	X	X	--	--	X	X	X	X	X	X	--
											TG-SC14-4.1-6.1-241114	--	--	X	--	--	--	--	--	--	--	--
	TG-SC15	2	2	1168507.69	712550.13	-32.10	8.00	7.00	88%	7.00	TG-SC15-00-02-241113	X	X	--	--	--	--	--	--	--	X	--
											TG-SC15-00-1.9-241113	--	--	X	--	--	--	--	--	--	--	--
											TG-SC15-02-3.2-241113	X	X	--	--	--	--	--	--	--	X	--
											TG-SC15-1.9-3.2-241113	--	--	X	--	--	--	--	--	--	--	--
	TG-SC15RE	2	2	1168500.83	712549.54	-32.47	12.50	11.20	90%	10.90	TG-SC15RE-00-02-250328	--	--	--	--	--	--	--	--	--	X	--
											TG-SC15RE-02-04-250328	X	X	--	--	--	--	--	--		X	--
											TG-SC15RE-04-06-250328	X	X	--	--	X	X	X	X	X	X	--
											TG-SC15RE-06-08-250328	X	X	--	--	--	--	--	--	--	X	--
											TG-SC15RE-08-10-250328	X	X	--	--	--	--	--	--	--	X	--
											TG-SC15RE-10-10.9-250328	X	X	--	--	--	--	--	--	--	X	--
	TG-SC16	1	1	1168611.80	712458.18	-34.40	6.50	5.80	89%	5.80	TG-SC16-00-02-241114	X	X	X	--	--	--	--	--	--	X	--
											TG-SC16-02-04-241114	X	X	--	--	--	--	--	--	--	X	--
											TG-SC16-03-05-241114	--	--	X	--	--	--	--	--	--	--	--
											TG-SC16-04-5.4-241114	X	X	--	--	X	X	X	X	X	X	--
	TG-SC17	1	1	1168696.21	712380.55	-36.00	8.00	6.90	86%	6.90	TG-SC17-00-02-241114	X	X	--	--	--	--	--	--	--	X	--
											TG-SC17-00-4.2-241114	--	--	X	--	--	--	--	--	--	--	--
											TG-SC17-02-04-241114	X	X	--	--	--	--	--	--	--	X	--
											TG-SC17-04-6.2-241114	X	X	--	--	X	X	X	X	X	X	--
											TG-SC17-4.2-6.2-241114	--	--	X	--	--	--	--	--	--	--	--
	TG-SC18	2	2	1168785.78	712283.28	-35.64	10.90	10.10	93%	10.10	TG-SC18-00-02-241101	X	X	X	--	X	X	X	X	X	X	--
											TG-SC18-02-04-241101	X	X	--	--	--	--	--	--	--	X	--
											TG-SC18-03-04-241101	--	--	--	X	--	--	--	--	--	--	--
											TG-SC18-04-06-241101	X	X	--	--	X	X	X	X	X	X	--
											TG-SC18-06-08-241101	X	X	X	--	--	--	--	--	--	X	--
											TG-SC18-08-9.9-241101	X	X	--	--	--	--	--	--	--	X	--
	TG-SC19	1	1	1168287.19	712691.87	-49.76	9.00	6.90	77%	6.90	TG-SC19-00-02-241112	X	X	--	--	X	X	X	X	X	X	--
											TG-SC19-00-2.6-241112	--	--	X	--	--	--	--	--	--	--	--
											TG-SC19-02-04-241112	X	X	--	--	--	--	--	--	--	X	--
											TG-SC19-04-5.4-241112	X	X	--	--	--	--	--	--	--	X	--
											TG-SC19-2.6-5.4-241112	--	--	X	X	--	--	--	--	--	--	--
	TG-SC20	2	2	1168378.61	712597.36	-49.89	8.00	6.00	75%	6.00	TG-SC20-00-02-241114	X	X	--	--	X	X	X	X	X	X	--
											TG-SC20-00-2.1-241114	--	--	X	--	--	--	--	--	--	--	--
											TG-SC20-02-04-241114	X	X	--	--	--	--	--	--	--	X	--
											TG-SC20-04-4.8-241114	X	X	--	--	--	--	--	--	--	X	--
											TG-SC20-2.1-4.8-241114	--	--	X	--	--	--	--	--	--	--	--
	TG-SC21	3	3	1168483.16	712521.37	-49.65	8.00	6.80	85%	6.80	TG-SC21-00-02-241113	X	X	--	--	X	X	X	X	X	X	--
											TG-SC21-00-3.8-241113	--	--	X	--	--	--	--	--	--	--	--
											TG-SC21-02-04-241113	X	X	--	--	--	--	--	--	X	X	--
											TG-SC21-04-06-241113	X	X	--	--	--	--	--	--	--	X	--
											TG-SC21-3.8-06-241113	--	--	X	--	--	--	--	--	--	--	--
	TG-SC22	1	1	1168563.30	712422.35	-50.30	8.00	7.80	98%	7.80	TG-SC22-00-02-241114	X	X	--	--	X	X	X	X	X	X	--
											TG-SC22-00-1.9-241114	--	--	X	--	--	--	--	--	--	--	--
											TG-SC22-02-04-241114	X	X	--	--	--	--	--	--	X	X	--
											TG-SC22-04-06-241114	X	X	--	--	--	--	--	--	--	X	--
											TG-SC22-06-6.8-241114	X	X	--	--	--	--	--	--	--	X	--
											TG-SC22-1.9-6.8-241114	--	--	X	--	--	--	--	--	--	--	--

Table 3-1a

Sample Locations, IDs, Coordinates, Elevations, and Intervals Summary – Tru-Grit

Location/ Purpose	Location ID	Accepted Attempt No.	Total No. of Attempts	Station Coordinates (Washington SP NAD83 South Zone)		Mudline Elevation (ft MLLW)	Drive Penetration (ft bml)	Core Collection Recovery Length (ft)	Core Collection Recovery (%)	Processed Core Length (ft)	Sample ID	Analyses										
				Easting (ft)	Northing (ft)							TS/TVS/TOC	Metals	Grain Size	Atterberg Limits	Butyltins	SVOCs	Pesticides	PCBs	D/F	Chemistry Archive	Bioassay Archive
Lower Slope	TG-SC23	1	1	1168657.10	712330.16	-50.14	8.00	6.40	80%	6.40	TG-SC23-00-02-241113	X	X	--	--	X	X	X	X	X	X	--
											TG-SC23-00-3.9-241113	--	--	X	--	--	--	--	--	--	--	--
											TG-SC23-02-04-241113	X	X	--	--	--	--	--	--	X	X	--
											TG-SC23-04-5.5-241113	X	X	--	--	--	--	--	--	--	X	--
											TG-SC23-3.9-5.5-241113	--	--	X	--	--	--	--	--	--	--	--
	TG-SC24	1	1	1168741.59	712248.08	-50.61	12.00	11.20	93%	11.20	TG-SC24-00-02-241028	X	X	X	--	X	X	X	X	X	X	--
											TG-SC24-02-04-241028	X	X	--	--	--	--	--	--	X	X	--
											TG-SC24-04-06-241028	X	X	--	--	--	--	--	--	--	X	--
											TG-SC24-06-08-241028	X	X	X	--	--	--	--	--	--	X	--
											TG-SC24-08-10-241028	X	X	--	--	--	--	--	--	--	X	--
											TG-SC24-10-11.2-241028	X	X	--	--	--	--	--	--	--	X	--
	TG-SC26	1	1	1168874.40	712198.41	-34.73	12.20	11.50	94%	11.00	TG-SC26-00-02-250331	X	X	--	--	--	--	--	--	--	X	--
											TG-SC26-02-04-250331	X	X	--	--	--	--	--	--	--	X	--
											TG-SC26-04-06-250331	X	X	--	--	--	--	--	--	--	X	--
											TG-SC26-06-08-250331	X	X	--	--	X	X	X	X	X	X	--
											TG-SC26-08-10-250331	X	X	--	--	--	--	--	--	X	X	--
											TG-SC26-10-11-250331	X	X	--	--	--	--	--	--	--	X	--
	TG-SC28	1	1	1168969.47	712108.66	-35.52	13.90	13.30	96%	12.80	TG-SC28-00-02-250512	X	X	--	--	X	X	X	X	X	X	--
											TG-SC28-02-04-250512	X	X	--	--	--	--	--	--	--	X	--
											TG-SC28-04-06-250512	X	X	--	--	--	--	--	--	--	X	--
											TG-SC28-06-08-250512	X	X	--	--	--	--	--	--	--	X	--
											TG-SC28-08-10-250512	X	X	--	--	--	--	--	--	--	X	--
											TG-SC28-10-12-250512	X	X	--	--	--	--	--	--	--	X	--
	TG-SC30	1	1	1169059.13	712020.37	-36.97	14.00	14.00	100%	13.60	TG-SC30-00-02-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC30-02-04-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC30-04-06-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC30-06-08-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC30-08-10-250826	X	X	--	--	--	--	--	--	--	X	--
											TG-SC30-10-12-250826	X	X	--	--	--	--	--	--	--	X	--
Surface Sediment Grabs	TG-SG06	1,3	3	1168873.10	712372.68	-9.83	--	--	--	--	TG-SG06-250826	X	X	--	--	X	X	X	X	X	X	X
	TG-SG12	1,2	2	1168827.03	712329.42	-20.10	--	--	--	--	TG-SG12-250826	X	X	--	--	X	X	X	X	X	X	X
	TG-SG25	4,5	5	1168914.82	712238.16	-20.00	--	--	--	--	TG-SG25-250826	X	X	--	--	X	X	X	X	X	X	X
	TG-SG27	2,3	3	1169014.40	712152.58	-24.20	--	--	--	--	TG-SG27-250826	X	X	--	--	X	X	X	X	X	X	X
	TG-SG29	1,2	2	1169092.28	712070.25	-23.61	--	--	--	--	TG-SG29-250826	X	X	--	--	X	X	X	X	X	X	X
	TG-SG30	1,2	2	1169063.30	712018.36	-34.50	--	--	--	--	TG-SG30-250826	X	X	--	--	X	X	X	X	X	X	X
	TG-SG31	1,2	2	1169055.98	712197.73	-10.40	--	--	--	--	TG-SG31-250826	X	X	--	--	X	X	X	X	X	X	X
	TG-SG32	1,3	3	1168969.17	712288.02	-1.50	--	--	--	--	TG-SG32-250826	X	X	--	--	X	X	X	X	X	X	X

Notes:
X: analyzed
-- : not analyzed
bml: below mudline
D/F: dioxins/furans
ft: foot
MLLW: mean lower low water
PCB: polychlorinated biphenyl
SVOC: semivolatile organic compound
TOC: total organic carbon
TS: total solids
TVS: total volatile solids
Washington SP NAD83: Washington State Plane North American Datum of 1983

Table 3-1b
Sample Locations, IDs, Coordinates, Elevations, and Intervals Summary – Landau

Sample Year	Location ID	Station Coordinates (Washington SP NAD83 South Zone)		Mudline Elevation (ft MLLW)	Sample ID	Sample Upper Depth (bml)	Sample Lower Depth (bml)	Depth Unit (ft/cm)	Analyses				
		Easting (ft)	Northing (ft)						TS/TOC	Metals	Grain Size	SVOCs	PCBs
2014	LANDAU-14-BSC-1	-122.402603	47.270917	-51.3	BSC-1	1	2	ft	--	X	--	--	--
						2	3	ft	--	X	--	--	--
	LANDAU-14-BSG-1	-122.402615	47.270914	-51.6	BSG-1	0	10	cm	X	X	--	--	--
	LANDAU-14-BSG-2	-122.404390	47.273800	-50.7	BSG-2	0	10	cm	--	X	--	--	--
	LANDAU-14-G-5	-122.400655	47.271653	-20.1	G-5	2	3	ft	--	X	--	--	--
						4	5	ft	--	X	--	--	--
	LANDAU-14-SC-05	-122.400970	47.272128	0.5	SC-05	1	2	ft	--	X	--	--	--
						2	3	ft	--	X	--	--	--
	LANDAU-14-SC-07	-122.400533	47.271858	0.3	SC-07	1	2	ft	--	X	--	--	--
						2	3	ft	--	X	--	--	--
	LANDAU-14-SC-08	-122.401067	47.272033	-12.3	SC-08	1	2	ft	--	X	--	--	--
						2	3	ft	--	X	--	--	--
						1	2	ft	--	X	--	--	--
						2	3	ft	--	X	--	--	--
	LANDAU-14-SC-09	-122.400858	47.271913	-8.6	SC-09	1	2	ft	--	X	--	--	--
						2	3	ft	--	X	--	--	--
	LANDAU-14-SC-10	-122.400672	47.271796	-8.5	SC-10	2	3	ft	--	X	--	--	--
						3	4	ft	--	X	--	--	--
	LANDAU-14-SC-12	-122.400983	47.271810	-26.7	SC-12	1	2	ft	--	X	--	--	--
						2	3	ft	--	X	--	--	--
	LANDAU-14-SC-13	-122.400776	47.271660	-27.2	SC-13	3	4	ft	--	X	--	--	--
						5	6	ft	--	X	--	--	--
	LANDAU-14-SC-14	-122.400620	47.271446	-29.8	SC-14	1	2	ft	--	X	--	--	--
						2	3	ft	--	X	--	--	--
	LANDAU-14-SC-16	-122.401347	47.271840	-28.3	SC-16	1	2	ft	--	X	--	--	--
						2	3	ft	--	X	--	--	--
	LANDAU-14-SC-17	-122.401120	47.271692	30.2	SC-17	2	3	ft	--	X	--	--	--
						3	4	ft	--	X	--	--	--
	LANDAU-14-SG-01	-122.401213	47.272270	4.1	SG-01	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-02	-122.400805	47.272125	3.8	SG-02	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-03	-122.400486	47.271985	7.1	SG-03	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-04	-122.400492	47.271832	10.2	SG-04	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-05	-122.400974	47.272125	0.3	SG-05	0	10	cm	X	X	--	--	--
	LANDAU-14-SG-06	-122.400744	47.271995	0.9	SG-06	0	10	cm	X	X	--	--	--
	LANDAU-14-SG-07	-122.400541	47.271850	0.9	SG-07	0	10	cm	X	X	--	--	--
	LANDAU-14-SG-08	-122.401080	47.272036	-14.8	SG-08	0	10	cm	X	X	--	--	--
	LANDAU-14-SG-09	-122.400865	47.271902	-8.7	SG-09	0	10	cm	X	X	--	--	--
	LANDAU-14-SG-10	-122.400668	47.271790	-6.8	SG-10	0	10	cm	X	X	X	X	X
	LANDAU-14-SG-11	-122.401217	47.271935	-27.9	SG-11	0	10	cm	X	X	--	--	--
	LANDAU-14-SG-12	-122.401003	47.271804	-27.1	SG-12	0	10	cm	X	X	--	--	--
	LANDAU-14-SG-13	-122.400784	47.271665	-28.6	SG-13	0	10	cm	X	X	X	X	X
	LANDAU-14-SG-14	-122.400559	47.271452	-27.1	SG-14	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-15	-122.400171	47.271190	-28.9	SG-15	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-16	-122.401351	47.271837	-27.5	SG-16	0	10	cm	X	X	--	--	--

Table 3-1b
Sample Locations, IDs, Coordinates, Elevations, and Intervals Summary – Landau

Sample Year	Location ID	Station Coordinates (Washington SP NAD83 South Zone)		Mudline Elevation (ft MLLW)	Sample ID	Sample Upper Depth (bml)	Sample Lower Depth (bml)	Depth Unit (ft/cm)	Analyses				
		Easting (ft)	Northing (ft)						TS/TOC	Metals	Grain Size	SVOCs	PCBs
2014	LANDAU-14-SG-17	-122.401124	47.271690	-30.6	SG-17	0	10	cm	X	X	--	--	--
	LANDAU-14-SG-18	-122.400884	47.271529	-34.0	SG-18	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-19	-122.400480	47.271253	-39.6	SG-19	0	10	cm	X	X	--	--	--
	LANDAU-14-SG-20	-122.401261	47.271583	-50.7	SG-20	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-21	-122.400861	47.271315	-50.4	SG-21	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-22	-122.400415	47.271013	-51.1	SG-22	0	10	cm	X	X	--	--	--
	LANDAU-14-SG-23	-122.400349	47.271768	10.3	SG-23	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-24	-122.400677	47.272056	4.6	SG-24	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-25	-122.401330	47.272158	-7.6	SG-25	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-26	-122.401440	47.272077	-17.4	SG-26	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-27	-122.401585	47.271978	-27.3	SG-27	0	10	cm	--	X	--	--	--
	LANDAU-14-SG-28	-122.401516	47.271733	-50.8	SG-28	0	10	cm	--	X	--	--	--
2018	LANDAU-18-G-5	-122.400664	47.271651	-25.3	G-5 (2018)	0	0.33	ft	X	X	X	X	X
	LANDAU-18-SG-14	-122.400574	47.271458	-28.9	SG-14 (2018)	0	0.33	ft	X	X	X	X	X
	LANDAU-18-SG-16	-122.401352	47.271833	-28.5	SG-16 (2018)	0	0.33	ft	X	X	X	X	X
	LANDAU-18-SG-17	-122.401122	47.271692	-35.7	SG-17 (2018)	0	0.33	ft	X	X	X	X	X

Notes:
X: analyzed
-- : not analyzed
bml: below mudline
cm: centimeter
ft: feet
MLLW: mean lower low water
PCB: polychlorinated biphenyl
SVOC: semivolatile organic compound
TOC: total organic carbon
TS: total solids
Washington SP NAD83: Washington State Plane North American Datum of 1983

Table 3-1c
Sample Locations, IDs, Coordinates, Elevations, and Intervals Summary – Blair Federal Navigation Channel Side Slopes

Upper DMMU	Lower DMMU	Location ID	Station Coordinates (Washington SP NAD83 South Zone)		Mudline Elevation (feet MLLW)	Discrete Sample ID	Analyses											
			Easting (feet)	Northing (feet)			TS/TVS/ TOC	Grain Size	NH_3/S^{2-}	Metals	Butyltins	SVOCs	Pesticides	PCBs	D/F	Chemistry Archive	D/F Archive	Bioassay Archive
D116	D506	BW-SC073	1168192.72	712810.31	-46.6	BW-SC073-A-250605	X	--	X	X	X	X	X	X	X	X	X	X
						BW-SC073-B-250605	X	--	X	X	X	X	X	X	X	X	X	X
						BW-SC073-Z-250605	--	--	--	--	--	--	--	--	--	X	X	--
						BW-SC073-10-11.3-250605	--	--	--	--	--	--	--	--	--	X	--	--
D117		BW-SC075	1168453.59	712517.14	-50.56	BW-SC075-A-250604	X	--	X	X	X	X	X	X	X	X	X	X
						BW-SC075-B-250604	X	--	X	X	X	X	X	X	X	X	X	X
						BW-SC075-Z-250604	--	--	--	--	--	--	--	--	--	X	X	--
						BW-SC075-10-11.4-250604	--	--	--	--	--	--	--	--	--	X	--	--
D118		BW-SC081	1168624.99	712347.00	-50.52	BW-SC081-A-250604	X	--	X	X	X	X	X	X	X	X	X	X
						BW-SC081-B-250604	X	--	X	X	X	X	X	X	X	X	X	X
						BW-SC081-Z-250604	--	--	--	--	--	--	--	--	--	X	X	--
						BW-SC081-10-12.1-250604	--	--	--	--	--	--	--	--	--	X	--	--
D119	D507	BW-SC088	1168912.5	712123.09	-46.61	BW-SC088-A-250604	X	--	X	X	X	X	X	X	X	X	X	X
						BW-SC088-B-250604	X	--	X	X	X	X	X	X	X	X	X	X
						BW-SC088-Z-250604	--	--	--	--	--	--	--	--	--	X	X	--
						BW-SC088-10-12.4-250604	--	--	--	--	--	--	--	--	--	X	--	--
D120		BW-SC094	1169151.27	711896.32	-45.46	BW-SC094-A-250605	X	--	X	X	X	X	X	X	X	X	X	X
						BW-SC094-B-250605	X	--	X	X	X	X	X	X	X	X	X	X
						BW-SC094-Z-250605	--	--	--	--	--	--	--	--	--	X	X	--
						BW-SC094-10-11.2-250605	--	--	--	--	--	--	--	--	--	X	--	--

Notes:
X: analyzed
--: not analyzed
D/F: dioxins/furans
DMMU: dredged material management unit
MLLW: mean lower low water
NAD83: North American Datum of 1983
NH_3/S^{2-}: sulfides
PCB: polychlorinated biphenyl
SVOC: semivolatile organic compound
TOC: total organic carbon
TS: total solids
TVS: total volatile solids
Washington SP NAD83: Washington State Plane North American Datum of 1983

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC01	TG-SC02	TG-SC03	TG-SC03	TG-SC03	TG-SC03	TG-SC04	TG-SC04	TG-SC04	TG-SC05	TG-SC05RE	TG-SC05RE	TG-SC05RE
						Sample ID	TG-SC01-00-01-241113	TG-SC02-00-1.7-241108	TG-SC03-00-02-241108	TG-SC03-02-04-241108	TG-SC03-04-06-241108	TG-SC03-06-6.3-241108	TG-SC04-00-02-241029	TG-SC04-02-04-241029	TG-SC04-04-06-241029	TG-SC05-00-1.6-241113	TG-SC05RE-00-02-250401	TG-SC05RE-02-04-250401	TG-SC05RE-04-06-250401	TG-SC05RE-06-08-250401
						Sample Date	2024-11-13	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-10-29	2024-10-29	2024-10-29	2024-11-13	2025-04-01	2025-04-01	2025-04-01	2025-04-01
						Depth Interval	0 - 1 ft	0 - 1.7 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.3 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 1.6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						**0.18**	**0.25**	**1.59**	--	--	--	--	--	**0.37**	--	--	**0.05 J**	--	--
Total solids	D2216						--	--	--	--	--	--	--	--	--	--	--	**84.06**	--	--
Total solids	SM2540G						**84.24**	**84.53**	**65.44**	**53.75**	**53.08**	**47.18**	**72.13**	**75.71**	**82.14**	**73.02**	**90.91**	**84.39**	**83.53**	**80.07**
Total volatile solids	PSEP-TVS						**2.46**	**1.38**	**3.98**	--	--	--	--	--	**1.73**	--	--	**0.92**	--	--
Metals (mg/kg)																				
Antimony	SW6020	150			200		**0.32 J**	**0.48 J**	**0.21 J**	0.36 UJ	0.37 UJ	0.42 UJ	**0.87**	**1.61**	**0.51**	**4.68 J**	**0.49 J**	0.23 UJ	0.23 UJ	0.23 UJ
Arsenic	SW6020	57	507.1		700		**7.44 J**	**10.2**	**7.07**	**5.70**	**6.73**	**7.71**	**26.5**	**59.1**	**29.4**	**37.3 J**	**9.60**	**2.07**	**0.99**	**0.99**
Cadmium	SW6020	5.1			14		**0.18 J**	**0.13**	**0.12 J**	**0.13 J**	**0.13 J**	**0.18 J**	**0.23**	**0.28**	**0.15**	**0.18 J**	**0.06 J**	0.11 U	0.11 U	0.12 U
Chromium	SW6020	260					**9.19 J**	**18.7 J**	**10.7 J**	**13.8 J**	**14.3 J**	**11.9 J**	**13.0**	**20.4**	**12.3**	**15.7 J**	**12.7**	**10.6**	**9.79**	**12.0**
Copper	SW6020	390			1300		**49.9 J**	**43.0 J**	**45.2 J**	**32.0 J**	**38.8 J**	**38.3 J**	**120**	**347**	**112**	**155 J**	**66.8**	**11.1**	**10.1**	**9.88**
Lead	SW6020	450	975		1200		**13.9 J**	**23.4 J**	**8.40 J**	**4.32 J**	**3.90 J**	**3.57 J**	**50.2**	**86.3**	**38.2**	**51.7 J**	**15.0**	**1.31**	**1.18**	**1.12**
Mercury	SW7471B	0.41	1.5		2.3		**0.00984 J**	**0.0119 J**	**0.0208 J**	**0.0158 J**	**0.0163 J**	**0.0155 J**	**0.0771**	**0.0529**	**0.0383**	**0.0546 J**	**0.0189 J**	0.0243 U	0.0263 U	0.0275 U
Selenium	SW6020		3				**0.76 J**	**0.63**	**0.90**	**1.01**	**1.10**	**1.32**	**0.36 J**	**0.45 J**	**0.45 J**	**0.39 J**	**0.58**	**0.79**	0.57 U	0.59 U
Silver	SW6020	6.1			8.4		**0.10 J**	**0.06 J**	**0.10 J**	**0.10 J**	**0.10 J**	**0.09 J**	**0.32**	**0.48**	**0.29**	**0.18 J**	0.21 UJ	0.23 UJ	0.23 UJ	0.23 UJ
Zinc	SW6020	410			3800		**62.3 J**	**71.4 J**	**44.2 J**	**31.6 J**	**36.3 J**	**36.8 J**	**148**	**215**	**110**	**234 J**	**81.4**	**21.2**	**20.6**	**21.7**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM			73			R	**9.47 J**	3.83 UJ	--	--	--	--	--	3.85 U	--	--	3.40 U	--	--
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--
1,2-Dichlorobenzene	SW8270ESIM	35			110		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--
1,4-Dichlorobenzene	SW8270ESIM	110			120		5.0 U	**4.9 J**	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--
2,4-Dimethylphenol	SW8270ESIM	29			210		19.9 UJ	20.0 UJ	20.0 UJ	--	--	--	--	--	20.0 UJ	--	--	16.7 U	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--
Benzoic acid	SW8270ESIM	650			760		99.4 UJ	100 UJ	100 UJ	--	--	--	--	--	99.9 UJ	--	--	**111 J**	--	--
Benzyl alcohol	SW8270ESIM	57			870		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	16.7 UJ	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		49.7 U	**88.0**	50.0 U	--	--	--	--	--	49.9 U	--	--	35.5 U	--	--
Butylbenzyl phthalate	SW8270ESIM	63			970		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	6.6 U	--	--
Di-n-butyl phthalate	SW8270E	1400			5100		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Di-n-octyl phthalate	SW8270E	6200			6200		19.9 U	20.0 U	20.0 U	--	--	--	--	--	**365 J**	--	--	14.2 U	--	--
Diethyl phthalate	SW8270ESIM	200			1200		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	16.7 U	--	--
Dimethyl phthalate	SW8270ESIM	71			1400		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--
Hexachlorobenzene	SW8270ESIM	22	168		230		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--
n-Nitrosodiphenylamine	SW8270ESIM	28			130		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	16.7 U	--	--
Pentachlorophenol	SW8270ESIM	400	504		690		19.9 UJ	20.0 UJ	20.0 UJ	--	--	--	--	--	49.9 U	--	--	16.7 UJ	--	--
Phenol	SW8270ESIM	420			1200		5.0 U	5.0 U	5.0 U	--	--	--	--	--	9.4 U	--	--	4.2 U	--	--

Table 5-1a

Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC01	TG-SC02	TG-SC03	TG-SC03	TG-SC03	TG-SC03	TG-SC04	TG-SC04	TG-SC04	TG-SC05	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE
						Sample ID	TG-SC01-00-01-241113	TG-SC02-00-1.7-241108	TG-SC03-00-02-241108	TG-SC03-02-04-241108	TG-SC03-04-06-241108	TG-SC03-06-6.3-241108	TG-SC04-00-02-241029	TG-SC04-02-04-241029	TG-SC04-04-06-241029	TG-SC05-00-1.6-241113	TG-SC05RE-00-02-250401	TG-SC05RE-02-04-250401	TG-SC05RE-04-06-250401	TG-SC05RE-06-08-250401
						Sample Date	2024-11-13	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-10-29	2024-10-29	2024-10-29	2024-11-13	2025-04-01	2025-04-01	2025-04-01	2025-04-01
						Depth Interval	0 - 1 ft	0 - 1.7 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.3 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 1.6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E	670			1900		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Acenaphthene	SW8270E	500			2000		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Acenaphthylene	SW8270E	560			1300		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Anthracene	SW8270E	960			13000		19.9 U	**11.9 J**	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Benzo(a)anthracene	SW8270E	1300			5100		**42.8**	**52.3**	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Benzo(a)pyrene	SW8270E	1600			3600		**59.3**	**68.4**	20.0 U	--	--	--	--	--	**1060 J**	--	--	14.2 U	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						**127**	**145**	40.0 U	--	--	--	--	--	40.0 U	--	--	28.4 U	--	--
Benzo(g,h,i)perylene	SW8270E	670			3200		**102 J**	**108 J**	**92.5 J**	--	--	--	--	--	99.9 U	--	--	14.2 UJ	--	--
Carbazole	SW8270E						19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Chrysene	SW8270E	1400			21000		**60.8**	**71.1**	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900		**15.8**	**16.6**	5.0 U	--	--	--	--	--	10.0 U	--	--	4.2 U	--	--
Dibenzofuran	SW8270E	540			1700		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Fluoranthene	SW8270E	1700	4600		30000		**94.8**	**106**	**20.9**	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Fluorene	SW8270E	540			3600		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400		19.9 U	**21.0**	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 UJ	--	--
Naphthalene	SW8270E	2100			2400		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Phenanthrene	SW8270E	1500			21000		**41.0**	**43.4**	**13.5 J**	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Pyrene	SW8270E	2600	11980		16000		**117**	**107**	**21.7**	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		**127**	**145**	40.0 U	--	--	--	--	--	40.0 U	--	--	28.4 U	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						**78.5**	**92.6**	20.0 U	--	--	--	--	--	**1060 J**	--	--	14.2 UJ	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						**79.5**	**92.6**	20.0 U	--	--	--	--	--	**1060 J**	--	--	14.2 UJ	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		**620 J**	**695 J**	**135 J**	--	--	--	--	--	**1060 J**	--	--	28.4 UJ	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		**41.0**	**55.3 J**	**13.5 J**	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--
Pesticides (µg/kg)																				
2,4'-DDD (o,p'-DDD)	SW8081B						0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 U	--	--	0.90 UJ	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 U	--	--	0.90 U	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 U	--	--	0.90 U	--	--
4,4'-DDD (p,p'-DDD)	SW8081B	16					0.99 U	**0.96 J**	**0.95 J**	--	--	--	--	--	1.00 U	--	--	0.90 U	--	--
4,4'-DDE (p,p'-DDE)	SW8081B	9					0.99 U	0.99 U	**1.42**	--	--	--	--	--	1.00 UJ	--	--	0.90 U	--	--
4,4'-DDT (p,p'-DDT)	SW8081B	12					0.99 U	0.99 U	**0.91 J**	--	--	--	--	--	1.00 UJ	--	--	0.90 U	--	--
Aldrin	SW8081B	9.5					0.49 U	0.50 U	0.50 U	--	--	--	--	--	0.50 UJ	--	--	0.45 U	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						0.49 U	0.50 U	0.50 U	--	--	--	--	--	0.50 UJ	--	--	0.45 U	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						0.49 U	0.50 U	0.50 U	--	--	--	--	--	0.50 UJ	--	--	0.45 U	--	--
Dieldrin	SW8081B	1.9			1700		0.99 U	0.99 U	0.99 U	--	--	--	--	--	1.00 UJ	--	--	0.90 U	--	--
Endrin ketone	SW8081B						0.99 U	0.99 U	0.99 U	--	--	--	--	--	1.00 UJ	--	--	0.90 U	--	--
Heptachlor	SW8081B	1.5			270		0.49 U	0.50 U	0.50 U	--	--	--	--	--	0.50 UJ	--	--	0.45 U	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						0.49 U	0.50 U	0.50 U	--	--	--	--	--	0.50 UJ	--	--	0.45 U	--	--
Nonachlor, cis-	SW8081B						0.99 U	0.99 U	0.99 U	--	--	--	--	--	1.00 U	--	--	0.90 UJ	--	--
Nonachlor, trans-	SW8081B						0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 U	--	--	0.90 U	--	--
Oxychlordane	SW8081B						0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 U	--	--	0.90 UJ	--	--
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69		0.99 U	**0.96 J**	**3.3 J**	--	--	--	--	--	1.00 UJ	--	--	0.90 U	--	--
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37				0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 UJ	--	--	0.90 UJ	--	--
Total DDx (U = 0 max limit)	Calculated						0.99 UJ	**0.96 J**	**3.3 J**	--	--	--	--	--	1.00 UJ	--	--	0.90 UJ	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC01	TG-SC02	TG-SC03	TG-SC03	TG-SC03	TG-SC03	TG-SC04	TG-SC04	TG-SC04	TG-SC05	TG-SC05RE	TG-SC05RE	TG-SC05RE
						Sample ID	TG-SC01-00-01-241113	TG-SC02-00-1.7-241108	TG-SC03-00-02-241108	TG-SC03-02-04-241108	TG-SC03-04-06-241108	TG-SC03-06-6.3-241108	TG-SC04-00-02-241029	TG-SC04-02-04-241029	TG-SC04-04-06-241029	TG-SC05-00-1.6-241113	TG-SC05RE-00-02-250401	TG-SC05RE-02-04-250401	TG-SC05RE-04-06-250401
						Sample Date	2024-11-13	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-10-29	2024-10-29	2024-10-29	2024-11-13	2025-04-01	2025-04-01	2025-04-01
						Depth Interval	0 - 1 ft	0 - 1.7 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.3 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 1.6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																			
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**592**	**689**	**446**	--	--	--	--	--	**1460**	--	--	**1.54 J**	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						**15.3**	**36.6**	**15.3**	--	--	--	--	--	**65.3**	--	--	0.505 U	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**57.0**	**86.5**	**50.8**	--	--	--	--	--	**164**	--	--	0.343 U	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						**11.3**	**19.1 J**	**9.90 J**	--	--	--	--	--	**30.6**	--	--	0.186 UJ	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						0.855 UJ	**0.903 J**	**1.11 J**	--	--	--	--	--	**1.27**	--	--	0.289 UJ	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.453 U	**0.688 J**	0.476 U	--	--	--	--	--	**1.50**	--	--	0.246 U	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.843 J**	**1.60**	**1.46**	--	--	--	--	--	**2.46**	--	--	0.145 U	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**2.40 J**	**4.40**	**1.67**	--	--	--	--	--	**7.53**	--	--	0.258 U	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						0.534 U	0.332 U	**0.290 J**	--	--	--	--	--	**1.74**	--	--	0.149 U	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**1.07**	**2.53**	**1.17**	--	--	--	--	--	**3.76**	--	--	0.273 U	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						0.668 U	0.422 U	0.416 U	--	--	--	--	--	**0.557 J**	--	--	0.214 U	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						0.435 U	**0.963 J**	0.581 U	--	--	--	--	--	**1.30**	--	--	0.212 U	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						0.485 U	0.462 U	**0.544 J**	--	--	--	--	--	**1.01**	--	--	0.187 U	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**1.01**	**1.18**	0.291 U	--	--	--	--	--	**0.905 J**	--	--	0.150 U	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						0.516 UJ	0.478 U	**0.365 J**	--	--	--	--	--	**0.752 J**	--	--	0.206 UJ	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						0.284 U	0.247 U	0.227 U	--	--	--	--	--	**0.222 J**	--	--	0.180 U	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						**4.75 J**	**2.29 J**	**0.788 J**	--	--	--	--	--	**3.47 J**	--	--	0.217 U	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				**1.87 J**	**3.51 J**	**1.42 J**	--	--	--	--	--	**6.39 J**	--	--	**0.000462 J**	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				**2.40 J**	**3.75 J**	**1.88 J**	--	--	--	--	--	**6.39 J**	--	--	**0.317 J**	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**128**	**182**	**138**	--	--	--	--	--	**466**	--	--	0.128 U	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						**33.5 J**	**55.6 J**	**29.6 J**	--	--	--	--	--	**89.1**	--	--	0.105 UJ	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**18.4 J**	**34.6**	**8.90**	--	--	--	--	--	**69.1**	--	--	0.109 U	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						**23.6**	**27.5**	**14.2**	--	--	--	--	--	**42.1 J**	--	--	0.082 U	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**0.257 J**	**2.49**	**1.20**	--	--	--	--	--	**8.24**	--	--	0.086 U	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						**20.4 J**	**12.7**	**4.27**	--	--	--	--	--	**16.7**	--	--	UJ	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**0.926**	**1.63**	**0.617 J**	--	--	--	--	--	**7.20**	--	--	0.127 U	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						**16.1 J**	**8.58**	**1.81**	--	--	--	--	--	**14.4 J**	--	--	0.077 U	--
PCB Aroclors (mg/kg-OC)																			
Aroclor 1016	SW8082A						11.0 U	8.00 U	1.25 U	--	--	--	--	--	5.32 U	--	--	37.0 U	--
Aroclor 1221	SW8082A						11.0 U	8.00 U	1.25 U	--	--	--	--	--	5.32 U	--	--	37.0 U	--
Aroclor 1232	SW8082A						11.0 U	8.00 U	1.25 U	--	--	--	--	--	5.32 U	--	--	37.0 U	--
Aroclor 1242	SW8082A						11.0 U	8.00 U	1.25 U	--	--	--	--	--	5.32 U	--	--	37.0 U	--
Aroclor 1248	SW8082A						11.0 U	8.00 U	1.25 U	--	--	--	--	--	5.32 U	--	--	37.0 U	--
Aroclor 1254	SW8082A						**10.6 J**	**8.76**	1.25 U	--	--	--	--	--	**13.1**	--	--	37.0 U	--
Aroclor 1260	SW8082A						11.0 U	8.00 U	1.25 U	--	--	--	--	--	**7.54**	--	--	37.0 U	--
Aroclor 1262	SW8082A						11.0 U	8.00 U	1.25 U	--	--	--	--	--	--	--	--	37.0 U	--
Aroclor 1268	SW8082A						11.0 U	8.00 U	1.25 U	--	--	--	--	--	--	--	--	37.0 U	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				**10.6 J**	**8.76**	1.25 U	--	--	--	--	--	**20.6**	--	--	37.0 U	--

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE
						Sample ID	TG-SC05RE-06-08-250401	TG-SC05RE-08-10-250401	TG-SC05RE-10-12-250401	TG-SC05RE-12-14-250401	TG-SC05RE-14-16-250401	TG-SC05RE-16-18-250401	TG-SC05RE-18-20-250401	TG-SC05RE-20-22-250401	TG-SC05RE-22-24-250401	TG-SC05RE-24-26-250401	TG-SC05RE-26-28-250401	TG-SC05RE-28-30-250401	TG-SC05RE-30-32-250401
						Sample Date	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	12 - 14 ft	14 - 16 ft	16 - 18 ft	18 - 20 ft	20 - 22 ft	22 - 24 ft	24 - 26 ft	26 - 28 ft	28 - 30 ft	30 - 32 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																			
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				--	--	--	--	--	--	--	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				--	--	--	--	--	--	--	--	--	--	--	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (mg/kg-OC)																			
Aroclor 1016	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC01	TG-SC02	TG-SC03	TG-SC03	TG-SC03	TG-SC03	TG-SC04	TG-SC04	TG-SC04	TG-SC05	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE
						Sample ID	TG-SC01-00-01-241113	TG-SC02-00-1.7-241108	TG-SC03-00-02-241108	TG-SC03-02-04-241108	TG-SC03-04-06-241108	TG-SC03-06-6.3-241108	TG-SC04-00-02-241029	TG-SC04-02-04-241029	TG-SC04-04-06-241029	TG-SC05-00-1.6-241113	TG-SC05RE-00-02-250401	TG-SC05RE-02-04-250401	TG-SC05RE-04-06-250401	TG-SC05RE-06-08-250401
						Sample Date	2024-11-13	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-10-29	2024-10-29	2024-10-29	2024-11-13	2025-04-01	2025-04-01	2025-04-01	2025-04-01
						Depth Interval	0 - 1 ft	0 - 1.7 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.3 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 1.6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (µg/kg)																				
Aroclor 1016	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	19.7 U	--	--	18.5 U	--	--
Aroclor 1221	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	19.7 U	--	--	18.5 U	--	--
Aroclor 1232	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	19.7 U	--	--	18.5 U	--	--
Aroclor 1242	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	19.7 U	--	--	18.5 U	--	--
Aroclor 1248	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	19.7 U	--	--	18.5 U	--	--
Aroclor 1254	SW8082A						**19.0 J**	**21.9**	19.9 U	--	--	--	--	--	**48.5**	--	--	18.5 U	--	--
Aroclor 1260	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	**27.9**	--	--	18.5 U	--	--
Aroclor 1262	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	--	--	--	18.5 U	--	--
Aroclor 1268	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	--	--	--	18.5 U	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		**19.0 J**	**21.9**	19.9 U	--	--	--	--	--	**76.4**	--	--	18.5 U	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC05RE	TG-SC05RE	TG-SC06	TG-SC06	TG-SC06	TG-SC06	TG-SC07	TG-SC07	TG-SC07	TG-SC08	TG-SC08	TG-SC08	TG-SC09	TG-SC09
						Sample ID	TG-SC105RE-06-08-250401	TG-SC05RE-08-9.4-250401	TG-SC06-00-02-241108	TG-SC06-02-04-241108	TG-SC06-04-06-241108	TG-SC06-06-07-241108	TG-SC07-00-02-241113	TG-SC07-02-04-241113	TG-SC07-04-5.9-241113	TG-SC08-00-02-241114	TG-SC08-02-04-241114	TG-SC08-04-06-241114	TG-SC09-00-02-241113	TG-SC09-02-04-241113
						Sample Date	2025-04-01	2025-04-01	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13
						Depth Interval	6 - 8 ft	8 - 9.4 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 7 ft	0 - 2 ft	2 - 4 ft	4 - 5.9 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft
						Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	--	**0.74**	**0.69**	--	--	**0.53**	--	--	**1.06**	--	**0.35 J**	--	--
Total solids	D2216						--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	SM2540G						**81.69**	**77.55**	**66.99**	**68.43**	**59.33**	**57.23**	**74.42**	**76.06**	**85.85**	**61.95**	**59.51**	**75.98**	**61.41**	**66.03**
Total volatile solids	PSEP-TVS						--	--	**3.68**	**2.98**	--	--	**2.51**	--	--	**4.19**	--	--	--	--
Metals (mg/kg)																				
Antimony	SW6020	150			200		0.24 UJ	0.25 UJ	**2.06 J**	0.28 UJ	0.33 UJ	0.35 UJ	**0.16 J**	0.25 UJ	0.22 UJ	0.31 UJ	**0.86 J**	**3.86 J**	**0.49 J**	**1.23 J**
Arsenic	SW6020	57	507.1		700		**0.99**	**1.65**	**30.2**	**4.79**	**6.73**	**6.43**	**7.84 J**	**6.76 J**	**2.43**	**9.03 J**	**28.6 J**	**42.5 J**	**17.1 J**	**38.4 J**
Cadmium	SW6020	5.1			14		0.12 U	**0.09 J**	**0.22**	**0.12 J**	**0.06 J**	**0.14 J**	**0.15 J**	**0.10 J**	**0.04 J**	**0.20 J**	**0.39 J**	**0.20 J**	**0.24 J**	**0.26 J**
Chromium	SW6020	260					**12.3**	**13.4**	**13.0 J**	**11.8 J**	**13.0 J**	**14.8 J**	**10.7 J**	**10.6 J**	**13.8**	**15.9 J**	**23.7 J**	**23.2 J**	**18.8 J**	**48.7 J**
Copper	SW6020	390			1300		**10.2**	**17.0**	**71.1 J**	**25.1 J**	**37.7 J**	**41.2 J**	**28.4 J**	**22.1 J**	**18.3**	**51.1 J**	**156 J**	**153 J**	**82.3 J**	**342 J**
Lead	SW6020	450	975		1200		**1.09**	**1.60**	**34.7 J**	**3.11 J**	**3.88 J**	**4.11 J**	**10.1 J**	**6.39 J**	**2.00**	**16.6 J**	**90.5 J**	**112 J**	**23.4 J**	**114 J**
Mercury	SW7471B	0.41	1.5		2.3		0.0264 U	**0.00707 J**	**0.0628**	**0.0154 J**	**0.0182 J**	**0.0266 J**	**0.0381 J**	**0.0246 J**	0.0254 U	**0.0595 J**	**0.185 J**	**0.0733 J**	**0.0943 J**	**0.134 J**
Selenium	SW6020		3				**1.08**	**1.49**	**0.59 J**	**0.67 J**	**1.11**	**1.10**	**0.59 J**	**0.59 J**	0.56 U	**0.81 J**	**0.69 J**	**0.46 J**	**0.79 J**	**0.72 J**
Silver	SW6020	6.1			8.4		0.24 UJ	0.25 UJ	**0.19 J**	**0.06 J**	**0.08 J**	**0.10 J**	**0.08 J**	**0.07 J**	**0.04 J**	**0.17 J**	**0.43 J**	**0.16 J**	**0.35 J**	**0.31 J**
Zinc	SW6020	410			3800		**18.3**	**21.4**	**122 J**	**27.7 J**	**34.4 J**	**34.0 J**	**56.6 J**	**51.8 J**	**24.8**	**76.2 J**	**172 J**	**153 J**	**105 J**	**314 J**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM			73			--	--	**13.0 J**	3.86 UJ	--	--	3.81 U	--	--	3.82 U	--	--	--	--
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		--	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	35			110		--	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	110			120		--	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--
2,4-Dimethylphenol	SW8270ESIM	29			210		--	--	19.9 UJ	20.0 UJ	--	--	20.0 UJ	--	--	20.0 UJ	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		--	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		--	--	5.0 U	5.0 U	--	--	**11.1**	--	--	**88.9**	--	--	--	--
Benzoic acid	SW8270ESIM	650			760		--	--	99.4 UJ	100 UJ	--	--	499 UJ	--	--	499 UJ	--	--	--	--
Benzyl alcohol	SW8270ESIM	57			870		--	--	19.9 U	20.0 U	--	--	20.0 UJ	--	--	R	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		--	--	**54.9**	50.0 U	--	--	49.9 U	--	--	49.9 U	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM	63			970		--	--	5.0 U	5.0 U	--	--	**9.6**	--	--	**9.7**	--	--	--	--
Di-n-butyl phthalate	SW8270E	1400			5100		--	--	19.9 U	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--
Di-n-octyl phthalate	SW8270E	6200			6200		--	--	19.9 U	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--
Diethyl phthalate	SW8270ESIM	200			1200		--	--	19.9 U	20.0 U	--	--	20.0 U	--	--	**40.9**	--	--	--	--
Dimethyl phthalate	SW8270ESIM	71			1400		--	--	5.0 U	5.0 U	--	--	5.0 U	--	--	**3.1 J**	--	--	--	--
Hexachlorobenzene	SW8270ESIM	22	168		230		--	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		--	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	28			130		--	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--
Pentachlorophenol	SW8270ESIM	400	504		690		--	--	19.9 UJ	20.0 UJ	--	--	250 UJ	--	--	250 U	--	--	--	--
Phenol	SW8270ESIM	420			1200		--	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC05RE	TG-SC05RE	TG-SC06	TG-SC06	TG-SC06	TG-SC06	TG-SC07	TG-SC07	TG-SC07	TG-SC08	TG-SC08	TG-SC08	TG-SC09	TG-SC09
						Sample ID	TG-SC105RE-06-08-250401	TG-SC05RE-08-9.4-250401	TG-SC06-00-02-241108	TG-SC06-02-04-241108	TG-SC06-04-06-241108	TG-SC06-06-07-241108	TG-SC07-00-02-241113	TG-SC07-02-04-241113	TG-SC07-04-5.9-241113	TG-SC08-00-02-241114	TG-SC08-02-04-241114	TG-SC08-04-06-241114	TG-SC09-00-02-241113	TG-SC09-02-04-241113
						Sample Date	2025-04-01	2025-04-01	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13
						Depth Interval	6 - 8 ft	8 - 9.4 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 7 ft	0 - 2 ft	2 - 4 ft	4 - 5.9 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft
						Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E	670			1900	--	--	**14.5 J**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--
Acenaphthene	SW8270E	500			2000	--	--	**47.3**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--
Acenaphthylene	SW8270E	560			1300	--	--	**11.4 J**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--
Anthracene	SW8270E	960			13000	--	--	**60.7**	20.0 U	--	--	**24.4**	--	--	**11.8 J**	--	--	--	--
Benzo(a)anthracene	SW8270E	1300			5100	--	--	**225**	20.0 U	--	--	**63.1**	--	--	**34.3**	--	--	--	--
Benzo(a)pyrene	SW8270E	1600			3600	--	--	**320**	20.0 U	--	--	**78.2**	--	--	**40.6**	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E					--	--	**641**	40.0 U	--	--	**149**	--	--	**87.5**	--	--	--	--
Benzo(g,h,i)perylene	SW8270E	670			3200	--	--	**153 J**	20.0 U	--	--	**115**	--	--	**101 J**	--	--	--	--
Carbazole	SW8270E					--	--	**44.0**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--
Chrysene	SW8270E	1400			21000	--	--	**344**	20.0 U	--	--	**112**	--	--	**70.7**	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900	--	--	**33.3**	5.0 U	--	--	**19.2**	--	--	**15.6**	--	--	--	--
Dibenzofuran	SW8270E	540			1700	--	--	**29.9**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--
Fluoranthene	SW8270E	1700	4600		30000	--	--	**446**	20.0 U	--	--	**119**	--	--	**75.6**	--	--	--	--
Fluorene	SW8270E	540			3600	--	--	**46.6**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400	--	--	**89.5**	20.0 U	--	--	**31.4**	--	--	20.0 U	--	--	--	--
Naphthalene	SW8270E	2100			2400	--	--	**25.4**	20.0 U	--	--	**20.3**	--	--	20.0 U	--	--	--	--
Phenanthrene	SW8270E	1500			21000	--	--	**254**	20.0 U	--	--	**49.2**	--	--	**24.4**	--	--	--	--
Pyrene	SW8270E	2600	11980		16000	--	--	**647**	20.0 U	--	--	**187**	--	--	**120**	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900	--	--	**641**	40.0 U	--	--	**149**	--	--	**87.5**	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					--	--	**422**	20.0 U	--	--	**106**	--	--	**55.0**	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					--	--	**422**	20.0 U	--	--	**106**	--	--	**56.0**	--	--	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000	--	--	**2900 J**	40.0 U	--	--	**874**	--	--	**550 J**	--	--	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000	--	--	**445 J**	20.0 U	--	--	**93.9**	--	--	**36.2 J**	--	--	--	--
Pesticides (µg/kg)																				
2,4'-DDD (o,p'-DDD)	SW8081B					--	--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B					--	--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B					--	--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B	16				--	--	1.00 U	1.00 U	--	--	**0.60 J**	--	--	1.00 U	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B	9				--	--	1.00 U	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B	12				--	--	1.00 U	1.00 U	--	--	**3.38**	--	--	1.00 U	--	--	--	--
Aldrin	SW8081B	9.5				--	--	0.50 U	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B					--	--	0.50 U	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B					--	--	0.50 U	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--	--
Dieldrin	SW8081B	1.9			1700	--	--	1.00 U	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--	--
Endrin ketone	SW8081B					--	--	1.00 U	1.00 U	--	--	**1.81**	--	--	1.00 U	--	--	--	--
Heptachlor	SW8081B	1.5			270	--	--	0.50 U	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B					--	--	0.50 U	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--	--
Nonachlor, cis-	SW8081B					--	--	1.00 U	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--	--
Nonachlor, trans-	SW8081B					--	--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--
Oxychlordane	SW8081B					--	--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69	--	--	1.00 U	1.00 U	--	--	**4.0 J**	--	--	1.00 U	--	--	--	--
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37			--	--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--
Total DDx (U = 0 max limit)	Calculated					--	--	1.00 UJ	1.00 UJ	--	--	**4.0 J**	--	--	1.00 UJ	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC05RE	TG-SC05RE	TG-SC06	TG-SC06	TG-SC06	TG-SC06	TG-SC07	TG-SC07	TG-SC07	TG-SC08	TG-SC08	TG-SC08	TG-SC09	TG-SC09
						Sample ID	TG-SC105RE-06-08-250401	TG-SC05RE-08-9.4-250401	TG-SC06-00-02-241108	TG-SC06-02-04-241108	TG-SC06-04-06-241108	TG-SC06-06-07-241108	TG-SC07-00-02-241113	TG-SC07-02-04-241113	TG-SC07-04-5.9-241113	TG-SC08-00-02-241114	TG-SC08-02-04-241114	TG-SC08-04-06-241114	TG-SC09-00-02-241113	TG-SC09-02-04-241113
						Sample Date	2025-04-01	2025-04-01	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13
						Depth Interval	6 - 8 ft	8 - 9.4 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 7 ft	0 - 2 ft	2 - 4 ft	4 - 5.9 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft
						Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	--	**3170**	**79.8**	--	--	**790**	--	--	**3730**	--	**10300**	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	--	**109**	**0.938 J**	--	--	**26.6**	--	--	**150**	--	**124**	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	**370**	**7.22**	--	--	**91.7**	--	--	**442**	--	**944**	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	**53.7**	**1.01**	--	--	**16.3**	--	--	**73.9**	--	**74.8**	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	**4.10 J**	0.423 UJ	--	--	**0.821 J**	--	--	**5.33 J**	--	**5.47**	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	**2.59**	0.337 U	--	--	**1.03**	--	--	**3.41**	--	**5.49 J**	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	**8.19**	0.224 U	--	--	**3.90**	--	--	**10.6**	--	**11.1**	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	**13.1 J**	**0.171 J**	--	--	**4.41 J**	--	--	**15.4 J**	--	**43.2**	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	**2.89**	0.211 U	--	--	**2.54**	--	--	**4.13**	--	**4.69**	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	**5.96**	0.374 U	--	--	**1.24**	--	--	**6.18**	--	**18.0**	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	**1.59**	0.312 U	--	--	**1.29**	--	--	**2.39**	--	**0.818 J**	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	**2.05 J**	0.404 U	--	--	**0.761 J**	--	--	**2.67**	--	**4.31**	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	**3.27**	0.397 U	--	--	**0.825 J**	--	--	**4.43**	--	**11.2**	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	**2.80**	0.218 U	--	--	**3.83**	--	--	**3.73**	--	**6.10**	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	**1.67 J**	0.414 UJ	--	--	**1.86 J**	--	--	**2.64 J**	--	**12.1**	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	**0.475 J**	0.302 U	--	--	0.287 U	--	--	**0.285 J**	--	**0.536 J**	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	**4.47 J**	0.265 UJ	--	--	**19.6 J**	--	--	**6.33 J**	--	**73.5**	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				--	--	**13 J**	**0.124 J**	--	--	**6.5 J**	--	--	**15 J**	--	**38.5 J**	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				--	--	**13 J**	**0.644 J**	--	--	**6.6 J**	--	--	**15 J**	--	**38.5 J**	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	**1370**	**22.5**	--	--	**257**	--	--	**1300**	--	**2530**	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	**211 J**	**3.36 J**	--	--	**47.8 J**	--	--	**255 J**	--	**237**	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	**127 J**	0.172 U	--	--	**36.4 J**	--	--	**146 J**	--	**353 J**	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	**102**	0.099 U	--	--	**73.5**	--	--	**120**	--	**174 J**	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	**8.52**	0.134 U	--	--	**3.59**	--	--	**13.3**	--	**45.6 J**	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	**24.5 J**	UJ	--	--	**117 J**	--	--	**34.2 J**	--	**105**	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	**22.2**	**0.193 J**	--	--	**2.18**	--	--	**15.5**	--	**25.2 J**	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	**12.6 J**	0.102 UJ	--	--	**111 J**	--	--	**18.1 J**	--	**155 J**	--	--
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--
Aroclor 1221	SW8082A						--	--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--
Aroclor 1232	SW8082A						--	--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--
Aroclor 1242	SW8082A						--	--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--
Aroclor 1248	SW8082A						--	--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--
Aroclor 1254	SW8082A						--	--	**15.7**	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--
Aroclor 1260	SW8082A						--	--	**4.26 J**	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--
Aroclor 1262	SW8082A						--	--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--
Aroclor 1268	SW8082A						--	--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	**19.9 J**	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC05RE	TG-SC05RE	TG-SC06	TG-SC06	TG-SC06	TG-SC06	TG-SC07	TG-SC07	TG-SC07	TG-SC08	TG-SC08	TG-SC08	TG-SC09	TG-SC09
						Sample ID	TG-SC105RE-06-08-250401	TG-SC05RE-08-9.4-250401	TG-SC06-00-02-241108	TG-SC06-02-04-241108	TG-SC06-04-06-241108	TG-SC06-06-07-241108	TG-SC07-00-02-241113	TG-SC07-02-04-241113	TG-SC07-04-5.9-241113	TG-SC08-00-02-241114	TG-SC08-02-04-241114	TG-SC08-04-06-241114	TG-SC09-00-02-241113	TG-SC09-02-04-241113
						Sample Date	2025-04-01	2025-04-01	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13
						Depth Interval	6 - 8 ft	8 - 9.4 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 7 ft	0 - 2 ft	2 - 4 ft	4 - 5.9 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft
						Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (µg/kg)																				
Aroclor 1016	SW8082A						--	--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--
Aroclor 1221	SW8082A						--	--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--
Aroclor 1232	SW8082A						--	--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--
Aroclor 1242	SW8082A						--	--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--
Aroclor 1248	SW8082A						--	--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--
Aroclor 1254	SW8082A						--	--	**116**	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--
Aroclor 1260	SW8082A						--	--	**31.5 J**	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--
Aroclor 1262	SW8082A						--	--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--
Aroclor 1268	SW8082A						--	--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	--	**148 J**	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC09	TG-SC09	TG-SC09RE	TG-SC09RE	TG-SC09RE	TG-SC10	TG-SC10	TG-SC10	TG-SC10RE	TG-SC10RE	TG-SC11	TG-SC11	TG-SC11RE	TG-SC11RE
						Sample ID	TG-SC09-04-06-241113	TG-SC09-06-6.7-241113	TG-SC09RE-06-08-250327	TG-SC09RE-08-10-250327	TG-SC09RE-10-12-250327	TG-SC10-00-02-241112	TG-SC10-02-04-241112	TG-SC10-04-5.2-241112	TG-SC10RE-04-06-250328	TG-SC10RE-06-6.9-250328	TG-SC11-00-02-241111	TG-SC11-02-4.4-241111	TG-SC11RE-02-04-250327	TG-SC11RE-04-06-250327
						Sample Date	2024-11-13	2024-11-13	2025-03-27	2025-03-27	2025-03-27	2024-11-12	2024-11-12	2024-11-12	2025-03-28	2025-03-28	2024-11-11	2024-11-11	2025-03-27	2025-03-27
						Depth Interval	4 - 6 ft	6 - 6.7 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 5.2 ft	4 - 6 ft	6 - 6.9 ft	0 - 2 ft	2 - 4.4 ft	2 - 4 ft	4 - 6 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	--	--	**0.48 J**	--	--	--	--	--	**0.33 J**	--	**0.25**	--	**1.18 J**
Total solids	D2216						--	--	--	**74.45**	--	--	--	--	--	**76.89**	--	--	--	--
Total solids	SM2540G						**75.21**	**73.91**	**71.21**	**75.07**	**76.92**	**64.79**	**72.86**	**74.60**	**80.13**	**80.70**	**68.70**	**80.75**	**67.40**	**75.63 J**
Total volatile solids	PSEP-TVS						--	--	--	**2.56**	--	--	--	--	--	**1.74**	--	**1.50**	--	--
Metals (mg/kg)																				
Antimony	SW6020	150			200		**1.51 J**	**41.4 J**	0.27 UJ	0.26 UJ	0.25 UJ	**0.70 J**	**0.82 J**	**1.75 J**	0.24 UJ	0.25 UJ	**8.78 J**	**0.17 J**	**1.56 J**	0.26 UJ
Arsenic	SW6020	57	507.1		700		**35.1 J**	**221 J**	**11.1**	**4.71**	**3.62**	**16.0**	**67.8**	**62.5**	**7.09**	**17.1**	**220**	**6.86**	**156**	**8.83**
Cadmium	SW6020	5.1			14		**0.17 J**	**0.46 J**	0.13 U	0.13 U	**0.13**	**0.42**	**0.38**	**1.48**	**0.08 J**	**0.06 J**	**0.79**	**0.11 J**	**0.59**	**0.23**
Chromium	SW6020	260					**17.6 J**	**25.5 J**	**10.2 J**	**11.5 J**	**13.0 J**	**15.4 J**	**32.5 J**	**488 J**	**12.1 J**	**11.7 J**	**67.7 J**	**11.9 J**	**55.9 J**	**17.1 J**
Copper	SW6020	390			1300		**132 J**	**382 J**	**16.4**	**17.7**	**18.3**	**203 J**	**776 J**	**615 J**	**20.0**	**17.3**	**484 J**	**24.8 J**	**378**	**36.1**
Lead	SW6020	450	975		1200		**32.5 J**	**359 J**	**2.07**	**2.00**	**2.19**	**25.9 J**	**189 J**	**171 J**	**10.3**	**3.86**	**258 J**	**33.6 J**	**342**	**19.1**
Mercury	SW7471B	0.41	1.5		2.3		**0.231 J**	**0.317 J**	**0.0169 J**	**0.0163 J**	**0.0196 J**	**0.0863**	**0.167**	**0.0985**	**0.0324**	**0.0229 J**	**0.0943**	**0.0279 J**	**0.141**	**0.160**
Selenium	SW6020		3				**0.52 J**	**0.64 J**	**0.68**	**0.69**	0.63 U	**0.82**	**1.06**	**0.98**	0.61 U	0.62 U	**1.06**	**0.60 J**	**1.00**	0.66 U
Silver	SW6020	6.1			8.4		**0.17 J**	**0.37 J**	0.27 U	0.26 U	0.25 U	**0.40**	**0.71**	**0.68**	0.24 U	0.25 U	**0.57**	**0.08 J**	**0.57**	**0.19 J**
Zinc	SW6020	410			3800		**145 J**	**911 J**	**20.6**	**22.3**	**23.4**	**517 J**	**1170 J**	**322 J**	**28.1**	**24.8**	**746 J**	**35.3 J**	**591**	**45.4**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM			73			--	--	--	3.82 U	--	--	--	--	--	3.30 U	--	**2.27 J**	--	--
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		--	--	--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--
1,2-Dichlorobenzene	SW8270ESIM	35			110		--	--	--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--
1,4-Dichlorobenzene	SW8270ESIM	110			120		--	--	--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--
2,4-Dimethylphenol	SW8270ESIM	29			210		--	--	--	19.2 U	--	--	--	--	--	15.0 U	--	19.8 UJ	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		--	--	--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		--	--	--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--
Benzoic acid	SW8270ESIM	650			760		--	--	--	95.9 UJ	--	--	--	--	--	75.1 UJ	--	98.9 UJ	--	--
Benzyl alcohol	SW8270ESIM	57			870		--	--	--	19.2 UJ	--	--	--	--	--	15.0 UJ	--	19.8 U	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		--	--	--	35.4 UJ	--	--	--	--	--	28.8 U	--	49.5 U	--	--
Butylbenzyl phthalate	SW8270ESIM	63			970		--	--	--	7.7 U	--	--	--	--	--	8.5 U	--	4.9 U	--	--
Di-n-butyl phthalate	SW8270E	1400			5100		--	--	--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--
Di-n-octyl phthalate	SW8270E	6200			6200		--	--	--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--
Diethyl phthalate	SW8270ESIM	200			1200		--	--	--	**10.2 J**	--	--	--	--	--	**25.7 J**	--	19.8 U	--	--
Dimethyl phthalate	SW8270ESIM	71			1400		--	--	--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--
Hexachlorobenzene	SW8270ESIM	22	168		230		--	--	--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		--	--	--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--
n-Nitrosodiphenylamine	SW8270ESIM	28			130		--	--	--	19.2 U	--	--	--	--	--	15.0 U	--	4.9 U	--	--
Pentachlorophenol	SW8270ESIM	400	504		690		--	--	--	19.2 UJ	--	--	--	--	--	**46.9 J**	--	19.8 UJ	--	--
Phenol	SW8270ESIM	420			1200		--	--	--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC09	TG-SC09	TG-SC09RE	TG-SC09RE	TG-SC09RE	TG-SC10	TG-SC10	TG-SC10	TG-SC10RE	TG-SC10RE	TG-SC11	TG-SC11	TG-SC11RE	TG-SC11RE
						Sample ID	TG-SC09-04-06-241113	TG-SC09-06-6.7-241113	TG-SC09RE-06-08-250327	TG-SC09RE-08-10-250327	TG-SC09RE-10-12-250327	TG-SC10-00-02-241112	TG-SC10-02-04-241112	TG-SC10-04-5.2-241112	TG-SC10RE-04-06-250328	TG-SC10RE-06-6.9-250328	TG-SC11-00-02-241111	TG-SC11-02-4.4-241111	TG-SC11RE-02-04-250327	TG-SC11RE-04-06-250327
						Sample Date	2024-11-13	2024-11-13	2025-03-27	2025-03-27	2025-03-27	2024-11-12	2024-11-12	2024-11-12	2025-03-28	2025-03-28	2024-11-11	2024-11-11	2025-03-27	2025-03-27
						Depth Interval	4 - 6 ft	6 - 6.7 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 5.2 ft	4 - 6 ft	6 - 6.9 ft	0 - 2 ft	2 - 4.4 ft	2 - 4 ft	4 - 6 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																			
2-Methylnaphthalene	SW8270E	670			1900	--	--	--	14.2 UJ	--	--	--	--	--	**7.0 J**	--	19.8 U	--	--
Acenaphthene	SW8270E	500			2000	--	--	--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--
Acenaphthylene	SW8270E	560			1300	--	--	--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--
Anthracene	SW8270E	960			13000	--	--	--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--
Benzo(a)anthracene	SW8270E	1300			5100	--	--	--	14.2 UJ	--	--	--	--	--	11.5 U	--	**30.3**	--	--
Benzo(a)pyrene	SW8270E	1600			3600	--	--	--	14.2 UJ	--	--	--	--	--	**6.7 J**	--	**41.4**	--	--
Benzo(b,j,k)fluoranthenes	SW8270E					--	--	--	28.3 UJ	--	--	--	--	--	**17.3 J**	--	**67.5**	--	--
Benzo(g,h,i)perylene	SW8270E	670			3200	--	--	--	14.2 UJ	--	--	--	--	--	11.5 UJ	--	**99.1 J**	--	--
Carbazole	SW8270E					--	--	--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--
Chrysene	SW8270E	1400			21000	--	--	--	14.2 UJ	--	--	--	--	--	**6.9 J**	--	**43.0**	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900	--	--	--	4.8 U	--	--	--	--	--	3.8 U	--	**15.2**	--	--
Dibenzofuran	SW8270E	540			1700	--	--	--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--
Fluoranthene	SW8270E	1700	4600		30000	--	--	--	14.2 UJ	--	--	--	--	--	**10.7 J**	--	**44.6**	--	--
Fluorene	SW8270E	540			3600	--	--	--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400	--	--	--	14.2 UJ	--	--	--	--	--	11.5 UJ	--	19.8 U	--	--
Naphthalene	SW8270E	2100			2400	--	--	--	14.2 UJ	--	--	--	--	--	**7.6 J**	--	19.8 U	--	--
Phenanthrene	SW8270E	1500			21000	--	--	--	14.2 UJ	--	--	--	--	--	**12.2**	--	**23.6**	--	--
Pyrene	SW8270E	2600	11980		16000	--	--	--	14.2 UJ	--	--	--	--	--	**17.8**	--	**111**	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900	--	--	--	28.3 UJ	--	--	--	--	--	**17.3 J**	--	**67.5**	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					--	--	--	14.2 UJ	--	--	--	--	--	**8.50 J**	--	**53.1**	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					--	--	--	14.2 UJ	--	--	--	--	--	**9.84 J**	--	**54.1**	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000	--	--	--	28.3 UJ	--	--	--	--	--	**59 J**	--	**452 J**	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000	--	--	--	14.2 UJ	--	--	--	--	--	**20 J**	--	**23.6**	--	--
Pesticides (µg/kg)																			
2,4'-DDD (o,p'-DDD)	SW8081B					--	--	--	0.95 UJ	--	--	--	--	--	0.86 UJ	--	1.00 UJ	--	--
2,4'-DDE (o,p'-DDE)	SW8081B					--	--	--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 UJ	--	--
2,4'-DDT (o,p'-DDT)	SW8081B					--	--	--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 UJ	--	--
4,4'-DDD (p,p'-DDD)	SW8081B	16				--	--	--	0.95 U	--	--	--	--	--	0.86 U	--	**0.88 J**	--	--
4,4'-DDE (p,p'-DDE)	SW8081B	9				--	--	--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 U	--	--
4,4'-DDT (p,p'-DDT)	SW8081B	12				--	--	--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 U	--	--
Aldrin	SW8081B	9.5				--	--	--	0.47 U	--	--	--	--	--	0.43 U	--	0.50 U	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B					--	--	--	0.47 U	--	--	--	--	--	0.43 U	--	0.50 U	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B					--	--	--	0.47 U	--	--	--	--	--	0.43 U	--	0.50 U	--	--
Dieldrin	SW8081B	1.9			1700	--	--	--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 U	--	--
Endrin ketone	SW8081B					--	--	--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 U	--	--
Heptachlor	SW8081B	1.5			270	--	--	--	0.47 U	--	--	--	--	--	0.43 U	--	0.50 U	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B					--	--	--	0.47 U	--	--	--	--	--	0.43 U	--	0.50 U	--	--
Nonachlor, cis-	SW8081B					--	--	--	0.95 UJ	--	--	--	--	--	0.86 UJ	--	1.00 U	--	--
Nonachlor, trans-	SW8081B					--	--	--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 UJ	--	--
Oxychlordane	SW8081B					--	--	--	0.95 UJ	--	--	--	--	--	0.86 UJ	--	1.00 UJ	--	--
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69	--	--	--	0.95 U	--	--	--	--	--	0.86 U	--	**0.88 J**	--	--
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37			--	--	--	0.95 UJ	--	--	--	--	--	0.86 UJ	--	1.00 UJ	--	--
Total DDx (U = 0 max limit)	Calculated					--	--	--	0.95 UJ	--	--	--	--	--	0.86 UJ	--	**0.88 J**	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC09	TG-SC09	TG-SC09RE	TG-SC09RE	TG-SC09RE	TG-SC10	TG-SC10	TG-SC10	TG-SC10RE	TG-SC10RE	TG-SC11	TG-SC11	TG-SC11RE	TG-SC11RE
						Sample ID	TG-SC09-04-06-241113	TG-SC09-06-6.7-241113	TG-SC09RE-06-08-250327	TG-SC09RE-08-10-250327	TG-SC09RE-10-12-250327	TG-SC10-00-02-241112	TG-SC10-02-04-241112	TG-SC10-04-5.2-241112	TG-SC10RE-04-06-250328	TG-SC10RE-06-6.9-250328	TG-SC11-00-02-241111	TG-SC11-02-4.4-241111	TG-SC11RE-02-04-250327	TG-SC11RE-04-06-250327
						Sample Date	2024-11-13	2024-11-13	2025-03-27	2025-03-27	2025-03-27	2024-11-12	2024-11-12	2024-11-12	2025-03-28	2025-03-28	2024-11-11	2024-11-11	2025-03-27	2025-03-27
						Depth Interval	4 - 6 ft	6 - 6.7 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 5.2 ft	4 - 6 ft	6 - 6.9 ft	0 - 2 ft	2 - 4.4 ft	2 - 4 ft	4 - 6 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	--	--	**8.97 J**	--	--	--	--	--	**36.9**	--	**19800 J**	--	**56600**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	--	--	**0.641 J**	--	--	--	--	--	**8.23**	--	**873**	--	**3550**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	**1.08 J**	--	--	--	--	--	**6.57**	--	**1580**	--	**4080**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	**0.497 J**	--	--	--	--	--	**5.86 J**	--	**382**	--	**954**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	0.345 UJ	--	--	--	--	--	**0.259 J**	--	**28.9 J**	--	**83.3**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	0.287 U	--	--	--	--	--	0.217 U	--	**7.83**	--	**23.1**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	0.200 U	--	--	--	--	--	**0.335 J**	--	**43.6**	--	**92.0**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	0.307 U	--	--	--	--	--	0.241 U	--	**59.7 J**	--	**128**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	0.200 U	--	--	--	--	--	**0.515 J**	--	**17.3**	--	**33.6**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	0.323 U	--	--	--	--	--	**0.322 J**	--	**19.6**	--	**55.3**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	0.268 U	--	--	--	--	--	0.213 U	--	**18.5**	--	**20.6**
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	0.304 U	--	--	--	--	--	**0.264 J**	--	**4.66**	--	**16.9**
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	0.206 U	--	--	--	--	--	0.224 U	--	**6.07**	--	**15.3**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	0.204 U	--	--	--	--	--	**0.496 J**	--	**21.5**	--	**36.4**
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	0.214 UJ	--	--	--	--	--	0.226 UJ	--	**7.31 J**	--	**35.4**
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	0.213 U	--	--	--	--	--	0.146 U	--	**0.721 J**	--	**3.17**
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	0.276 U	--	--	--	--	--	**0.528 J**	--	**24.9 J**	--	**7.93**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				--	--	--	**0.0187 J**	--	--	--	--	--	**0.624 J**	--	**55.2 J**	--	**140**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				--	--	--	**0.417 J**	--	--	--	--	--	**0.768 J**	--	**55.2 J**	--	**140**
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	**2.57**	--	--	--	--	--	**13.1**	--	**3030**	--	**7180**
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	**0.497 J**	--	--	--	--	--	**13.3 J**	--	**1790 J**	--	**4750**
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	0.131 U	--	--	--	--	--	**4.23**	--	**375 J**	--	**961**
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	0.106 U	--	--	--	--	--	**6.68**	--	**907**	--	**2020 J**
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	0.128 U	--	--	--	--	--	**1.72**	--	**32.0**	--	**166 J**
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	UJ	--	--	--	--	--	**2.13 J**	--	**245 J**	--	**437 J**
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	0.139 U	--	--	--	--	--	**2.06**	--	**38.8**	--	**108 J**
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	0.082 U	--	--	--	--	--	**3.35**	--	**99.4 J**	--	**128 J**
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	--	--	3.15 U	--	--	--	--	--	3.94 U	--	7.96 U	--	--
Aroclor 1221	SW8082A						--	--	--	3.15 U	--	--	--	--	--	3.94 U	--	7.96 U	--	--
Aroclor 1232	SW8082A						--	--	--	3.15 U	--	--	--	--	--	3.94 U	--	7.96 U	--	--
Aroclor 1242	SW8082A						--	--	--	3.15 U	--	--	--	--	--	3.94 U	--	7.96 U	--	--
Aroclor 1248	SW8082A						--	--	--	3.15 U	--	--	--	--	--	3.94 U	--	7.96 U	--	--
Aroclor 1254	SW8082A						--	--	--	3.15 U	--	--	--	--	--	3.94 U	--	**18.5**	--	--
Aroclor 1260	SW8082A						--	--	--	3.15 U	--	--	--	--	--	3.94 U	--	**8.40**	--	--
Aroclor 1262	SW8082A						--	--	--	3.15 U	--	--	--	--	--	3.94 U	--	7.96 U	--	--
Aroclor 1268	SW8082A						--	--	--	3.15 U	--	--	--	--	--	3.94 U	--	7.96 U	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	3.15 U	--	--	--	--	--	3.94 U	--	**26.9**	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC09	TG-SC09	TG-SC09RE	TG-SC09RE	TG-SC09RE	TG-SC10	TG-SC10	TG-SC10	TG-SC10RE	TG-SC10RE	TG-SC11	TG-SC11	TG-SC11RE	TG-SC11RE
						Sample ID	TG-SC09-04-06-241113	TG-SC09-06-6.7-241113	TG-SC09RE-06-08-250327	TG-SC09RE-08-10-250327	TG-SC09RE-10-12-250327	TG-SC10-00-02-241112	TG-SC10-02-04-241112	TG-SC10-04-5.2-241112	TG-SC10RE-04-06-250328	TG-SC10RE-06-6.9-250328	TG-SC11-00-02-241111	TG-SC11-02-4.4-241111	TG-SC11RE-02-04-250327	TG-SC11RE-04-06-250327
						Sample Date	2024-11-13	2024-11-13	2025-03-27	2025-03-27	2025-03-27	2024-11-12	2024-11-12	2024-11-12	2025-03-28	2025-03-28	2024-11-11	2024-11-11	2025-03-27	2025-03-27
						Depth Interval	4 - 6 ft	6 - 6.7 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 5.2 ft	4 - 6 ft	6 - 6.9 ft	0 - 2 ft	2 - 4.4 ft	2 - 4 ft	4 - 6 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (µg/kg)																				
Aroclor 1016	SW8082A						--	--	--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--
Aroclor 1221	SW8082A						--	--	--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--
Aroclor 1232	SW8082A						--	--	--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--
Aroclor 1242	SW8082A						--	--	--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--
Aroclor 1248	SW8082A						--	--	--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--
Aroclor 1254	SW8082A						--	--	--	15.1 U	--	--	--	--	--	13.0 U	--	**46.2**	--	--
Aroclor 1260	SW8082A						--	--	--	15.1 U	--	--	--	--	--	13.0 U	--	**21.0**	--	--
Aroclor 1262	SW8082A						--	--	--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--
Aroclor 1268	SW8082A						--	--	--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	--	--	15.1 U	--	--	--	--	--	13.0 U	--	**67.2**	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC12	TG-SC12	TG-SC12	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC13	TG-SC13	TG-SC14	TG-SC14
						Sample ID	TG-SC11RE-06-08-250327	TG-SC11RE-08-10-250327	TG-SC11RE-10-11.3-250327	TG-SC12-00-02-241111	TG-SC112-00-02-241111	TG-SC12-02-4.5-241111	TG-SC12RE-04-06-250328	TG-SC12RE-06-08-250328	TG-SC12RE-08-10-250328	TG-SC12RE-10-11.2-250328	TG-SC13-00-02-241113	TG-SC13-02-3.3-241113	TG-SC14-00-02-241114	TG-SC14-02-04-241114
						Sample Date	2025-03-27	2025-03-27	2025-03-27	2024-11-11	2024-11-11	2024-11-11	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-13	2024-11-13	2024-11-14	2024-11-14
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 11.3 ft	0 - 2 ft	0 - 2 ft	2 - 4.5 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 3.3 ft	0 - 2 ft	2 - 4 ft
						Sample Type Code	N	N	N	N	FD	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						**0.20 J**	--	--	--	--	--	**0.44 J**	**0.25 J**	**0.18 J**	--	**0.63**	--	--	**0.39**
Total solids	D2216						--	--	--	--	--	--	**80.02**	--	--	--	--	--	--	--
Total solids	SM2540G						**80.84 J**	**76.78**	**76.13**	**77.06**	**76.00**	**84.33**	**78.78**	**76.95 J**	**77.69**	**80.80**	**69.01**	**77.18**	**72.43**	**78.45**
Total volatile solids	PSEP-TVS						--	--	--	--	--	--	**2.42**	--	--	--	**2.88**	--	--	**2.38**
Metals (mg/kg)																				
Antimony	SW6020	150			200		0.24 UJ	0.25 UJ	0.25 UJ	**3.03 J**	**3.73 J**	**1.51**	0.26 UJ	0.26 UJ	0.25 UJ	0.24 UJ	0.29 UJ	**0.36 J**	**7.30 J**	**1.79 J**
Arsenic	SW6020	57	507.1		700		**1.89**	**2.39**	**2.07**	**50.9**	**79.2**	**90.8 J**	**6.45**	**3.38**	**2.77**	**1.80**	**5.91 J**	**8.31 J**	**93.2 J**	**29.0 J**
Cadmium	SW6020	5.1			14		0.12 U	0.13 U	0.12 U	**0.25**	**0.63**	**0.14**	**0.15**	0.13 U	0.13 U	0.12 U	**0.11 J**	**0.08 J**	**0.19 J**	**0.15 J**
Chromium	SW6020	260					**9.18 J**	**11.0 J**	**10.3 J**	**33.7 J**	**32.6 J**	**36.2**	**14.6 J**	**15.7 J**	**12.8 J**	**8.98 J**	**13.8 J**	**10.7 J**	**13.0 J**	**11.2 J**
Copper	SW6020	390			1300		**10.3**	**15.3**	**14.3**	**174 J**	**193 J**	**295**	**26.6**	**26.8**	**19.3**	**9.01**	**32.5 J**	**23.0 J**	**74.8 J**	**32.1 J**
Lead	SW6020	450	975		1200		**3.00**	**3.08**	**1.76**	**50.0 J**	**71.3 J**	**73.0 J**	**11.5**	**2.62**	**2.03**	**0.95**	**9.78 J**	**6.57 J**	**58.0 J**	**21.3 J**
Mercury	SW7471B	0.41	1.5		2.3		**0.0155 J**	**0.0168 J**	**0.0174 J**	**0.0404**	**0.0764**	**0.0378**	**0.145**	**0.0303**	**0.0277**	**0.0220 J**	**0.0511 J**	**0.0238 J**	**0.0560 J**	**0.0435 J**
Selenium	SW6020		3				0.60 U	0.63 U	0.62 U	**0.76**	**0.61 J**	**0.75**	**0.69**	**0.67**	0.64 U	0.59 U	**0.50 J**	**0.30 J**	**0.30 J**	**0.44 J**
Silver	SW6020	6.1			8.4		0.24 U	0.25 U	0.25 U	**0.19 J**	**0.23 J**	**0.23 J**	**0.13 J**	0.26 U	0.25 U	0.24 U	**0.12 J**	**0.08 J**	**0.17 J**	**0.09 J**
Zinc	SW6020	410			3800		**18.3**	**24.1**	**22.2**	**399 J**	**443 J**	**229 J**	**38.4**	**32.1**	**27.8**	**19.1**	**47.7 J**	**40.0 J**	**191 J**	**86.8 J**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM			73			--	--	--	--	--	--	3.46 U	--	--	--	3.82 U	--	--	**5.91**
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		--	--	--	--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U
1,2-Dichlorobenzene	SW8270ESIM	35			110		--	--	--	--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U
1,4-Dichlorobenzene	SW8270ESIM	110			120		--	--	--	--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U
2,4-Dimethylphenol	SW8270ESIM	29			210		--	--	--	--	--	--	18.9 U	--	--	--	20.0 UJ	--	--	20.0 UJ
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		--	--	--	--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		--	--	--	--	--	--	4.7 U	--	--	--	**19.8**	--	--	5.0 U
Benzoic acid	SW8270ESIM	650			760		--	--	--	--	--	--	**121 J**	--	--	--	500 UJ	--	--	499 UJ
Benzyl alcohol	SW8270ESIM	57			870		--	--	--	--	--	--	18.9 UJ	--	--	--	20.0 UJ	--	--	20.0 UJ
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		--	--	--	--	--	--	37.2 U	--	--	--	50.0 U	--	--	49.9 U
Butylbenzyl phthalate	SW8270ESIM	63			970		--	--	--	--	--	--	8.0 U	--	--	--	**6.2**	--	--	**5.7**
Di-n-butyl phthalate	SW8270E	1400			5100		--	--	--	--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U
Di-n-octyl phthalate	SW8270E	6200			6200		--	--	--	--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U
Diethyl phthalate	SW8270ESIM	200			1200		--	--	--	--	--	--	18.9 U	--	--	--	**11.3 J**	--	--	20.0 U
Dimethyl phthalate	SW8270ESIM	71			1400		--	--	--	--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U
Hexachlorobenzene	SW8270ESIM	22	168		230		--	--	--	--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		--	--	--	--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U
n-Nitrosodiphenylamine	SW8270ESIM	28			130		--	--	--	--	--	--	18.9 U	--	--	--	5.0 U	--	--	5.0 U
Pentachlorophenol	SW8270ESIM	400	504		690		--	--	--	--	--	--	**60.9 J**	--	--	--	250 UJ	--	--	250 UJ
Phenol	SW8270ESIM	420			1200		--	--	--	--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC12	TG-SC12	TG-SC12	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC13	TG-SC13	TG-SC14	TG-SC14
						Sample ID	TG-SC11RE-06-08-250327	TG-SC11RE-08-10-250327	TG-SC11RE-10-11.3-250327	TG-SC12-00-02-241111	TG-SC112-00-02-241111	TG-SC12-02-4.5-241111	TG-SC12RE-04-06-250328	TG-SC12RE-06-08-250328	TG-SC12RE-08-10-250328	TG-SC12RE-10-11.2-250328	TG-SC13-00-02-241113	TG-SC13-02-3.3-241113	TG-SC14-00-02-241114	TG-SC14-02-04-241114
						Sample Date	2025-03-27	2025-03-27	2025-03-27	2024-11-11	2024-11-11	2024-11-11	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-13	2024-11-13	2024-11-14	2024-11-14
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 11.3 ft	0 - 2 ft	0 - 2 ft	2 - 4.5 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 3.3 ft	0 - 2 ft	2 - 4 ft
						Sample Type Code	N	N	N	N	FD	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E	670			1900	--	--	--	--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U
Acenaphthene	SW8270E	500			2000	--	--	--	--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U
Acenaphthylene	SW8270E	560			1300	--	--	--	--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U
Anthracene	SW8270E	960			13000	--	--	--	--	--	--	**8.5 J**	--	--	--	20.0 U	--	--	20.0 U
Benzo(a)anthracene	SW8270E	1300			5100	--	--	--	--	--	--	**12.4 J**	--	--	--	**11.2 J**	--	--	20.0 U
Benzo(a)pyrene	SW8270E	1600			3600	--	--	--	--	--	--	**20.4 J**	--	--	--	**13.1 J**	--	--	20.0 U
Benzo(b,j,k)fluoranthenes	SW8270E					--	--	--	--	--	--	**47.6 J**	--	--	--	40.0 U	--	--	40.0 U
Benzo(g,h,i)perylene	SW8270E	670			3200	--	--	--	--	--	--	14.9 UJ	--	--	--	**92.9 J**	--	--	**91.7 J**
Carbazole	SW8270E					--	--	--	--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U
Chrysene	SW8270E	1400			21000	--	--	--	--	--	--	**21.5**	--	--	--	**13.9 J**	--	--	**10.1 J**
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900	--	--	--	--	--	--	**3.7 J**	--	--	--	**13.1**	--	--	**12.8**
Dibenzofuran	SW8270E	540			1700	--	--	--	--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U
Fluoranthene	SW8270E	1700	4600		30000	--	--	--	--	--	--	**18.0**	--	--	--	**25.9**	--	--	**25.9**
Fluorene	SW8270E	540			3600	--	--	--	--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400	--	--	--	--	--	--	14.9 UJ	--	--	--	20.0 U	--	--	20.0 U
Naphthalene	SW8270E	2100			2400	--	--	--	--	--	--	**15.4**	--	--	--	20.0 U	--	--	20.0 U
Phenanthrene	SW8270E	1500			21000	--	--	--	--	--	--	**17.0**	--	--	--	**14.8 J**	--	--	20.0 U
Pyrene	SW8270E	2600	11980		16000	--	--	--	--	--	--	**93.7**	--	--	--	**33.7**	--	--	**26.5**
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900	--	--	--	--	--	--	**47.6 J**	--	--	--	40.0 U	--	--	40.0 U
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					--	--	--	--	--	--	**27.0 J**	--	--	--	**15.7 J**	--	--	**1.38 J**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					--	--	--	--	--	--	**27.7 J**	--	--	--	**18.7 J**	--	--	**15.4 J**
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000	--	--	--	--	--	--	**220 J**	--	--	--	**204 J**	--	--	**167 J**
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000	--	--	--	--	--	--	**41 J**	--	--	--	**14.8 J**	--	--	20.0 U
Pesticides (µg/kg)																				
2,4'-DDD (o,p'-DDD)	SW8081B					--	--	--	--	--	--	0.97 UJ	--	--	--	1.00 UJ	--	--	0.99 UJ
2,4'-DDE (o,p'-DDE)	SW8081B					--	--	--	--	--	--	0.97 U	--	--	--	1.00 UJ	--	--	0.99 UJ
2,4'-DDT (o,p'-DDT)	SW8081B					--	--	--	--	--	--	0.97 U	--	--	--	1.00 UJ	--	--	0.99 UJ
4,4'-DDD (p,p'-DDD)	SW8081B	16				--	--	--	--	--	--	**1.19**	--	--	--	1.00 U	--	--	0.99 U
4,4'-DDE (p,p'-DDE)	SW8081B	9				--	--	--	--	--	--	0.97 U	--	--	--	1.00 U	--	--	0.99 U
4,4'-DDT (p,p'-DDT)	SW8081B	12				--	--	--	--	--	--	0.97 U	--	--	--	1.00 U	--	--	0.99 U
Aldrin	SW8081B	9.5				--	--	--	--	--	--	0.49 U	--	--	--	0.50 U	--	--	0.50 U
Chlordane, alpha- (Chlordane, cis-)	SW8081B					--	--	--	--	--	--	0.49 U	--	--	--	0.50 U	--	--	0.50 U
Chlordane, beta- (Chlordane, trans-)	SW8081B					--	--	--	--	--	--	0.49 U	--	--	--	0.50 U	--	--	0.50 U
Dieldrin	SW8081B	1.9			1700	--	--	--	--	--	--	0.97 U	--	--	--	1.00 U	--	--	0.99 U
Endrin ketone	SW8081B					--	--	--	--	--	--	0.97 U	--	--	--	1.00 U	--	--	0.99 U
Heptachlor	SW8081B	1.5			270	--	--	--	--	--	--	0.49 U	--	--	--	0.50 U	--	--	0.50 U
Hexachlorocyclohexane (BHC), beta-	SW8081B					--	--	--	--	--	--	0.49 U	--	--	--	0.50 U	--	--	0.50 U
Nonachlor, cis-	SW8081B					--	--	--	--	--	--	0.97 UJ	--	--	--	1.00 U	--	--	0.99 U
Nonachlor, trans-	SW8081B					--	--	--	--	--	--	0.97 U	--	--	--	1.00 UJ	--	--	0.99 UJ
Oxychlordane	SW8081B					--	--	--	--	--	--	0.97 UJ	--	--	--	1.00 UJ	--	--	0.99 UJ
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69	--	--	--	--	--	--	**1.19**	--	--	--	1.00 U	--	--	0.99 U
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37			--	--	--	--	--	--	0.97 UJ	--	--	--	1.00 UJ	--	--	0.99 UJ
Total DDx (U = 0 max limit)	Calculated					--	--	--	--	--	--	**1.19 J**	--	--	--	1.00 UJ	--	--	0.99 UJ

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC12	TG-SC12	TG-SC12	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC13	TG-SC13	TG-SC14	TG-SC14
						Sample ID	TG-SC11RE-06-08-250327	TG-SC11RE-08-10-250327	TG-SC11RE-10-11.3-250327	TG-SC12-00-02-241111	TG-SC112-00-02-241111	TG-SC12-02-4.5-241111	TG-SC12RE-04-06-250328	TG-SC12RE-06-08-250328	TG-SC12RE-08-10-250328	TG-SC12RE-10-11.2-250328	TG-SC13-00-02-241113	TG-SC13-02-3.3-241113	TG-SC14-00-02-241114	TG-SC14-02-04-241114
						Sample Date	2025-03-27	2025-03-27	2025-03-27	2024-11-11	2024-11-11	2024-11-11	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-13	2024-11-13	2024-11-14	2024-11-14
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 11.3 ft	0 - 2 ft	0 - 2 ft	2 - 4.5 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 3.3 ft	0 - 2 ft	2 - 4 ft
						Sample Type Code	N	N	N	N	FD	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**141**	--	--	--	--	--	**22700 J**	22.7 U	**36.2**	--	**1520**	--	--	**1410**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						**19.1**	--	--	--	--	--	**1960**	**1.12 J**	**2.28 J**	--	**82.3**	--	--	**120**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**19.8**	--	--	--	--	--	**1650**	**1.77 J**	**2.62**	--	**162**	--	--	**130**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						**11.2**	--	--	--	--	--	**531 J**	**0.483 J**	**0.658 J**	--	**29.0**	--	--	**64.7 J**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						**0.725 J**	--	--	--	--	--	**44.3 J**	0.117 U	0.110 U	--	**2.16 J**	--	--	**2.44 J**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**0.424 J**	--	--	--	--	--	**11.2**	0.204 U	0.159 U	--	**1.33**	--	--	**0.968 J**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.763 J**	--	--	--	--	--	**32.4**	0.102 U	0.101 U	--	**4.13**	--	--	**2.72**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**0.991 J**	--	--	--	--	--	**56.2 J**	0.213 U	0.159 U	--	**6.29 J**	--	--	**5.18**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.611 J**	--	--	--	--	--	**13.4**	0.109 U	0.104 U	--	**1.49**	--	--	**1.06**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**0.817 J**	--	--	--	--	--	**27.4**	0.231 U	0.173 U	--	**2.82**	--	--	**1.97**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						0.334 U	--	--	--	--	--	**10.8**	0.145 U	0.149 U	--	**0.581 J**	--	--	0.780 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**0.346 J**	--	--	--	--	--	**8.67**	0.105 U	0.124 U	--	**0.830 J**	--	--	0.618 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**0.260 J**	--	--	--	--	--	**4.25**	0.0799 U	0.0713 U	--	**1.52**	--	--	**0.481 J**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.490 J**	--	--	--	--	--	**21.2**	0.117 U	0.121 U	--	**1.09**	--	--	**2.03**
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**0.711 J**	--	--	--	--	--	**4.79 J**	0.0683 U	0.0643 U	--	**0.541 J**	--	--	**0.742 J**
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**0.0980 J**	--	--	--	--	--	**0.841 J**	0.0661 U	0.0657 U	--	**0.216 J**	--	--	0.253 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						**0.366 J**	--	--	--	--	--	**4.25 J**	0.0776 U	0.0704 U	--	**2.40 J**	--	--	**1.67 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				**1.48 J**	--	--	--	--	--	**58.4 J**	**0.0229 J**	**0.0443 J**	--	**5.68 J**	--	--	**4.2 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				**1.49 J**	--	--	--	--	--	**58.4 J**	**0.184 J**	**0.202 J**	--	**5.68 J**	--	--	**4.7 J**
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**38.7**	--	--	--	--	--	**2880**	**4.97**	**5.65 J**	--	**443**	--	--	**241**
Total Heptachlorodibenzofuran (HpCDF)	E1613B						**26.1**	--	--	--	--	--	**2680 J**	**1.68 J**	**2.68 J**	--	**120 J**	--	--	**216 J**
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**10.2 J**	--	--	--	--	--	**351 J**	**0.699 J**	**0.450 J**	--	**57.5 J**	--	--	**38.5**
Total Hexachlorodibenzofuran (HxCDF)	E1613B						**13.0 J**	--	--	--	--	--	**789**	**0.805 J**	**1.02 J**	--	**45.2**	--	--	**62.9**
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**3.29 J**	--	--	--	--	--	**39.7**	**0.112 J**	0.124 U	--	**3.97**	--	--	**0.695 J**
Total Pentachlorodibenzofuran (PeCDF)	E1613B						**6.51 J**	--	--	--	--	--	**90.5 J**	**0.176 J**	**0.164 J**	--	**9.60 J**	--	--	**13.6**
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**2.33 J**	--	--	--	--	--	**26.2**	0.0661 U	0.0657 U	--	**5.32**	--	--	**4.15**
Total Tetrachlorodibenzofuran (TCDF)	E1613B						**5.19 J**	--	--	--	--	--	**39.9**	0.0776 U	0.0704 U	--	**7.90 J**	--	--	**7.42**
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	--	--	--	--	--	3.32 U	--	--	--	3.16 U	--	--	5.10 U
Aroclor 1221	SW8082A						--	--	--	--	--	--	3.32 U	--	--	--	3.16 U	--	--	5.10 U
Aroclor 1232	SW8082A						--	--	--	--	--	--	3.32 U	--	--	--	3.16 U	--	--	5.10 U
Aroclor 1242	SW8082A						--	--	--	--	--	--	3.32 U	--	--	--	3.16 U	--	--	5.10 U
Aroclor 1248	SW8082A						--	--	--	--	--	--	**14.1**	--	--	--	3.16 U	--	--	5.10 U
Aroclor 1254	SW8082A						--	--	--	--	--	--	**7.36**	--	--	--	3.16 U	--	--	**5.31**
Aroclor 1260	SW8082A						--	--	--	--	--	--	3.32 U	--	--	--	3.16 U	--	--	**6.23**
Aroclor 1262	SW8082A						--	--	--	--	--	--	3.32 U	--	--	--	3.16 U	--	--	5.10 U
Aroclor 1268	SW8082A						--	--	--	--	--	--	3.32 U	--	--	--	3.16 U	--	--	5.10 U
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	--	--	--	**21.5**	--	--	--	3.16 U	--	--	**11.5**

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC12	TG-SC12	TG-SC12	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC13	TG-SC13	TG-SC14	TG-SC14
						Sample ID	TG-SC11RE-06-08-250327	TG-SC11RE-08-10-250327	TG-SC11RE-10-11.3-250327	TG-SC12-00-02-241111	TG-SC112-00-02-241111	TG-SC12-02-4.5-241111	TG-SC12RE-04-06-250328	TG-SC12RE-06-08-250328	TG-SC12RE-08-10-250328	TG-SC12RE-10-11.2-250328	TG-SC13-00-02-241113	TG-SC13-02-3.3-241113	TG-SC14-00-02-241114	TG-SC14-02-04-241114
						Sample Date	2025-03-27	2025-03-27	2025-03-27	2024-11-11	2024-11-11	2024-11-11	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-13	2024-11-13	2024-11-14	2024-11-14
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 11.3 ft	0 - 2 ft	0 - 2 ft	2 - 4.5 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 3.3 ft	0 - 2 ft	2 - 4 ft
						Sample Type Code	N	N	N	N	FD	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (µg/kg)																				
Aroclor 1016	SW8082A						--	--	--	--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U
Aroclor 1221	SW8082A						--	--	--	--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U
Aroclor 1232	SW8082A						--	--	--	--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U
Aroclor 1242	SW8082A						--	--	--	--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U
Aroclor 1248	SW8082A						--	--	--	--	--	--	**62.1**	--	--	--	19.9 U	--	--	19.9 U
Aroclor 1254	SW8082A						--	--	--	--	--	--	**32.4**	--	--	--	19.9 U	--	--	**20.7**
Aroclor 1260	SW8082A						--	--	--	--	--	--	14.6 U	--	--	--	19.9 U	--	--	**24.3**
Aroclor 1262	SW8082A						--	--	--	--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U
Aroclor 1268	SW8082A						--	--	--	--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	--	--	--	--	--	**94.5**	--	--	--	19.9 U	--	--	**45.0**

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC14	TG-SC15	TG-SC15	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC16	TG-SC16	TG-SC16	TG-SC16	TG-SC17
						Sample ID	TG-SC14-04-6.1-241114	TG-SC15-00-02-241113	TG-SC15-02-3.2-241113	TG-SC15RE-02-04-250328	TG-SC15RE-04-06-250328	TG-SC115RE-04-06-250328	TG-SC15RE-06-08-250328	TG-SC15RE-08-10-250328	TG-SC15RE-10-10.9-250328	TG-SC16-00-02-241114	TG-SC16-02-04-241114	TG-SC116-02-04-241114	TG-SC16-04-5.4-241114	TG-SC17-00-02-241114
						Sample Date	2024-11-14	2024-11-13	2024-11-13	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14
						Depth Interval	4 - 6.1 ft	0 - 2 ft	2 - 3.2 ft	2 - 4 ft	4 - 6 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.9 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	FD	N	N	N	N	N	FD	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						**1.33**	--	--	--	**0.15 J**	--	--	--	--	--	--	--	**0.29**	--
Total solids	D2216						--	--	--	--	**81.21**	--	--	--	--	--	--	--	--	--
Total solids	SM2540G						**62.94**	**74.36**	**86.59**	**80.77**	**80.35**	**80.25**	**74.07**	**79.95**	**79.93**	**65.11**	**74.28**	**74.97**	**79.50**	**63.67**
Total volatile solids	PSEP-TVS						**4.17**	--	--	--	**1.49**	--	--	--	--	--	--	--	**2.00**	--
Metals (mg/kg)																				
Antimony	SW6020	150			200		0.30 UJ	**160 J**	**25.1 J**	**9.48 J**	0.25 UJ	0.23 UJ	0.26 UJ	0.23 UJ	0.23 UJ	**2.87 J**	**0.28 J**	**1.17 J**	0.24 UJ	**0.59 J**
Arsenic	SW6020	57	507.1		700		**8.39 J**	**1620 J**	**1030 J**	**641**	**6.58**	**6.43**	**3.22**	**4.22**	**10.1**	**83.6 J**	**33.0**	**33.2 J**	**12.1**	**17.7**
Cadmium	SW6020	5.1			14		**0.11 J**	**1.15 J**	**1.01 J**	**1.00**	0.12 U	0.12 U	**0.12 J**	**0.14**	**0.07 J**	**0.30 J**	**0.14**	**0.12 J**	**0.15**	**0.19**
Chromium	SW6020	260					**13.1 J**	**61.6 J**	**32.9 J**	**35.0 J**	**10.3 J**	**9.79 J**	**12.0 J**	**11.1 J**	**10.9 J**	**24.8 J**	**11.5**	**16.3 J**	**10.1**	**15.3**
Copper	SW6020	390			1300		**33.2 J**	**1260 J**	**1180 J**	**684**	**14.7**	**11.6**	**16.2**	**13.4**	**13.0**	**250 J**	**48.3**	**78.7 J**	**19.6**	**56.9**
Lead	SW6020	450	975		1200		**3.83 J**	**1290 J**	**853 J**	**569**	**1.55**	**1.27**	**1.96**	**1.55**	**1.60**	**77.7 J**	**7.68**	**20.1 J**	**2.26**	**26.3**
Mercury	SW7471B	0.41	1.5		2.3		**0.0206 J**	**0.340 J**	**0.118 J**	**0.344**	**0.0109 J**	**0.0107 J**	**0.0156 J**	**0.0190 J**	**0.0148 J**	**0.318 J**	0.0306 U	**0.0257 J**	0.0263 U	**0.0364**
Selenium	SW6020		3				**0.55 J**	**1.27 J**	**1.03 J**	**0.86**	0.62 U	0.58 U	**0.91**	**0.61**	**1.14**	**1.14 J**	**1.10**	**0.48 J**	**0.92**	**1.01**
Silver	SW6020	6.1			8.4		**0.08 J**	**0.92 J**	**0.82 J**	**0.90**	0.25 U	0.23 U	0.26 U	0.23 U	0.23 U	**0.30 J**	**0.09 J**	**0.12 J**	**0.05 J**	**0.26 J**
Zinc	SW6020	410			3800		**35.0 J**	**495 J**	**2850 J**	**1870**	**21.6**	**20.4**	**24.1**	**22.2**	**22.8**	**1090 J**	**109**	**210 J**	**24.1**	**92.3**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM			73			3.86 U	--	--	--	2.91 U	--	--	--	--	--	--	--	3.85 U	--
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		5.0 U	--	--	--	4.3 U	--	--	--	--	--	--	--	5.0 U	--
1,2-Dichlorobenzene	SW8270ESIM	35			110		5.0 U	--	--	--	4.3 U	--	--	--	--	--	--	--	5.0 U	--
1,4-Dichlorobenzene	SW8270ESIM	110			120		5.0 U	--	--	--	4.3 U	--	--	--	--	--	--	--	5.0 U	--
2,4-Dimethylphenol	SW8270ESIM	29			210		20.0 UJ	--	--	--	17.0 U	--	--	--	--	--	--	--	20.0 UJ	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		5.0 U	--	--	--	4.3 U	--	--	--	--	--	--	--	5.0 U	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		5.0 U	--	--	--	**3.1 J**	--	--	--	--	--	--	--	5.0 U	--
Benzoic acid	SW8270ESIM	650			760		499 UJ	--	--	--	**107 J**	--	--	--	--	--	--	--	500 UJ	--
Benzyl alcohol	SW8270ESIM	57			870		20.0 UJ	--	--	--	17.0 UJ	--	--	--	--	--	--	--	20.0 UJ	--
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		49.9 U	--	--	--	33.1 U	--	--	--	--	--	--	--	50.0 U	--
Butylbenzyl phthalate	SW8270ESIM	63			970		**5.6**	--	--	--	7.4 U	--	--	--	--	--	--	--	**5.6**	--
Di-n-butyl phthalate	SW8270E	1400			5100		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Di-n-octyl phthalate	SW8270E	6200			6200		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Diethyl phthalate	SW8270ESIM	200			1200		**149**	--	--	--	17.0 U	--	--	--	--	--	--	--	**15.7 J**	--
Dimethyl phthalate	SW8270ESIM	71			1400		5.0 U	--	--	--	4.3 U	--	--	--	--	--	--	--	5.0 U	--
Hexachlorobenzene	SW8270ESIM	22	168		230		5.0 U	--	--	--	4.3 U	--	--	--	--	--	--	--	5.0 U	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		5.0 U	--	--	--	4.3 U	--	--	--	--	--	--	--	5.0 U	--
n-Nitrosodiphenylamine	SW8270ESIM	28			130		5.0 U	--	--	--	17.0 U	--	--	--	--	--	--	--	5.0 U	--
Pentachlorophenol	SW8270ESIM	400	504		690		250 UJ	--	--	--	17.0 UJ	--	--	--	--	--	--	--	250 UJ	--
Phenol	SW8270ESIM	420			1200		5.0 U	--	--	--	4.3 U	--	--	--	--	--	--	--	5.0 U	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC14	TG-SC15	TG-SC15	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC16	TG-SC16	TG-SC16	TG-SC16	TG-SC17
						Sample ID	TG-SC14-04-6.1-241114	TG-SC15-00-02-241113	TG-SC15-02-3.2-241113	TG-SC15RE-02-04-250328	TG-SC15RE-04-06-250328	TG-SC115RE-04-06-250328	TG-SC15RE-06-08-250328	TG-SC15RE-08-10-250328	TG-SC15RE-10-10.9-250328	TG-SC16-00-02-241114	TG-SC16-02-04-241114	TG-SC116-02 04-241114	TG-SC16-04-5.4-241114	TG-SC17-00-02-241114
						Sample Date	2024-11-14	2024-11-13	2024-11-13	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14
						Depth Interval	4 - 6.1 ft	0 - 2 ft	2 - 3.2 ft	2 - 4 ft	4 - 6 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.9 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	FD	N	N	N	N	N	FD	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E	670			1900		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Acenaphthene	SW8270E	500			2000		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Acenaphthylene	SW8270E	560			1300		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Anthracene	SW8270E	960			13000		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Benzo(a)anthracene	SW8270E	1300			5100		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Benzo(a)pyrene	SW8270E	1600			3600		20.0 U	--	--	--	13.2 UJ	--	--	--	--	--	--	--	20.0 U	--
Benzo(b,j,k)fluoranthenes	SW8270E						39.9 U	--	--	--	26.5 UJ	--	--	--	--	--	--	--	40.0 U	--
Benzo(g,h,i)perylene	SW8270E	670			3200		20.0 U	--	--	--	13.2 UJ	--	--	--	--	--	--	--	20.0 U	--
Carbazole	SW8270E						20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Chrysene	SW8270E	1400			21000		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900		**12.2**	--	--	--	4.3 U	--	--	--	--	--	--	--	**12.3**	--
Dibenzofuran	SW8270E	540			1700		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Fluoranthene	SW8270E	1700	4600		30000		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Fluorene	SW8270E	540			3600		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400		20.0 U	--	--	--	13.2 UJ	--	--	--	--	--	--	--	20.0 U	--
Naphthalene	SW8270E	2100			2400		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Phenanthrene	SW8270E	1500			21000		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Pyrene	SW8270E	2600	11980		16000		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		39.9 U	--	--	--	26.5 UJ	--	--	--	--	--	--	--	40.0 U	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						**1.22**	--	--	--	13.2 UJ	--	--	--	--	--	--	--	**1.23**	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						**15.3**	--	--	--	13.2 UJ	--	--	--	--	--	--	--	**15.3**	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		**12.2**	--	--	--	26.5 UJ	--	--	--	--	--	--	--	**12.3**	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		20.0 U	--	--	--	13.2 U	--	--	--	--	--	--	--	20.0 U	--
Pesticides (µg/kg)																				
2,4'-DDD (o,p'-DDD)	SW8081B						1.00 UJ	--	--	--	0.78 UJ	--	--	--	--	--	--	--	1.00 UJ	--
2,4'-DDE (o,p'-DDE)	SW8081B						1.00 UJ	--	--	--	0.78 U	--	--	--	--	--	--	--	1.00 UJ	--
2,4'-DDT (o,p'-DDT)	SW8081B						1.00 UJ	--	--	--	0.78 U	--	--	--	--	--	--	--	1.00 UJ	--
4,4'-DDD (p,p'-DDD)	SW8081B	16					1.00 U	--	--	--	0.78 U	--	--	--	--	--	--	--	1.00 U	--
4,4'-DDE (p,p'-DDE)	SW8081B	9					1.00 U	--	--	--	0.78 U	--	--	--	--	--	--	--	1.00 U	--
4,4'-DDT (p,p'-DDT)	SW8081B	12					1.00 U	--	--	--	0.78 U	--	--	--	--	--	--	--	1.00 U	--
Aldrin	SW8081B	9.5					0.50 U	--	--	--	0.39 U	--	--	--	--	--	--	--	0.50 U	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						0.50 U	--	--	--	0.39 U	--	--	--	--	--	--	--	0.50 U	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						0.50 U	--	--	--	0.39 U	--	--	--	--	--	--	--	0.50 U	--
Dieldrin	SW8081B	1.9			1700		1.00 U	--	--	--	0.78 U	--	--	--	--	--	--	--	1.00 U	--
Endrin ketone	SW8081B						1.00 U	--	--	--	0.78 U	--	--	--	--	--	--	--	1.00 U	--
Heptachlor	SW8081B	1.5			270		0.50 U	--	--	--	0.39 U	--	--	--	--	--	--	--	0.50 U	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						0.50 U	--	--	--	0.39 U	--	--	--	--	--	--	--	0.50 U	--
Nonachlor, cis-	SW8081B						1.00 U	--	--	--	0.78 UJ	--	--	--	--	--	--	--	1.00 U	--
Nonachlor, trans-	SW8081B						1.00 UJ	--	--	--	0.78 U	--	--	--	--	--	--	--	1.00 UJ	--
Oxychlordane	SW8081B						1.00 UJ	--	--	--	0.78 UJ	--	--	--	--	--	--	--	1.00 UJ	--
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69		1.00 U	--	--	--	0.78 U	--	--	--	--	--	--	--	1.00 U	--
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37				1.00 UJ	--	--	--	0.78 UJ	--	--	--	--	--	--	--	1.00 UJ	--
Total DDx (U = 0 max limit)	Calculated						1.00 UJ	--	--	--	0.78 UJ	--	--	--	--	--	--	--	1.00 UJ	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC14	TG-SC15	TG-SC15	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC16	TG-SC16	TG-SC16	TG-SC16	TG-SC17
						Sample ID	TG-SC14-04-6.1-241114	TG-SC15-00-02-241113	TG-SC15-02-3.2-241113	TG-SC15RE-02-04-250328	TG-SC15RE-04-06-250328	TG-SC115RE-04-06-250328	TG-SC15RE-06-08-250328	TG-SC15RE-08-10-250328	TG-SC15RE-10-10.9-250328	TG-SC16-00-02-241114	TG-SC16-02-04-241114	TG-SC116-02-04-241114	TG-SC16-04-5.4-241114	TG-SC17-00-02-241114
						Sample Date	2024-11-14	2024-11-13	2024-11-13	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14
						Depth Interval	4 - 6.1 ft	0 - 2 ft	2 - 3.2 ft	2 - 4 ft	4 - 6 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.9 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	FD	N	N	N	N	N	FD	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**8.70 J**	--	--	--	**1.81 J**	--	--	--	--	--	--	--	**4.85 J**	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						**0.377 J**	--	--	--	0.561 U	--	--	--	--	--	--	--	0.497 U	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**1.01 J**	--	--	--	0.407 U	--	--	--	--	--	--	--	**0.471 J**	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						**0.460 J**	--	--	--	0.217 UJ	--	--	--	--	--	--	--	**0.456 J**	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						0.457 UJ	--	--	--	0.384 UJ	--	--	--	--	--	--	--	0.352 UJ	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.306 U	--	--	--	0.279 U	--	--	--	--	--	--	--	0.281 U	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						0.217 U	--	--	--	0.153 U	--	--	--	--	--	--	--	0.226 U	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.306 U	--	--	--	0.285 U	--	--	--	--	--	--	--	0.293 U	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						0.218 U	--	--	--	0.153 U	--	--	--	--	--	--	--	0.214 U	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.332 U	--	--	--	0.306 U	--	--	--	--	--	--	--	0.312 U	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						0.290 U	--	--	--	0.225 U	--	--	--	--	--	--	--	0.298 U	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						0.324 U	--	--	--	0.336 U	--	--	--	--	--	--	--	0.370 U	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						0.262 U	--	--	--	0.194 U	--	--	--	--	--	--	--	0.262 U	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						0.198 U	--	--	--	0.161 U	--	--	--	--	--	--	--	0.221 U	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						0.268 U	--	--	--	0.208 UJ	--	--	--	--	--	--	--	0.283 U	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						0.257 U	--	--	--	0.215 U	--	--	--	--	--	--	--	0.193 U	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						0.221 U	--	--	--	0.224 U	--	--	--	--	--	--	--	0.231 U	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				**0.0174 J**	--	--	--	**0.000543 J**	--	--	--	--	--	--	--	**0.0107 J**	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				**0.459 J**	--	--	--	**0.405 J**	--	--	--	--	--	--	--	**0.444 J**	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**2.63**	--	--	--	0.159 U	--	--	--	--	--	--	--	**0.921 J**	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						0.180 UJ	--	--	--	0.127 UJ	--	--	--	--	--	--	--	**0.456 J**	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.146 U	--	--	--	0.124 U	--	--	--	--	--	--	--	**0.165 J**	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						**0.388 J**	--	--	--	0.091 U	--	--	--	--	--	--	--	0.131 U	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						0.137 U	--	--	--	0.149 U	--	--	--	--	--	--	--	0.142 U	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						U	--	--	--	UJ	--	--	--	--	--	--	--	U	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						0.130 U	--	--	--	0.142 U	--	--	--	--	--	--	--	**0.229 J**	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						0.066 U	--	--	--	0.081 U	--	--	--	--	--	--	--	0.089 U	--
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						1.50 U	--	--	--	11.3 U	--	--	--	--	--	--	--	6.72 U	--
Aroclor 1221	SW8082A						1.50 U	--	--	--	11.3 U	--	--	--	--	--	--	--	6.72 U	--
Aroclor 1232	SW8082A						1.50 U	--	--	--	11.3 U	--	--	--	--	--	--	--	6.72 U	--
Aroclor 1242	SW8082A						1.50 U	--	--	--	11.3 U	--	--	--	--	--	--	--	6.72 U	--
Aroclor 1248	SW8082A						1.50 U	--	--	--	11.3 U	--	--	--	--	--	--	--	6.72 U	--
Aroclor 1254	SW8082A						1.50 U	--	--	--	11.3 U	--	--	--	--	--	--	--	6.72 U	--
Aroclor 1260	SW8082A						1.50 U	--	--	--	11.3 U	--	--	--	--	--	--	--	6.72 U	--
Aroclor 1262	SW8082A						1.50 U	--	--	--	11.3 U	--	--	--	--	--	--	--	6.72 U	--
Aroclor 1268	SW8082A						1.50 U	--	--	--	11.3 U	--	--	--	--	--	--	--	6.72 U	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				1.50 U	--	--	--	11.3 U	--	--	--	--	--	--	--	6.72 U	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC14	TG-SC15	TG-SC15	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC16	TG-SC16	TG-SC16	TG-SC16	TG-SC17
						Sample ID	TG-SC14-04-6.1-241114	TG-SC15-00-02-241113	TG-SC15-02-3.2-241113	TG-SC15RE-02-04-250328	TG-SC15RE-04-06-250328	TG-SC115RE-04-06-250328	TG-SC15RE-06-08-250328	TG-SC15RE-08-10-250328	TG-SC15RE-10-10.9-250328	TG-SC16-00-02-241114	TG-SC16-02-04-241114	TG-SC116-02-04-241114	TG-SC16-04-5.4-241114	TG-SC17-00-02-241114
						Sample Date	2024-11-14	2024-11-13	2024-11-13	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14
						Depth Interval	4 - 6.1 ft	0 - 2 ft	2 - 3.2 ft	2 - 4 ft	4 - 6 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.9 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	FD	N	N	N	N	N	FD	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (µg/kg)																				
Aroclor 1016	SW8082A						19.9 U	--	--	--	17.0 U	--	--	--	--	--	--	--	19.5 U	--
Aroclor 1221	SW8082A						19.9 U	--	--	--	17.0 U	--	--	--	--	--	--	--	19.5 U	--
Aroclor 1232	SW8082A						19.9 U	--	--	--	17.0 U	--	--	--	--	--	--	--	19.5 U	--
Aroclor 1242	SW8082A						19.9 U	--	--	--	17.0 U	--	--	--	--	--	--	--	19.5 U	--
Aroclor 1248	SW8082A						19.9 U	--	--	--	17.0 U	--	--	--	--	--	--	--	19.5 U	--
Aroclor 1254	SW8082A						19.9 U	--	--	--	17.0 U	--	--	--	--	--	--	--	19.5 U	--
Aroclor 1260	SW8082A						19.9 U	--	--	--	17.0 U	--	--	--	--	--	--	--	19.5 U	--
Aroclor 1262	SW8082A						19.9 U	--	--	--	17.0 U	--	--	--	--	--	--	--	19.5 U	--
Aroclor 1268	SW8082A						19.9 U	--	--	--	17.0 U	--	--	--	--	--	--	--	19.5 U	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		19.9 U	--	--	--	17.0 U	--	--	--	--	--	--	--	19.5 U	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC17	TG-SC17	TG-SC18	TG-SC18	TG-SC18	TG-SC18	TG-SC18	TG-SC19	TG-SC19	TG-SC19	TG-SC20	TG-SC20	TG-SC20	TG-SC21
						Sample ID	TG-SC17-02-04-241114	TG-SC17-04-6.2-241114	TG-SC18-00-02-241101	TG-SC18-02-04-241101	TG-SC18-04-06-241101	TG-SC18-06-08-241101	TG-SC18-08-9.9-241101	TG-SC19-00-02-241112	TG-SC19-02-04-241112	TG-SC19-04-5.4-241112	TG-SC20-00-02-241114	TG-SC20-02-04-241114	TG-SC20-04-4.8-241114	TG-SC21-00-02-241113
						Sample Date	2024-11-14	2024-11-14	2024-11-01	2024-11-01	2024-11-01	2024-11-01	2024-11-01	2024-11-12	2024-11-12	2024-11-12	2024-11-14	2024-11-14	2024-11-14	2024-11-13
						Depth Interval	2 - 4 ft	4 - 6.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 9.9 ft	0 - 2 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 4.8 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	**0.28**	**0.60**	--	**0.22**	--	--	**0.61**	--	--	**0.61**	--	--	**0.67**
Total solids	D2216						--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	SM2540G						**68.67**	**77.16**	**71.16**	**71.93**	**80.61**	**84.32**	**85.90**	**66.72**	**79.29**	**86.18**	**71.67**	**73.56**	**78.21**	**68.44**
Total volatile solids	PSEP-TVS						--	**1.47**	**2.77**	--	**1.59**	--	--	**2.98**	--	--	**2.84**	--	--	**2.99**
Metals (mg/kg)																				
Antimony	SW6020	150			200		**10.8 J**	0.27 UJ	**0.28**	**0.34**	0.24 U	0.24 U	0.23 U	0.29 UJ	0.24 UJ	0.22 U	0.27 UJ	0.26 UJ	0.25 UJ	0.27 UJ
Arsenic	SW6020	57	507.1		700		**146**	**5.75**	**28.1**	**31.9**	**3.66**	**4.59**	**4.61**	**5.92**	**4.59**	**3.98 J**	**4.65**	**1.86**	**1.42**	**6.17**
Cadmium	SW6020	5.1			14		**0.44**	**0.08 J**	**0.28**	**0.20**	**0.10 J**	**0.05 J**	**0.05 J**	**0.14 J**	**0.07 J**	0.11 U	**0.08 J**	**0.07 J**	0.12 U	**0.12 J**
Chromium	SW6020	260					**24.2**	**10.5**	**17.1**	**14.4**	**8.95**	**10.8**	**9.78**	**14.8 J**	**9.46 J**	**8.29**	**11.1**	**10.4**	**9.03**	**12.4**
Copper	SW6020	390			1300		**232**	**16.1**	**71.4**	**65.3**	**13.7**	**9.91**	**8.84**	**36.5 J**	**19.5 J**	**10.1**	**27.2**	**14.5**	**11.0**	**31.4**
Lead	SW6020	450	975		1200		**193**	**4.06**	**36.1**	**33.0**	**1.70**	**1.36**	**1.23**	**12.6 J**	**4.86 J**	**1.36 J**	**7.14**	**1.68**	**1.17**	**8.01**
Mercury	SW7471B	0.41	1.5		2.3		**0.0722**	0.0240 U	**0.105**	**0.0520**	**0.0137 J**	**0.00720 J**	0.0242 U	**0.0494**	**0.0122 J**	**0.00694 J**	0.0335 U	0.0302 U	0.0257 U	0.0323 U
Selenium	SW6020		3				**0.92**	0.67 U	**0.64 J**	**0.56 J**	**0.56 J**	**0.50 J**	**0.35 J**	**0.83**	**0.56 J**	**0.58**	0.68 U	0.65 U	0.62 U	0.68 U
Silver	SW6020	6.1			8.4		**0.47**	**0.06 J**	**0.24 J**	**0.19 J**	**0.04 J**	**0.04 J**	**0.03 J**	**0.11 J**	**0.06 J**	**0.03 J**	**0.09 J**	**0.04 J**	0.25 U	**0.10 J**
Zinc	SW6020	410			3800		**646**	**24.3**	**118**	**98.8**	**20.5**	**19.2**	**18.6**	**51.2 J**	**29.4 J**	**19.5 J**	**38.8**	**19.9**	**17.7**	**48.4**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM			73			--	3.83 U	**5.46 J**	--	3.84 UJ	--	--	3.85 UJ	--	--	**2.09 J**	--	--	**19.8**
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		--	5.0 U	4.9 U	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U
1,2-Dichlorobenzene	SW8270ESIM	35			110		--	5.0 U	4.9 U	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U
1,4-Dichlorobenzene	SW8270ESIM	110			120		--	5.0 U	4.9 U	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U
2,4-Dimethylphenol	SW8270ESIM	29			210		--	20.0 UJ	19.7 UJ	--	19.9 UJ	--	--	20.0 UJ	--	--	20.0 UJ	--	--	20.0 UJ
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		--	5.0 U	4.9 U	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		--	5.0 U	4.9 U	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U
Benzoic acid	SW8270ESIM	650			760		--	500 UJ	98.6 UJ	--	99.7 UJ	--	--	99.9 UJ	--	--	499 UJ	--	--	499 UJ
Benzyl alcohol	SW8270ESIM	57			870		--	20.0 UJ	19.7 U	--	19.9 UJ	--	--	20.0 U	--	--	20.0 UJ	--	--	20.0 UJ
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		--	50.0 U	**73.4**	--	49.9 U	--	--	49.9 U	--	--	49.9 U	--	--	49.9 U
Butylbenzyl phthalate	SW8270ESIM	63			970		--	**5.8**	4.9 U	--	5.0 U	--	--	5.0 U	--	--	**7.0**	--	--	**5.6**
Di-n-butyl phthalate	SW8270E	1400			5100		--	20.0 U	19.7 U	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Di-n-octyl phthalate	SW8270E	6200			6200		--	20.0 U	19.7 U	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Diethyl phthalate	SW8270ESIM	200			1200		--	20.0 U	19.7 U	--	**16.3 J**	--	--	20.0 U	--	--	**28.1**	--	--	**34.4**
Dimethyl phthalate	SW8270ESIM	71			1400		--	5.0 U	4.9 U	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U
Hexachlorobenzene	SW8270ESIM	22	168		230		--	5.0 U	4.9 U	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		--	5.0 U	4.9 U	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U
n-Nitrosodiphenylamine	SW8270ESIM	28			130		--	5.0 U	4.9 U	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U
Pentachlorophenol	SW8270ESIM	400	504		690		--	250 UJ	**40.5 J**	--	19.9 UJ	--	--	20.0 UJ	--	--	250 UJ	--	--	250 UJ
Phenol	SW8270ESIM	420			1200		--	5.0 U	4.9 U	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC17	TG-SC17	TG-SC18	TG-SC18	TG-SC18	TG-SC18	TG-SC18	TG-SC19	TG-SC19	TG-SC19	TG-SC20	TG-SC20	TG-SC20	TG-SC21
						Sample ID	TG-SC17-02-04-241114	TG-SC17-04-6.2-241114	TG-SC18-00-02-241101	TG-SC18-02-04-241101	TG-SC18-04-06-241101	TG-SC18-06-08-241101	TG-SC18-08-9.9-241101	TG-SC19-00-02-241112	TG-SC19-02-04-241112	TG-SC19-04-5.4-241112	TG-SC20-00-02-241114	TG-SC20-02-04-241114	TG-SC20-04-4.8-241114	TG-SC21-00-02-241113
						Sample Date	2024-11-14	2024-11-14	2024-11-01	2024-11-01	2024-11-01	2024-11-01	2024-11-01	2024-11-12	2024-11-12	2024-11-12	2024-11-14	2024-11-14	2024-11-14	2024-11-13
						Depth Interval	2 - 4 ft	4 - 6.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 9.9 ft	0 - 2 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 4.8 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E	670			1900	--	20.0 U	19.7 U	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Acenaphthene	SW8270E	500			2000	--	20.0 U	**15.6 J**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Acenaphthylene	SW8270E	560			1300	--	20.0 U	19.7 U	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Anthracene	SW8270E	960			13000	--	20.0 U	**16.3 J**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Benzo(a)anthracene	SW8270E	1300			5100	--	20.0 U	**58.6**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Benzo(a)pyrene	SW8270E	1600			3600	--	20.0 U	**58.9**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Benzo(b,j,k)fluoranthenes	SW8270E					--	40.0 U	**121**	--	39.9 U	--	--	40.0 U	--	--	40.0 U	--	--	39.9 U
Benzo(g,h,i)perylene	SW8270E	670			3200	--	20.0 U	**117 J**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Carbazole	SW8270E					--	20.0 U	**13.8 J**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Chrysene	SW8270E	1400			21000	--	20.0 U	**84.5**	--	19.9 U	--	--	20.0 U	--	--	**15.2 J**	--	--	**11.8 J**
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900	--	**12.7**	**16.8**	--	5.0 U	--	--	5.0 U	--	--	**12.6**	--	--	**12.7**
Dibenzofuran	SW8270E	540			1700	--	20.0 U	19.7 U	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Fluoranthene	SW8270E	1700	4600		30000	--	20.0 U	**155**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	**13.2 J**
Fluorene	SW8270E	540			3600	--	20.0 U	19.7 U	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400	--	20.0 U	**33.1**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Naphthalene	SW8270E	2100			2400	--	20.0 U	**11.6 J**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Phenanthrene	SW8270E	1500			21000	--	20.0 U	**86.9**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Pyrene	SW8270E	2600	11980		16000	--	**12.3 J**	**140**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	**25.2**
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900	--	40.0 U	**121**	--	39.9 U	--	--	40.0 U	--	--	40.0 U	--	--	39.9 U
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					--	**1.27**	**82.7**	--	19.9 U	--	--	20.0 U	--	--	**1.41 J**	--	--	**1.39 J**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					--	**15.4**	**82.7**	--	19.9 U	--	--	20.0 U	--	--	**15.4 J**	--	--	**15.4 J**
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000	--	**25.0 J**	**780 J**	--	39.9 U	--	--	40.0 U	--	--	**27.8 J**	--	--	**62.9 J**
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000	--	20.0 U	**130 J**	--	19.9 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U
Pesticides (µg/kg)																			
2,4'-DDD (o,p'-DDD)	SW8081B					--	1.00 UJ	1.00 UJ	--	1.00 UJ	--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ
2,4'-DDE (o,p'-DDE)	SW8081B					--	1.00 UJ	1.00 UJ	--	1.00 UJ	--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ
2,4'-DDT (o,p'-DDT)	SW8081B					--	1.00 UJ	1.00 UJ	--	1.00 UJ	--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ
4,4'-DDD (p,p'-DDD)	SW8081B	16				--	1.00 U	**1.80 J**	--	1.00 U	--	--	0.98 U	--	--	1.00 U	--	--	1.00 U
4,4'-DDE (p,p'-DDE)	SW8081B	9				--	**2.02**	1.00 U	--	1.00 U	--	--	0.98 U	--	--	1.00 U	--	--	1.00 U
4,4'-DDT (p,p'-DDT)	SW8081B	12				--	**1.16**	1.00 U	--	1.00 U	--	--	0.98 U	--	--	1.00 U	--	--	1.00 U
Aldrin	SW8081B	9.5				--	0.50 U	0.50 U	--	0.50 U	--	--	0.49 U	--	--	0.50 U	--	--	0.50 U
Chlordane, alpha- (Chlordane, cis-)	SW8081B					--	0.47 U	0.50 U	--	0.50 U	--	--	0.49 U	--	--	0.50 U	--	--	0.50 U
Chlordane, beta- (Chlordane, trans-)	SW8081B					--	**0.99**	0.50 U	--	0.50 U	--	--	0.49 U	--	--	0.50 U	--	--	0.50 U
Dieldrin	SW8081B	1.9			1700	--	1.00 U	1.00 U	--	1.00 U	--	--	0.98 U	--	--	1.00 U	--	--	1.00 U
Endrin ketone	SW8081B					--	**0.95 J**	1.00 U	--	1.00 U	--	--	0.98 U	--	--	1.00 U	--	--	1.00 U
Heptachlor	SW8081B	1.5			270	--	0.50 U	0.50 U	--	0.50 U	--	--	0.49 U	--	--	0.50 U	--	--	0.50 U
Hexachlorocyclohexane (BHC), beta-	SW8081B					--	0.50 U	0.50 U	--	0.50 U	--	--	0.49 U	--	--	0.50 U	--	--	0.50 U
Nonachlor, cis-	SW8081B					--	1.00 U	1.00 U	--	1.00 U	--	--	0.98 U	--	--	1.00 U	--	--	1.00 U
Nonachlor, trans-	SW8081B					--	1.00 UJ	1.00 UJ	--	1.00 UJ	--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ
Oxychlordane	SW8081B					--	1.00 UJ	1.00 UJ	--	1.00 UJ	--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69	--	**3.18**	**1.80 J**	--	1.00 U	--	--	0.98 U	--	--	1.00 U	--	--	1.00 U
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37			--	**0.99 J**	1.00 UJ	--	1.00 UJ	--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ
Total DDx (U = 0 max limit)	Calculated					--	**3.18 J**	**1.80 J**	--	1.00 UJ	--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC17	TG-SC17	TG-SC18	TG-SC18	TG-SC18	TG-SC18	TG-SC18	TG-SC19	TG-SC19	TG-SC19	TG-SC20	TG-SC20	TG-SC20	TG-SC21
						Sample ID	TG-SC17-02-04-241114	TG-SC17-04-6.2-241114	TG-SC18-00-02-241101	TG-SC18-02-04-241101	TG-SC18-04-06-241101	TG-SC18-06-08-241101	TG-SC18-08-9.9-241101	TG-SC19-00-02-241112	TG-SC19-02-04-241112	TG-SC19-04-5.4-241112	TG-SC20-00-02-241114	TG-SC20-02-04-241114	TG-SC20-04-4.8-241114	TG-SC21-00-02-241113
						Sample Date	2024-11-14	2024-11-14	2024-11-01	2024-11-01	2024-11-01	2024-11-01	2024-11-01	2024-11-12	2024-11-12	2024-11-12	2024-11-14	2024-11-14	2024-11-14	2024-11-13
						Depth Interval	2 - 4 ft	4 - 6.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 9.9 ft	0 - 2 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 4.8 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	**2300**	**5680 J**	--	**111**	--	--	**1210**	--	--	**903**	--	--	**2230**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	**135**	**140**	--	**1.46 J**	--	--	**47.0**	--	--	**44.6**	--	--	**293**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	**187**	**578**	--	**8.84**	--	--	**110**	--	--	**93.9**	--	--	**275**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	**56.7 J**	**87.8 J**	--	**1.48 J**	--	--	**24.5**	--	--	**19.5 J**	--	--	**83.5 J**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	**3.29 J**	**5.23 J**	--	0.371 UJ	--	--	**2.11 J**	--	--	**1.02 J**	--	--	**6.13 J**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	**1.46**	**5.25**	--	0.398 U	--	--	**0.740 J**	--	--	**0.804 J**	--	--	**0.945 J**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	**4.99**	**13.6**	--	**0.185 J**	--	--	**3.11**	--	--	**2.73**	--	--	**3.89**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	**6.99**	**30.2**	--	0.429 U	--	--	**4.68 J**	--	--	**3.87**	--	--	**8.82**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	**2.54**	**4.96**	--	0.217 U	--	--	**1.14**	--	--	**1.29**	--	--	**1.19**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	**3.16**	**12.5**	--	0.450 U	--	--	**2.37**	--	--	**2.42**	--	--	**2.37**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	**1.47**	**4.79**	--	0.306 U	--	--	**0.879 J**	--	--	**0.320 J**	--	--	**1.00**
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	**1.17**	**4.80**	--	0.352 U	--	--	0.640 U	--	--	0.615 U	--	--	**0.715 J**
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	**0.841 J**	**3.50**	--	0.331 U	--	--	0.608 U	--	--	**0.856 J**	--	--	**1.38**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	**1.82**	**2.59**	--	0.206 U	--	--	**1.11**	--	--	**0.818 J**	--	--	**2.39**
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	**1.06**	**2.75**	--	0.334 U	--	--	**0.780 J**	--	--	**0.818 J**	--	--	**0.725 J**
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	**0.283 J**	**0.525 J**	--	0.216 U	--	--	0.299 U	--	--	0.206 U	--	--	0.181 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	**2.23 J**	**6.74 J**	--	0.225 U	--	--	**1.71 J**	--	--	**1.71 J**	--	--	**1.16**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				--	**7.5 J**	**23 J**	--	**0.155 J**	--	--	**3.6 J**	--	--	**3.10 J**	--	--	**7.55 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				--	**7.5 J**	**23 J**	--	**0.608 J**	--	--	**4.0 J**	--	--	**3.51 J**	--	--	**7.64 J**
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	**340**	**1270**	--	**8.84**	--	--	**270**	--	--	**241**	--	--	**562**
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	**232 J**	**357 J**	--	**5.65 J**	--	--	**86.2 J**	--	--	**71.9 J**	--	--	**395 J**
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	**42.2**	**250**	--	0.221 U	--	--	**39.4 J**	--	--	**24.0**	--	--	**58.3**
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	**97.5**	**220**	--	**2.59**	--	--	**35.9**	--	--	**28.0**	--	--	**86.1**
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	**2.93**	**24.7**	--	0.144 U	--	--	**1.79**	--	--	**3.84**	--	--	**6.67**
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	**20.1**	**57.5**	--	**0.174 J**	--	--	**10.8 J**	--	--	**10.3**	--	--	**14.8**
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	**6.09**	**29.2**	--	0.128 U	--	--	**5.95**	--	--	**7.28**	--	--	**5.41**
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	**9.83**	**34.7**	--	0.088 U	--	--	**2.56 J**	--	--	**3.35**	--	--	**5.31**
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	7.07 U	3.27 U	--	9.09 U	--	--	3.23 U	--	--	3.25 U	--	--	2.96 U
Aroclor 1221	SW8082A						--	7.07 U	3.27 U	--	9.09 U	--	--	3.23 U	--	--	3.25 U	--	--	2.96 U
Aroclor 1232	SW8082A						--	7.07 U	3.27 U	--	9.09 U	--	--	3.23 U	--	--	3.25 U	--	--	2.96 U
Aroclor 1242	SW8082A						--	7.07 U	3.27 U	--	9.09 U	--	--	3.23 U	--	--	3.25 U	--	--	2.96 U
Aroclor 1248	SW8082A						--	7.07 U	**10.7**	--	9.09 U	--	--	3.23 U	--	--	3.25 U	--	--	2.96 U
Aroclor 1254	SW8082A						--	7.07 U	**8.43**	--	9.09 U	--	--	3.23 U	--	--	3.25 U	--	--	2.96 U
Aroclor 1260	SW8082A						--	7.07 U	**4.32**	--	9.09 U	--	--	3.23 U	--	--	3.25 U	--	--	2.96 U
Aroclor 1262	SW8082A						--	7.07 U	3.27 U	--	9.09 U	--	--	3.23 U	--	--	3.25 U	--	--	2.96 U
Aroclor 1268	SW8082A						--	7.07 U	3.27 U	--	9.09 U	--	--	3.23 U	--	--	3.25 U	--	--	2.96 U
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	7.07 U	**23**	--	9.09 U	--	--	3.23 U	--	--	3.25 U	--	--	2.96 U

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC17	TG-SC17	TG-SC18	TG-SC18	TG-SC18	TG-SC18	TG-SC18	TG-SC19	TG-SC19	TG-SC19	TG-SC20	TG-SC20	TG-SC20	TG-SC21
						Sample ID	TG-SC17-02-04-241114	TG-SC17-04-6.2-241114	TG-SC18-00-02-241101	TG-SC18-02-04-241101	TG-SC18-04-06-241101	TG-SC18-06-08-241101	TG-SC18-08-9.9-241101	TG-SC19-00-02-241112	TG-SC19-02-04-241112	TG-SC19-04-5.4-241112	TG-SC20-00-02-241114	TG-SC20-02-04-241114	TG-SC20-04-4.8-241114	TG-SC21-00-02-241113
						Sample Date	2024-11-14	2024-11-14	2024-11-01	2024-11-01	2024-11-01	2024-11-01	2024-11-01	2024-11-12	2024-11-12	2024-11-12	2024-11-14	2024-11-14	2024-11-14	2024-11-13
						Depth Interval	2 - 4 ft	4 - 6.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 9.9 ft	0 - 2 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 4.8 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (µg/kg)																			
Aroclor 1016	SW8082A						--	19.8 U	19.6 U	--	20.0 U	--	--	19.7 U	--	--	19.8 U	--	--	19.8 U
Aroclor 1221	SW8082A						--	19.8 U	19.6 U	--	20.0 U	--	--	19.7 U	--	--	19.8 U	--	--	19.8 U
Aroclor 1232	SW8082A						--	19.8 U	19.6 U	--	20.0 U	--	--	19.7 U	--	--	19.8 U	--	--	19.8 U
Aroclor 1242	SW8082A						--	19.8 U	19.6 U	--	20.0 U	--	--	19.7 U	--	--	19.8 U	--	--	19.8 U
Aroclor 1248	SW8082A						--	19.8 U	**63.9**	--	20.0 U	--	--	19.7 U	--	--	19.8 U	--	--	19.8 U
Aroclor 1254	SW8082A						--	19.8 U	**50.6**	--	20.0 U	--	--	19.7 U	--	--	19.8 U	--	--	19.8 U
Aroclor 1260	SW8082A						--	19.8 U	**25.9**	--	20.0 U	--	--	19.7 U	--	--	19.8 U	--	--	19.8 U
Aroclor 1262	SW8082A						--	19.8 U	19.6 U	--	20.0 U	--	--	19.7 U	--	--	19.8 U	--	--	19.8 U
Aroclor 1268	SW8082A						--	19.8 U	19.6 U	--	20.0 U	--	--	19.7 U	--	--	19.8 U	--	--	19.8 U
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	19.8 U	**140**	--	20.0 U	--	--	19.7 U	--	--	19.8 U	--	--	19.8 U

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC21	TG-SC21	TG-SC22	TG-SC22	TG-SC22	TG-SC22	TG-SC23	TG-SC23	TG-SC23	TG-SC23	TG-SC24	TG-SC24	TG-SC24	TG-SC24
						Sample ID	TG-SC21-02-04-241113	TG-SC21-04-06-241113	TG-SC22-00-02-241114	TG-SC22-02-04-241114	TG-SC22-04-06-241114	TG-SC22-06-6.8-241114	TG-SC23-00-02-241113	TG-SC23-02-04-241113	TG-SC123-02-04-241113	TG-SC23-04-5.5-241113	TG-SC24-00-02-241028	TG-SC24-02-04-241028	TG-SC24-04-06-241028	TG-SC24-06-08-241028
						Sample Date	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-13	2024-10-28	2024-10-28	2024-10-28	2024-10-28
						Depth Interval	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.8 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	FD	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	--	**0.70**	--	--	--	**0.65**	--	--	--	**0.66**	--	--	--
Total solids	D2216						**79.46**	--	--	**79.77**	--	--	--	**74.34**	**75.19**	--	--	**75.47**	--	--
Total solids	SM2540G						**78.77**	**81.55**	**69.81**	**78.61**	**68.96**	**76.75**	**64.90**	**70.46**	**70.59**	**84.22**	**67.38**	**71.76**	**83.23**	**81.90**
Total volatile solids	PSEP-TVS						--	--	**2.91**	--	--	--	**2.98**	--	--	--	**3.01**	--	--	--
Metals (mg/kg)																				
Antimony	SW6020	150			200		0.25 UJ	0.24 UJ	0.28 UJ	0.25 UJ	0.28 UJ	0.26 UJ	0.30 UJ	0.27 UJ	0.28 UJ	0.23 UJ	0.27 U	0.28 U	0.23 U	0.23 U
Arsenic	SW6020	57	507.1		700		**3.97**	**1.21**	**5.35**	**1.52**	**1.49**	**1.59**	**6.70**	**4.91**	**3.64**	**1.12**	**5.43**	**3.45**	**1.08**	**1.19**
Cadmium	SW6020	5.1			14		**0.12 J**	0.12 U	**0.12 J**	0.13 U	**0.04 J**	**0.04 J**	**0.15 J**	**0.11 J**	**0.15**	0.12 U	**0.12 J**	**0.09 J**	0.12 U	0.12 U
Chromium	SW6020	260					**9.90**	**9.00**	**12.7**	**17.4**	**11.0**	**12.2**	**16.9**	**12.2**	**11.7**	**9.68**	**13.6**	**10.7**	**8.70**	**7.85**
Copper	SW6020	390			1300		**18.9**	**8.96**	**33.0**	**12.1**	**16.9**	**20.4**	**41.0**	**29.2**	**27.3**	**8.53**	**32.2**	**22.6**	**8.21**	**8.54**
Lead	SW6020	450	975		1200		**3.31**	**1.06**	**9.44**	**1.73**	**1.59**	**2.02**	**11.1**	**7.69**	**5.69**	**0.98**	**7.93**	**4.92**	**0.94**	**1.02**
Mercury	SW7471B	0.41	1.5		2.3		0.0290 U	0.0238 U	**0.00942 J**	0.0222 U	0.0281 U	0.0303 U	**0.00781 J**	0.0313 U	0.0271 U	0.0239 U	**0.0544**	**0.0429**	0.0251 U	0.0289 U
Selenium	SW6020		3				0.62 U	0.61 U	0.78 U	0.63 U	0.69 U	0.64 U	**1.31**	0.73 U	0.69 U	0.58 U	**0.61 J**	**0.48 J**	**0.32 J**	**0.26 J**
Silver	SW6020	6.1			8.4		**0.05 J**	0.24 U	**0.13 J**	0.25 U	**0.04 J**	**0.04 J**	**0.15 J**	**0.11 J**	**0.08 J**	0.23 U	**0.13 J**	**0.10 J**	0.23 U	0.23 U
Zinc	SW6020	410			3800		**26.1**	**16.5**	**45.6**	**18.8**	**20.6**	**24.2**	**56.5**	**38.8**	**31.3**	**16.3**	**43.2**	**30.3**	**15.5**	**15.6**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM			73			--	--	3.84 U	--	--	--	**2.55 J**	--	--	--	3.85 UJ	--	--	--
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		--	--	5.0 U	--	--	--	5.0 U	--	--	--	5.0 U	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	35			110		--	--	5.0 U	--	--	--	5.0 U	--	--	--	5.0 U	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	110			120		--	--	5.0 U	--	--	--	5.0 U	--	--	--	5.0 U	--	--	--
2,4-Dimethylphenol	SW8270ESIM	29			210		--	--	20.0 UJ	--	--	--	20.0 UJ	--	--	--	19.9 UJ	--	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		--	--	5.0 U	--	--	--	5.0 U	--	--	--	5.0 U	--	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		--	--	5.0 U	--	--	--	5.0 U	--	--	--	5.0 U	--	--	--
Benzoic acid	SW8270ESIM	650			760		--	--	500 UJ	--	--	--	500 UJ	--	--	--	**58.3 J**	--	--	--
Benzyl alcohol	SW8270ESIM	57			870		--	--	20.0 UJ	--	--	--	20.0 UJ	--	--	--	19.9 U	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		--	--	50.0 U	--	--	--	50.0 U	--	--	--	49.8 U	--	--	--
Butylbenzyl phthalate	SW8270ESIM	63			970		--	--	**6.6**	--	--	--	**5.8**	--	--	--	5.0 U	--	--	--
Di-n-butyl phthalate	SW8270E	1400			5100		--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Di-n-octyl phthalate	SW8270E	6200			6200		--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Diethyl phthalate	SW8270ESIM	200			1200		--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Dimethyl phthalate	SW8270ESIM	71			1400		--	--	5.0 U	--	--	--	5.0 U	--	--	--	5.0 U	--	--	--
Hexachlorobenzene	SW8270ESIM	22	168		230		--	--	5.0 U	--	--	--	5.0 U	--	--	--	5.0 U	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		--	--	5.0 U	--	--	--	5.0 U	--	--	--	5.0 U	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	28			130		--	--	5.0 U	--	--	--	5.0 U	--	--	--	5.0 U	--	--	--
Pentachlorophenol	SW8270ESIM	400	504		690		--	--	250 UJ	--	--	--	250 UJ	--	--	--	**42.3 J**	--	--	--
Phenol	SW8270ESIM	420			1200		--	--	5.0 U	--	--	--	5.0 U	--	--	--	5.0 U	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC21	TG-SC21	TG-SC22	TG-SC22	TG-SC22	TG-SC22	TG-SC23	TG-SC23	TG-SC23	TG-SC23	TG-SC24	TG-SC24	TG-SC24	TG-SC24
						Sample ID	TG-SC21-02-04-241113	TG-SC21-04-06-241113	TG-SC22-00-02-241114	TG-SC22-02-04-241114	TG-SC22-04-06-241114	TG-SC22-06-6.8-241114	TG-SC23-00-02-241113	TG-SC23-02-04-241113	TG-SC123-02-04-241113	TG-SC23-04-5.5-241113	TG-SC24-00-02-241028	TG-SC24-02-04-241028	TG-SC24-04-06-241028	TG-SC24-06-08-241028
						Sample Date	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-13	2024-10-28	2024-10-28	2024-10-28	2024-10-28
						Depth Interval	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.8 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	FD	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E	670			1900		--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Acenaphthene	SW8270E	500			2000		--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Acenaphthylene	SW8270E	560			1300		--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Anthracene	SW8270E	960			13000		--	--	**12.3 J**	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Benzo(a)anthracene	SW8270E	1300			5100		--	--	**27.4**	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Benzo(a)pyrene	SW8270E	1600			3600		--	--	**30.2**	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	**55.4**	--	--	--	40.0 U	--	--	--	39.9 U	--	--	--
Benzo(g,h,i)perylene	SW8270E	670			3200		--	--	**96.9 J**	--	--	--	20.0 U	--	--	--	**93.2 J**	--	--	--
Carbazole	SW8270E						--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Chrysene	SW8270E	1400			21000		--	--	**32.3**	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900		--	--	**13.9**	--	--	--	**12.8**	--	--	--	**12.8**	--	--	--
Dibenzofuran	SW8270E	540			1700		--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Fluoranthene	SW8270E	1700	4600		30000		--	--	**67.5**	--	--	--	**11.9 J**	--	--	--	**13.6 J**	--	--	--
Fluorene	SW8270E	540			3600		--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400		--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Naphthalene	SW8270E	2100			2400		--	--	20.0 U	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Phenanthrene	SW8270E	1500			21000		--	--	**42.5**	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Pyrene	SW8270E	2600	11980		16000		--	--	**66.3**	--	--	--	**19.8 J**	--	--	--	**16.1 J**	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		--	--	**55.4**	--	--	--	40.0 U	--	--	--	39.9 U	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	**40.2**	--	--	--	**1.28**	--	--	--	**1.28**	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	**41.2**	--	--	--	**15.4**	--	--	--	**15.3**	--	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		--	--	**390 J**	--	--	--	**44.5 J**	--	--	--	**136 J**	--	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		--	--	**54.8 J**	--	--	--	20.0 U	--	--	--	19.9 U	--	--	--
Pesticides (µg/kg)																				
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	1.00 UJ	--	--	--	1.00 UJ	--	--	--	0.99 UJ	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	1.00 UJ	--	--	--	1.00 UJ	--	--	--	0.99 UJ	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	1.00 UJ	--	--	--	1.00 UJ	--	--	--	0.99 UJ	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B	16					--	--	1.00 U	--	--	--	1.00 U	--	--	--	0.99 U	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B	9					--	--	1.00 U	--	--	--	1.00 U	--	--	--	0.99 U	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B	12					--	--	1.00 U	--	--	--	1.00 U	--	--	--	0.99 U	--	--	--
Aldrin	SW8081B	9.5					--	--	0.50 UJ	--	--	--	0.50 U	--	--	--	0.50 U	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	0.50 U	--	--	--	0.50 U	--	--	--	0.50 U	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	0.50 UJ	--	--	--	0.50 U	--	--	--	0.50 U	--	--	--
Dieldrin	SW8081B	1.9			1700		--	--	1.00 U	--	--	--	1.00 U	--	--	--	0.99 U	--	--	--
Endrin ketone	SW8081B						--	--	1.00 U	--	--	--	1.00 U	--	--	--	0.99 U	--	--	--
Heptachlor	SW8081B	1.5			270		--	--	0.50 UJ	--	--	--	0.50 U	--	--	--	0.50 U	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	0.50 U	--	--	--	0.50 U	--	--	--	0.50 U	--	--	--
Nonachlor, cis-	SW8081B						--	--	1.00 U	--	--	--	1.00 U	--	--	--	0.99 U	--	--	--
Nonachlor, trans-	SW8081B						--	--	1.00 UJ	--	--	--	1.00 UJ	--	--	--	0.99 UJ	--	--	--
Oxychlordane	SW8081B						--	--	1.00 UJ	--	--	--	1.00 UJ	--	--	--	0.99 UJ	--	--	--
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69		--	--	1.00 U	--	--	--	1.00 U	--	--	--	0.99 U	--	--	--
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37				--	--	1.00 UJ	--	--	--	1.00 UJ	--	--	--	0.99 UJ	--	--	--
Total DDx (U = 0 max limit)	Calculated						--	--	1.00 UJ	--	--	--	1.00 UJ	--	--	--	0.99 UJ	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC21	TG-SC21	TG-SC22	TG-SC22	TG-SC22	TG-SC22	TG-SC23	TG-SC23	TG-SC23	TG-SC23	TG-SC24	TG-SC24	TG-SC24	TG-SC24
						Sample ID	TG-SC21-02-04-241113	TG-SC21-04-06-241113	TG-SC22-00-02-241114	TG-SC22-02-04-241114	TG-SC22-04-06-241114	TG-SC22-06-6.8-241114	TG-SC23-00-02-241113	TG-SC23-02-04-241113	TG-SC123-02-04-241113	TG-SC23-04-5.5-241113	TG-SC24-00-02-241028	TG-SC24-02-04-241028	TG-SC24-04-06-241028	TG-SC24-06-08-241028
						Sample Date	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-13	2024-10-28	2024-10-28	2024-10-28	2024-10-28
						Depth Interval	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.8 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	FD	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**333**	--	**3760**	**134**	--	--	**1560**	**1200**	**1640**	--	**1340**	**672**	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						**15.9**	--	**48.9**	**7.96**	--	--	**59.1**	**56.1**	**88.2**	--	**45.9**	**28.5**	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**35.0**	--	**365**	**9.98**	--	--	**163**	**108**	**143**	--	**146**	**60.3**	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						**5.47**	--	**32.2 J**	**2.72**	--	--	**28.0 J**	**24.2**	**31.2**	--	**24.3 J**	**12.2**	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						0.442 U	--	**2.33 J**	**0.287 J**	--	--	**2.65 J**	**2.16**	**2.26**	--	**2.53 J**	**0.754 J**	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.479 U	--	**1.43**	0.211 U	--	--	**0.917 J**	**0.502 J**	**0.866 J**	--	**1.33**	0.408 U	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**1.13**	--	**6.91**	**0.248 J**	--	--	**5.67**	**5.23**	**4.20**	--	**4.80**	**1.88**	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**1.64**	--	**8.68**	0.225 U	--	--	**6.74**	**4.84**	**6.31**	--	**5.72**	**2.82**	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						0.257 U	--	**2.16**	0.194 U	--	--	**2.28**	**1.92**	**0.833 J**	--	**1.27**	**0.602 J**	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.531 U	--	**3.21**	0.237 U	--	--	**3.17**	**2.22**	**2.08**	--	**2.81**	**1.51**	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						0.284 U	--	**1.78**	0.242 U	--	--	**1.19**	**1.53 J**	**1.49 J**	--	**1.30**	**0.379 J**	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**0.165 J**	--	**0.988 J**	0.173 U	--	--	**0.665 J**	**0.498 J**	**0.791 J**	--	**0.890 J**	0.297 U	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**0.325 J**	--	**2.51**	0.186 U	--	--	**2.34**	**2.17**	**1.24**	--	**1.84**	**0.453 J**	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.170 J**	--	**2.07**	0.195 U	--	--	0.300 U	**0.684 J**	**0.524 J**	--	**1.38**	0.236 U	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**0.330 J**	--	**1.96**	0.200 U	--	--	**0.988 J**	**1.70**	**1.01**	--	**0.976 J**	**0.450 J**	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						0.152 U	--	**0.405 J**	0.172 U	--	--	0.203 U	**0.238 J**	0.191 U	--	0.253 U	0.205 U	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						**0.758 J**	--	**2.53 J**	**0.304 J**	--	--	**2.71 J**	**4.96 J**	**2.37 J**	--	**2.33**	**1.03 J**	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				**1.15 J**	--	**10.1 J**	**0.228 J**	--	--	**5.72 J**	**5.2 J**	**5.28 J**	--	**5.48 J**	**1.91 J**	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				**1.31 J**	--	**10.1 J**	**0.498 J**	--	--	**5.84 J**	**5.2 J**	**5.38 J**	--	**5.60 J**	**2.20 J**	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**85.5**	--	**1350**	**20.6**	--	--	**392**	**235**	**310**	--	**359**	**140**	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						**21.1**	--	**109 J**	**3.01**	--	--	**101 J**	**92.6 J**	**134 J**	--	**87.2 J**	**45.8 J**	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**11.8**	--	**97.8**	0.105 U	--	--	**53.8**	**25.1**	**44.8**	--	**50.6**	**20.6**	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						**11.2**	--	**65.0**	**3.32**	--	--	**49.7**	**47.8**	**59.7**	--	**30.5 J**	**19.1**	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**0.165 J**	--	**7.13**	0.049 U	--	--	**6.87**	**1.54**	**5.24 J**	--	**2.70**	**1.27**	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						**3.26**	--	**22.2**	**0.326 J**	--	--	**17.4**	**11.3**	**15.1**	--	**7.92 J**	**3.47**	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**0.436 J**	--	**7.35**	0.089 U	--	--	**4.55**	**1.79**	**5.00 J**	--	**4.93**	**1.27**	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						**1.58 J**	--	**5.46**	**0.451 J**	--	--	**6.38**	**8.96 J**	**5.06 J**	--	**5.48**	**1.37 J**	--	--
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	--	2.81 U	--	--	--	3.15 U	--	--	--	3.00 U	--	--	--
Aroclor 1221	SW8082A						--	--	2.81 U	--	--	--	3.15 U	--	--	--	3.00 U	--	--	--
Aroclor 1232	SW8082A						--	--	2.81 U	--	--	--	3.15 U	--	--	--	3.00 U	--	--	--
Aroclor 1242	SW8082A						--	--	2.81 U	--	--	--	3.15 U	--	--	--	3.00 U	--	--	--
Aroclor 1248	SW8082A						--	--	2.81 U	--	--	--	3.15 U	--	--	--	3.00 U	--	--	--
Aroclor 1254	SW8082A						--	--	2.81 U	--	--	--	3.15 U	--	--	--	3.00 U	--	--	--
Aroclor 1260	SW8082A						--	--	2.81 U	--	--	--	3.15 U	--	--	--	3.00 U	--	--	--
Aroclor 1262	SW8082A						--	--	2.81 U	--	--	--	3.15 U	--	--	--	3.00 U	--	--	--
Aroclor 1268	SW8082A						--	--	2.81 U	--	--	--	3.15 U	--	--	--	3.00 U	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	2.81 U	--	--	--	3.15 U	--	--	--	3.00 U	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

						Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC21	TG-SC21	TG-SC22	TG-SC22	TG-SC22	TG-SC22	TG-SC23	TG-SC23	TG-SC23	TG-SC23	TG-SC24	TG-SC24	TG-SC24	TG-SC24
						Sample ID	TG-SC21-02-04-241113	TG-SC21-04-06-241113	TG-SC22-00-02-241114	TG-SC22-02-04-241114	TG-SC22-04-06-241114	TG-SC22-06-6.8-241114	TG-SC23-00-02-241113	TG-SC23-02-04-241113	TG-SC123-02-04-241113	TG-SC23-04-5.5-241113	TG-SC24-00-02-241028	TG-SC24-02-04-241028	TG-SC24-04-06-241028	TG-SC24-06-08-241028
						Sample Date	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-13	2024-10-28	2024-10-28	2024-10-28	2024-10-28
						Depth Interval	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.8 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	FD	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML															
PCB Aroclors (µg/kg)																				
Aroclor 1016	SW8082A						--	--	19.7 U	--	--	--	20.5 U	--	--	--	19.8 U	--	--	--
Aroclor 1221	SW8082A						--	--	19.7 U	--	--	--	20.5 U	--	--	--	19.8 U	--	--	--
Aroclor 1232	SW8082A						--	--	19.7 U	--	--	--	20.5 U	--	--	--	19.8 U	--	--	--
Aroclor 1242	SW8082A						--	--	19.7 U	--	--	--	20.5 U	--	--	--	19.8 U	--	--	--
Aroclor 1248	SW8082A						--	--	19.7 U	--	--	--	20.5 U	--	--	--	19.8 U	--	--	--
Aroclor 1254	SW8082A						--	--	19.7 U	--	--	--	20.5 U	--	--	--	19.8 U	--	--	--
Aroclor 1260	SW8082A						--	--	19.7 U	--	--	--	20.5 U	--	--	--	19.8 U	--	--	--
Aroclor 1262	SW8082A						--	--	19.7 U	--	--	--	20.5 U	--	--	--	19.8 U	--	--	--
Aroclor 1268	SW8082A						--	--	19.7 U	--	--	--	20.5 U	--	--	--	19.8 U	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	--	19.7 U	--	--	--	20.5 U	--	--	--	19.8 U	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC24	TG-SC24	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26
						Sample ID	TG-SC24-08-10-241028	TG-SC24-10-11.2-241028	TG-SC25-00-02-250328	TG-SC25-02-04-250328	TG-SC25-04-06-250328	TG-SC25-06-08-250328	TG-SC125-06-08-250328	TG-SC25-08-10-250328	TG-SC25-10-11.8-250328	TG-SC26-00-02-250331	TG-SC26-02-04-250331	TG-SC26-04-06-250331	TG-SC26-06-08-250331	TG-SC26-08-10-250331
						Sample Date	2024-10-28	2024-10-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31
						Depth Interval	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft	8 - 10 ft	10 - 11.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft
						Sample Type Code	N	N	N	N	N	N	FD	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	--	--	--	**0.34**	--	--	**0.40 J**	**0.12 J**	--	--	--	**0.26 J**	**0.11 J**
Total solids	D2216						--	--	--	--	**76.11**	--	--	**76.14**	--	--	--	--	**80.00**	--
Total solids	SM2540G						**69.27**	**79.40**	**73.58**	**84.47**	**78.65**	**72.37**	**75.12**	**78.16**	**81.64 J**	**68.54**	**70.69**	**71.77**	**79.76**	**85.09**
Total volatile solids	PSEP-TVS						--	--	--	--	**2.04**	--	--	**2.07**	--	--	--	--	**1.70**	--
Metals (mg/kg)																				
Antimony	SW6020	150			200		0.27 U	0.24 U	0.27 UJ	0.23 UJ	0.25 UJ	**0.73 J**	**1.33 J**	0.27 UJ	0.23 UJ	0.29 UJ	0.28 UJ	**0.92 J**	0.25 UJ	0.22 UJ
Arsenic	SW6020	57	507.1		700		**1.85**	**1.33**	**10.1**	**10.4**	**5.72**	**36.1**	**34.4**	**6.22**	**1.55**	**7.64**	**13.0**	**39.5**	**5.33**	**1.89**
Cadmium	SW6020	5.1			14		**0.19**	0.12 U	**0.50**	**0.18**	**0.21**	**0.22**	**0.27**	**0.12 J**	**0.07 J**	**0.15**	**0.33**	**0.21**	**0.12 J**	0.11 U
Chromium	SW6020	260					**10.3**	**9.89**	**23.1**	**13.6**	**13.6**	**16.1**	**21.7**	**16.0**	**10.6**	**16.8**	**20.9**	**27.9**	**12.7**	**9.18**
Copper	SW6020	390			1300		**16.3**	**15.1**	**1060 J**	**286 J**	**17.1 J**	**91.8 J**	**69.3 J**	**26.9 J**	**12.4 J**	**58.7**	**307**	**397**	**16.8**	**10.8**
Lead	SW6020	450	975		1200		**1.58**	**1.48**	**40.0**	**17.7**	**7.45**	**42.2**	**45.3**	**11.9**	**1.38**	**12.1**	**31.7**	**54.7**	**3.77**	**1.15**
Mercury	SW7471B	0.41	1.5		2.3		**0.00922 J**	**0.0109 J**	**0.0418**	**0.0224 J**	**0.0219 J**	**0.113**	**0.123**	**0.112**	**0.00923 J**	**0.0441**	**0.0757**	**0.196**	**0.0287**	0.0278 U
Selenium	SW6020		3				**0.50 J**	**0.33 J**	**1.31**	**0.71**	**1.49**	**1.07**	**1.03**	0.68 U	**0.76**	**1.22**	**1.59**	**1.37**	0.62 U	**0.68**
Silver	SW6020	6.1			8.4		**0.05 J**	**0.04 J**	**0.76**	**0.23**	0.25 U	**0.18 J**	**0.18 J**	0.27 U	0.23 U	0.29 UJ	**0.41 J**	**0.21 J**	0.25 UJ	0.22 UJ
Zinc	SW6020	410			3800		**20.3**	**19.5**	**2970**	**693**	**37.0**	**130**	**132**	**36.6**	**19.3**	**100**	**824**	**216**	**40.2**	**18.1**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM			73			--	--	--	--	3.58 U	--	--	2.96 U	--	--	--	--	3.37 U	--
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		--	--	--	--	5.7 U	--	--	4.7 U	--	--	--	--	4.8 U	--
1,2-Dichlorobenzene	SW8270ESIM	35			110		--	--	--	--	5.7 UJ	--	--	4.7 U	--	--	--	--	4.8 U	--
1,4-Dichlorobenzene	SW8270ESIM	110			120		--	--	--	--	5.7 UJ	--	--	4.7 U	--	--	--	--	4.8 U	--
2,4-Dimethylphenol	SW8270ESIM	29			210		--	--	--	--	22.8 UJ	--	--	18.7 U	--	--	--	--	19.1 U	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		--	--	--	--	5.7 UJ	--	--	4.7 U	--	--	--	--	4.8 U	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		--	--	--	--	5.7 UJ	--	--	**4.8**	--	--	--	--	4.8 U	--
Benzoic acid	SW8270ESIM	650			760		--	--	--	--	114 UJ	--	--	**124 J**	--	--	--	--	**123 J**	--
Benzyl alcohol	SW8270ESIM	57			870		--	--	--	--	22.8 U	--	--	18.7 UJ	--	--	--	--	19.1 UJ	--
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		--	--	--	--	**66.0 J**	--	--	**28.6 J**	--	--	--	--	36.9 U	--
Butylbenzyl phthalate	SW8270ESIM	63			970		--	--	--	--	5.7 U	--	--	4.7 U	--	--	--	--	4.8 U	--
Di-n-butyl phthalate	SW8270E	1400			5100		--	--	--	--	18.5 U	--	--	13.9 U	--	--	--	--	14.8 U	--
Di-n-octyl phthalate	SW8270E	6200			6200		--	--	--	--	18.5 U	--	--	13.9 U	--	--	--	--	14.8 U	--
Diethyl phthalate	SW8270ESIM	200			1200		--	--	--	--	22.8 U	--	--	18.7 U	--	--	--	--	19.1 U	--
Dimethyl phthalate	SW8270ESIM	71			1400		--	--	--	--	5.7 U	--	--	**2.5 J**	--	--	--	--	4.8 U	--
Hexachlorobenzene	SW8270ESIM	22	168		230		--	--	--	--	5.7 U	--	--	4.7 U	--	--	--	--	4.8 U	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		--	--	--	--	5.7 U	--	--	4.7 U	--	--	--	--	4.8 U	--
n-Nitrosodiphenylamine	SW8270ESIM	28			130		--	--	--	--	5.7 U	--	--	18.7 U	--	--	--	--	19.1 U	--
Pentachlorophenol	SW8270ESIM	400	504		690		--	--	--	--	22.8 UJ	--	--	**63.0 J**	--	--	--	--	**60.1 J**	--
Phenol	SW8270ESIM	420			1200		--	--	--	--	5.7 UJ	--	--	6.8 U	--	--	--	--	4.8 U	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC24	TG-SC24	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26
						Sample ID	TG-SC24-08-10-241028	TG-SC24-10-11.2-241028	TG-SC25-00-02-250328	TG-SC25-02-04-250328	TG-SC25-04-06-250328	TG-SC25-06-08-250328	TG-SC125-06-08-250328	TG-SC25-08-10-250328	TG-SC25-10-11.8-250328	TG-SC26-00-02-250331	TG-SC26-02-04-250331	TG-SC26-04-06-250331	TG-SC26-06-08-250331	TG-SC26-08-10-250331
						Sample Date	2024-10-28	2024-10-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31
						Depth Interval	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft	8 - 10 ft	10 - 11.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft
						Sample Type Code	N	N	N	N	N	N	FD	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E	670			1900		--	--	--	--	**21.9 J**	--	--	**8.8 J**	--	--	--	--	14.8 U	--
Acenaphthene	SW8270E	500			2000		--	--	--	--	18.5 UJ	--	--	13.9 U	--	--	--	--	14.8 U	--
Acenaphthylene	SW8270E	560			1300		--	--	--	--	18.5 UJ	--	--	**11.6 J**	--	--	--	--	14.8 U	--
Anthracene	SW8270E	960			13000		--	--	--	--	**13.3 J**	--	--	**39.5**	--	--	--	--	14.8 U	--
Benzo(a)anthracene	SW8270E	1300			5100		--	--	--	--	**26.0**	--	--	**126**	--	--	--	--	**9.0 J**	--
Benzo(a)pyrene	SW8270E	1600			3600		--	--	--	--	**20.9**	--	--	**127 J**	--	--	--	--	**11.0 J**	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	--	**56.1**	--	--	**195 J**	--	--	--	--	**25.4 J**	--
Benzo(g,h,i)perylene	SW8270E	670			3200		--	--	--	--	18.5 UJ	--	--	**69.3 J**	--	--	--	--	14.8 UJ	--
Carbazole	SW8270E						--	--	--	--	**9.5 J**	--	--	13.9 U	--	--	--	--	14.8 U	--
Chrysene	SW8270E	1400			21000		--	--	--	--	**34.1**	--	--	**124**	--	--	--	--	**10.8 J**	--
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900		--	--	--	--	5.7 UJ	--	--	**19.4**	--	--	--	--	4.8 U	--
Dibenzofuran	SW8270E	540			1700		--	--	--	--	18.5 U	--	--	13.9 U	--	--	--	--	14.8 U	--
Fluoranthene	SW8270E	1700	4600		30000		--	--	--	--	**70.1**	--	--	**225**	--	--	--	--	**16.2**	--
Fluorene	SW8270E	540			3600		--	--	--	--	18.5 U	--	--	13.9 U	--	--	--	--	14.8 U	--
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400		--	--	--	--	18.5 UJ	--	--	**61.7 J**	--	--	--	--	14.8 UJ	--
Naphthalene	SW8270E	2100			2400		--	--	--	--	**25.8 J**	--	--	**19.5**	--	--	--	--	14.8 U	--
Phenanthrene	SW8270E	1500			21000		--	--	--	--	**53.4 J**	--	--	**94.8**	--	--	--	--	**12.3 J**	--
Pyrene	SW8270E	2600	11980		16000		--	--	--	--	**83.2 J**	--	--	**236**	--	--	--	--	**23.5**	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		--	--	--	--	**56.1**	--	--	**195 J**	--	--	--	--	**25.4 J**	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	--	**29.5 J**	--	--	**168 J**	--	--	--	--	**14.5 J**	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	--	**30.7 J**	--	--	**168 J**	--	--	--	--	**15.5 J**	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		--	--	--	--	**290 J**	--	--	**1180 J**	--	--	--	--	**96 J**	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		--	--	--	--	**92.5 J**	--	--	**165 J**	--	--	--	--	**12.3 J**	--
Pesticides (µg/kg)																				
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	--	0.86 U	--	--	0.96 UJ	--	--	--	--	0.99 UJ	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	--	0.86 U	--	--	0.96 U	--	--	--	--	0.99 U	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	--	0.86 U	--	--	0.96 U	--	--	--	--	0.99 U	--
4,4'-DDD (p,p'-DDD)	SW8081B	16					--	--	--	--	0.86 UJ	--	--	**1.37**	--	--	--	--	0.99 U	--
4,4'-DDE (p,p'-DDE)	SW8081B	9					--	--	--	--	0.86 U	--	--	0.96 U	--	--	--	--	0.99 U	--
4,4'-DDT (p,p'-DDT)	SW8081B	12					--	--	--	--	0.86 U	--	--	0.96 U	--	--	--	--	0.99 U	--
Aldrin	SW8081B	9.5					--	--	--	--	0.43 U	--	--	0.48 U	--	--	--	--	0.49 U	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	--	0.43 U	--	--	0.48 U	--	--	--	--	0.49 U	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	--	0.43 U	--	--	0.48 U	--	--	--	--	0.49 U	--
Dieldrin	SW8081B	1.9			1700		--	--	--	--	0.86 U	--	--	0.96 U	--	--	--	--	0.99 U	--
Endrin ketone	SW8081B						--	--	--	--	0.86 U	--	--	0.96 U	--	--	--	--	0.99 U	--
Heptachlor	SW8081B	1.5			270		--	--	--	--	0.43 U	--	--	0.48 U	--	--	--	--	0.49 U	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	--	0.43 U	--	--	0.48 U	--	--	--	--	0.49 U	--
Nonachlor, cis-	SW8081B						--	--	--	--	0.86 U	--	--	0.96 UJ	--	--	--	--	0.99 UJ	--
Nonachlor, trans-	SW8081B						--	--	--	--	0.86 U	--	--	0.96 U	--	--	--	--	0.99 U	--
Oxychlordane	SW8081B						--	--	--	--	0.86 U	--	--	0.96 UJ	--	--	--	--	0.99 UJ	--
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69		--	--	--	--	0.86 UJ	--	--	**1.37**	--	--	--	--	0.99 U	--
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37				--	--	--	--	0.86 U	--	--	0.96 UJ	--	--	--	--	0.99 UJ	--
Total DDx (U = 0 max limit)	Calculated						--	--	--	--	0.86 UJ	--	--	**1.37 J**	--	--	--	--	0.99 UJ	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC24	TG-SC24	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26
						Sample ID	TG-SC24-08-10-241028	TG-SC24-10-11.2-241028	TG-SC25-00-02-250328	TG-SC25-02-04-250328	TG-SC25-04-06-250328	TG-SC25-06-08-250328	TG-SC125-06-08-250328	TG-SC25-08-10-250328	TG-SC25-10-11.8-250328	TG-SC26-00-02-250331	TG-SC26-02-04-250331	TG-SC26-04-06-250331	TG-SC26-06-08-250331	TG-SC26-08-10-250331
						Sample Date	2024-10-28	2024-10-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31
						Depth Interval	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft	8 - 10 ft	10 - 11.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft
						Sample Type Code	N	N	N	N	N	N	FD	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	--	--	--	**12600 J**	--	--	**30300 J**	**43.5**	--	--	--	**6840 J**	15.1 U
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	--	--	--	**98.3**	--	--	**1920**	**1.38 J**	--	--	--	**266**	**0.584 J**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	--	**494**	--	--	**2310**	**2.52**	--	--	--	**538**	**1.11 J**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	**74.4**	--	--	**643 J**	0.535 U	--	--	--	**136 J**	**0.266 J**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	**4.91**	--	--	**51.6 J**	0.272 U	--	--	--	**11.5 J**	0.198 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	**3.44**	--	--	**13.5**	0.188 U	--	--	--	**3.10**	0.200 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	**8.07**	--	--	**58.4**	0.146 U	--	--	--	**17.9**	0.205 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	**18.5**	--	--	**84.3 J**	0.188 U	--	--	--	**23.2 J**	0.194 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	**3.18**	--	--	**20.6**	0.167 U	--	--	--	**6.31**	0.217 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	**9.50**	--	--	**33.4**	0.203 U	--	--	--	**7.91**	0.211 U
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	**2.89**	--	--	**22.7**	0.218 U	--	--	--	**7.48**	0.299 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	--	**2.75**	--	--	**10.9**	0.167 U	--	--	--	**2.67**	0.140 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	**1.69 J**	--	--	**7.62**	0.169 U	--	--	--	**2.48**	0.0961 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	**3.87**	--	--	**30.7**	0.184 U	--	--	--	**8.83**	0.248 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	**1.69**	--	--	**9.04 J**	**0.196 J**	--	--	--	**2.96 J**	0.0796 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	--	0.170 U	--	--	**1.61**	0.0660 U	--	--	--	**0.393 J**	0.0652 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	--	**2.75 J**	--	--	**4.84 J**	0.0665 U	--	--	--	**1.86 J**	0.0742 U
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				--	--	--	--	**18.1 J**	--	--	**82.0 J**	**0.0975 J**	--	--	--	**20.7 J**	**0.0139 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				--	--	--	--	**18.2 J**	--	--	**82.0 J**	**0.289 J**	--	--	--	**20.7 J**	**0.216 J**
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	--	**932**	--	--	**4160**	**5.87**	--	--	--	**997**	**2.31 J**
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	**245**	--	--	**3040 J**	**1.16 J**	--	--	--	**552 J**	**0.855 J**
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	**118**	--	--	**491 J**	**0.723 J**	--	--	--	**126 J**	**0.169 J**
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	**139**	--	--	**1160**	**0.562 J**	--	--	--	**299**	**0.344 J**
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	--	**11.1**	--	--	**52.7**	0.167 U	--	--	--	**12.1**	0.140 U
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	**33.5**	--	--	**171 J**	**0.196 J**	--	--	--	**40.4 J**	0.0961 U
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	--	**13.6**	--	--	**42.5**	0.0660 U	--	--	--	**7.16**	0.0652 U
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	--	**11.8**	--	--	**57.2**	0.0665 U	--	--	--	**12.3**	0.0742 U
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	--	--	--	1.2 U	--	--	4.75 U	2.7 U	--	--	--	7.12 U	--
Aroclor 1221	SW8082A						--	--	--	--	1.2 U	--	--	4.75 U	2.7 U	--	--	--	7.12 U	--
Aroclor 1232	SW8082A						--	--	--	--	1.2 U	--	--	4.75 U	2.7 U	--	--	--	7.12 U	--
Aroclor 1242	SW8082A						--	--	--	--	1.2 U	--	--	4.75 U	2.7 U	--	--	--	7.12 U	--
Aroclor 1248	SW8082A						--	--	--	--	**6.65**	--	--	**21.3**	2.7 U	--	--	--	7.12 U	--
Aroclor 1254	SW8082A						--	--	--	--	**6.24**	--	--	**13.6**	2.7 U	--	--	--	7.12 U	--
Aroclor 1260	SW8082A						--	--	--	--	**3.65**	--	--	4.75 U	2.7 U	--	--	--	7.12 U	--
Aroclor 1262	SW8082A						--	--	--	--	1.2 U	--	--	4.75 U	2.7 U	--	--	--	7.12 U	--
Aroclor 1268	SW8082A						--	--	--	--	1.2 U	--	--	4.75 U	2.7 U	--	--	--	7.12 U	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	--	**16.5**	--	--	**35**	2.7 U	--	--	--	7.12 U	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

					Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
					Location ID	TG-SC24	TG-SC24	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC26	TG-SC26	TG-SC26	TG-SC26
					Sample ID	TG-SC24-08-10-241028	TG-SC24-10-11.2-241028	TG-SC25-00-02-250328	TG-SC25-02-04-250328	TG-SC25-04-06-250328	TG-SC25-06-08-250328	TG-SC125-06-08-250328	TG-SC25-08-10-250328	TG-SC25-10-11.8-250328	TG-SC26-00-02-250331	TG-SC26-02-04-250331	TG-SC26-04-06-250331	TG-SC26-06-08-250331	TG-SC26-08-10-250331
					Sample Date	2024-10-28	2024-10-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31
					Depth Interval	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft	8 - 10 ft	10 - 11.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft
					Sample Type Code	N	N	N	N	N	N	FD	N	N	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML														
PCB Aroclors (µg/kg)																			
Aroclor 1016	SW8082A					--	--	--	--	4.0 U	--	--	19.0 U	3.2 U	--	--	--	18.5 U	--
Aroclor 1221	SW8082A					--	--	--	--	4.0 U	--	--	19.0 U	3.2 U	--	--	--	18.5 U	--
Aroclor 1232	SW8082A					--	--	--	--	4.0 U	--	--	19.0 U	3.2 U	--	--	--	18.5 U	--
Aroclor 1242	SW8082A					--	--	--	--	4.0 U	--	--	19.0 U	3.2 U	--	--	--	18.5 U	--
Aroclor 1248	SW8082A					--	--	--	--	**22.6**	--	--	**85.3**	3.2 U	--	--	--	18.5 U	--
Aroclor 1254	SW8082A					--	--	--	--	**21.2**	--	--	**54.4**	3.2 U	--	--	--	18.5 U	--
Aroclor 1260	SW8082A					--	--	--	--	**12.4**	--	--	19.0 U	3.2 U	--	--	--	18.5 U	--
Aroclor 1262	SW8082A					--	--	--	--	4.0 U	--	--	19.0 U	3.2 U	--	--	--	18.5 U	--
Aroclor 1268	SW8082A					--	--	--	--	4.0 U	--	--	19.0 U	3.2 U	--	--	--	18.5 U	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100	--	--	--	--	**56.2**	--	--	**140**	3.2 U	--	--	--	18.5 U	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC26	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC29
						Sample ID	TG-SC26-10-11-250331	TG-SC27-00-02-250512	TG-SC27-02-04-250512	TG-SC27-04-06-250512	TG-SC27-06-08-250512	TG-SC27-08-10-250512	TG-SC27-10-12-250512	TG-SC28-00-02-250512	TG-SC28-02-04-250512	TG-SC28-04-06-250512	TG-SC28-06-08-250512	TG-SC28-08-10-250512	TG-SC28-10-12-250512	TG-SC29-00-02-250826
						Sample Date	2025-03-31	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-08-26
						Depth Interval	10 - 11 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																			
Total organic carbon	SW9060AM						--	--	--	**0.39**	**0.71 J**	**0.12 J**	--	**0.82**	--	--	--	--	--	--
Total solids	D2216						--	--	--	**79.68**	--	--	--	**66.24**	--	--	--	--	--	--
Total solids	SM2540G						**79.98**	**63.46 J**	**73.10 J**	**83.63**	**70.16**	**83.19**	**79.94 J**	**64.26 J**	**63.40 J**	**70.64 J**	**78.05 J**	**85.67 J**	**78.98 J**	**68.06**
Total volatile solids	PSEP-TVS						--	--	--	**2.10**	--	--	--	**3.90**	--	--	--	--	--	--
Metals (mg/kg)																			
Antimony	SW6020	150			200		0.24 UJ	**0.54 J**	**1.96 J**	**0.87 J**	0.28 UJ	0.26 UJ	0.25 UJ	0.30 UJ	0.31 UJ	**0.47 J**	0.25 UJ	0.22 UJ	0.25 UJ	0.29 UJ
Arsenic	SW6020	57	507.1		700		**0.92**	**34.3**	**117**	**19.4**	**10.6**	**5.35**	**1.71**	**7.07**	**12.7**	**14.6**	**4.07**	**1.41**	**1.02**	**13.9**
Cadmium	SW6020	5.1			14		0.12 U	**0.38**	**0.44**	**0.16**	**0.26**	**0.09 J**	0.12 U	**0.18**	**0.25**	**0.26**	**0.09 J**	0.11 U	0.13 U	**0.22**
Chromium	SW6020	260					**10.1**	**23.5**	**27.0**	**12.9**	**43.0**	**10.9**	**8.21**	**12.4**	**18.8**	**13.5**	**9.84**	**8.93**	**8.14**	**16.5**
Copper	SW6020	390			1300		**8.47**	**278 J**	**307 J**	**91.3 J**	**71.8 J**	**23.1 J**	**10.0 J**	**41.7 J**	**61.0 J**	**52.2 J**	**17.9 J**	**9.77 J**	**8.44 J**	**45.9**
Lead	SW6020	450	975		1200		**1.00**	**42.3**	**124**	**26.3**	**19.6**	**10.3**	**1.19**	**10.4**	**62.5**	**30.6**	**4.91**	**1.07**	**0.93**	**26.9**
Mercury	SW7471B	0.41	1.5		2.3		0.0254 U	**0.113**	**0.0798**	**0.0587**	**0.325**	**0.125**	**0.00886 J**	**0.107**	**0.109**	**0.0685**	**0.0509**	**0.00683 J**	**0.00585 J**	**0.0822**
Selenium	SW6020		3				**1.09**	1.51 U	1.26 U	1.17 U	1.39 U	1.29 U	1.24 U	1.47 U	1.58 U	1.36 U	1.25 U	1.09 U	1.23 U	**1.40 J**
Silver	SW6020	6.1			8.4		0.24 UJ	**0.47**	**0.43**	**0.14 J**	**0.18 J**	**0.13 J**	0.25 U	0.29 U	**0.32**	**0.18 J**	0.25 U	0.22 U	0.25 U	**0.19 J**
Zinc	SW6020	410			3800		**17.9**	**717**	**732**	**75.0**	**59.0**	**33.3**	**18.3**	**64.7**	**94.9**	**98.3**	**24.6**	**18.0**	**16.3**	**79.8**
Organometals (µg/kg)																			
Tributyltin (ion)	SW8270ESIM			73			--	--	--	**39.4 J**	--	--	--	**1.71 J**	--	--	--	--	--	--
Semivolatile Organics (µg/kg)																			
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		--	--	--	5.9 U	--	--	--	6.7 U	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	35			110		--	--	--	5.9 UJ	--	--	--	6.7 UJ	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	110			120		--	--	--	5.9 UJ	--	--	--	6.7 UJ	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270ESIM	29			210		--	--	--	23.4 U	--	--	--	26.8 U	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		--	--	--	5.9 U	--	--	--	6.7 U	--	--	--	--	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		--	--	--	5.9 U	--	--	--	**16.6**	--	--	--	--	--	--
Benzoic acid	SW8270ESIM	650			760		--	--	--	117 UJ	--	--	--	134 UJ	--	--	--	--	--	--
Benzyl alcohol	SW8270ESIM	57			870		--	--	--	23.4 U	--	--	--	26.8 U	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		--	--	--	**61.8**	--	--	--	67.1 U	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM	63			970		--	--	--	**43.8**	--	--	--	**49.1**	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270E	1400			5100		--	--	--	23.4 U	--	--	--	26.8 U	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270E	6200			6200		--	--	--	23.4 U	--	--	--	26.8 U	--	--	--	--	--	--
Diethyl phthalate	SW8270ESIM	200			1200		--	--	--	23.4 U	--	--	--	**40.1**	--	--	--	--	--	--
Dimethyl phthalate	SW8270ESIM	71			1400		--	--	--	5.9 U	--	--	--	6.7 U	--	--	--	--	--	--
Hexachlorobenzene	SW8270ESIM	22	168		230		--	--	--	5.9 U	--	--	--	6.7 U	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		--	--	--	5.9 U	--	--	--	6.7 U	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	28			130		--	--	--	5.9 U	--	--	--	6.7 U	--	--	--	--	--	--
Pentachlorophenol	SW8270ESIM	400	504		690		--	--	--	23.4 UJ	--	--	--	26.8 UJ	--	--	--	--	--	--
Phenol	SW8270ESIM	420			1200		--	--	--	5.9 UJ	--	--	--	**152 J**	--	--	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC26	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC29
						Sample ID	TG-SC26-10-11-250331	TG-SC27-00-02-250512	TG-SC27-02-04-250512	TG-SC27-04-06-250512	TG-SC27-06-08-250512	TG-SC27-08-10-250512	TG-SC27-10-12-250512	TG-SC28-00-02-250512	TG-SC28-02-04-250512	TG-SC28-04-06-250512	TG-SC28-06-08-250512	TG-SC28-08-10-250512	TG-SC28-10-12-250512	TG-SC29-00-02-250826
						Sample Date	2025-03-31	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-08-26
						Depth Interval	10 - 11 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																			
2-Methylnaphthalene	SW8270E	670			1900		--	--	--	23.4 U	--	--	--	26.8 U	--	--	--	--	--	--
Acenaphthene	SW8270E	500			2000		--	--	--	23.4 U	--	--	--	26.8 U	--	--	--	--	--	--
Acenaphthylene	SW8270E	560			1300		--	--	--	23.4 U	--	--	--	26.8 U	--	--	--	--	--	--
Anthracene	SW8270E	960			13000		--	--	--	**18.0 J**	--	--	--	**21.9 J**	--	--	--	--	--	--
Benzo(a)anthracene	SW8270E	1300			5100		--	--	--	**85.8**	--	--	--	**38.2**	--	--	--	--	--	--
Benzo(a)pyrene	SW8270E	1600			3600		--	--	--	**81.2**	--	--	--	**32.5**	--	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	**213**	--	--	--	**83.3**	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270E	670			3200		--	--	--	**45.1**	--	--	--	26.8 U	--	--	--	--	--	--
Carbazole	SW8270E						--	--	--	23.4 U	--	--	--	26.8 U	--	--	--	--	--	--
Chrysene	SW8270E	1400			21000		--	--	--	**112**	--	--	--	**72.1**	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900		--	--	--	**12.9 J**	--	--	--	6.7 UJ	--	--	--	--	--	--
Dibenzofuran	SW8270E	540			1700		--	--	--	23.4 U	--	--	--	26.8 U	--	--	--	--	--	--
Fluoranthene	SW8270E	1700	4600		30000		--	--	--	**177**	--	--	--	**50.0**	--	--	--	--	--	--
Fluorene	SW8270E	540			3600		--	--	--	23.4 U	--	--	--	26.8 U	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400		--	--	--	**38.0**	--	--	--	26.8 U	--	--	--	--	--	--
Naphthalene	SW8270E	2100			2400		--	--	--	23.4 UJ	--	--	--	26.8 UJ	--	--	--	--	--	--
Phenanthrene	SW8270E	1500			21000		--	--	--	**87.4**	--	--	--	**28.6**	--	--	--	--	--	--
Pyrene	SW8270E	2600	11980		16000		--	--	--	**196**	--	--	--	**78.6**	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		--	--	--	**213**	--	--	--	**83.3**	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	**117 J**	--	--	--	**45.4 J**	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	**117 J**	--	--	--	**47.0 J**	--	--	--	--	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		--	--	--	**961 J**	--	--	--	**355 J**	--	--	--	--	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		--	--	--	**105 J**	--	--	--	**50.5 J**	--	--	--	--	--	--
Pesticides (µg/kg)																			
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	0.99 U	--	--	--	0.90 U	--	--	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	0.99 U	--	--	--	0.90 U	--	--	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	0.99 U	--	--	--	0.90 U	--	--	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B	16					--	--	--	0.99 UJ	--	--	--	0.90 UJ	--	--	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B	9					--	--	--	0.99 U	--	--	--	0.90 U	--	--	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B	12					--	--	--	0.99 U	--	--	--	0.90 U	--	--	--	--	--	--
Aldrin	SW8081B	9.5					--	--	--	0.49 U	--	--	--	0.45 U	--	--	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	0.49 U	--	--	--	0.45 U	--	--	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	0.49 UJ	--	--	--	0.45 U	--	--	--	--	--	--
Dieldrin	SW8081B	1.9			1700		--	--	--	0.99 U	--	--	--	0.90 U	--	--	--	--	--	--
Endrin ketone	SW8081B						--	--	--	0.99 U	--	--	--	0.90 U	--	--	--	--	--	--
Heptachlor	SW8081B	1.5			270		--	--	--	0.49 U	--	--	--	0.45 U	--	--	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	**0.33 J**	--	--	--	0.45 U	--	--	--	--	--	--
Nonachlor, cis-	SW8081B						--	--	--	0.99 U	--	--	--	0.90 U	--	--	--	--	--	--
Nonachlor, trans-	SW8081B						--	--	--	0.99 U	--	--	--	0.90 U	--	--	--	--	--	--
Oxychlordane	SW8081B						--	--	--	0.99 U	--	--	--	0.90 U	--	--	--	--	--	--
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69		--	--	--	0.99 UJ	--	--	--	0.90 UJ	--	--	--	--	--	--
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37				--	--	--	0.99 UJ	--	--	--	0.90 U	--	--	--	--	--	--
Total DDx (U = 0 max limit)	Calculated						--	--	--	0.99 UJ	--	--	--	0.90 UJ	--	--	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC26	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC29
						Sample ID	TG-SC26-10-11-250331	TG-SC27-00-02-250512	TG-SC27-02-04-250512	TG-SC27-04-06-250512	TG-SC27-06-08-250512	TG-SC27-08-10-250512	TG-SC27-10-12-250512	TG-SC28-00-02-250512	TG-SC28-02-04-250512	TG-SC28-04-06-250512	TG-SC28-06-08-250512	TG-SC28-08-10-250512	TG-SC28-10-12-250512	TG-SC29-00-02-250826
						Sample Date	2025-03-31	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-08-26
						Depth Interval	10 - 11 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	--	--	**19100 J**	**137000**	**1170**	--	**2550**	--	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	--	--	**183**	**4290**	**180**	--	**58.9**	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	**1320**	**8300**	**128**	--	**214**	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	**164**	**1440 J**	**60.9**	--	**38.0**	--	--	--	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	**11.5**	**123**	**5.07**	--	**2.52**	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	**9.54**	**31.6**	**1.26 J**	--	**1.32**	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	**23.8**	**187**	**5.49**	--	**5.60**	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	**60.4**	**264**	**5.37**	--	**8.47**	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	**8.58**	**59.2**	**2.88**	--	**1.50**	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	**27.9**	**85.2**	**2.53**	--	**3.00**	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	**8.52**	**49.2**	**0.623 J**	--	**1.58**	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	**8.01**	**24.2**	**1.11 J**	--	**1.20**	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	**4.95**	**34.3**	**1.27 J**	--	**1.57**	--	--	--	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	**11.7**	**63.6**	**3.48**	--	**2.00**	--	--	--	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	**5.84**	**70.2**	**2.60**	--	**0.927 J**	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	**0.889 J**	**3.95**	**0.314 J**	--	0.181 U	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	**6.07 J**	**22.0**	**1.30**	--	**1.18**	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				--	--	--	**47.2 J**	**270 J**	**6.9 J**	--	**7.32 J**	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				--	--	--	**47.2 J**	**270 J**	**6.9 J**	--	**7.41 J**	--	--	--	--	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	**2700**	**15500**	**250**	--	**576**	--	--	--	--	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	**547**	**7120**	**246**	--	**129**	--	--	--	--	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	**386**	**1720**	**46.8**	--	**72.5**	--	--	--	--	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	**379**	**3810 J**	**96.2**	--	**66.1**	--	--	--	--	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	**45.4**	**269**	**23.0 J**	--	**6.48**	--	--	--	--	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	**89.9**	**884**	**40.7**	--	**12.7**	--	--	--	--	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	**49.9**	**260**	**15.6 J**	--	**5.95**	--	--	--	--	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	**40.5**	**241**	**23.6 J**	--	**4.13**	--	--	--	--	--	--
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	--	--	0.97 U	0.51 U	2.8 U	--	0.45 U	--	--	--	--	--	--
Aroclor 1221	SW8082A						--	--	--	0.97 U	0.51 U	2.8 U	--	0.45 U	--	--	--	--	--	--
Aroclor 1232	SW8082A						--	--	--	0.97 U	0.51 U	2.8 U	--	0.45 U	--	--	--	--	--	--
Aroclor 1242	SW8082A						--	--	--	0.97 U	0.51 U	2.8 U	--	0.45 U	--	--	--	--	--	--
Aroclor 1248	SW8082A						--	--	--	**53.6**	**4.04 J**	2.8 U	--	**0.98**	--	--	--	--	--	--
Aroclor 1254	SW8082A						--	--	--	**70.0**	**3.14**	2.8 U	--	**1.55**	--	--	--	--	--	--
Aroclor 1260	SW8082A						--	--	--	**12.0**	**1.2**	2.8 U	--	**0.49**	--	--	--	--	--	--
Aroclor 1262	SW8082A						--	--	--	0.97 U	0.51 U	2.8 U	--	0.45 U	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	--	--	0.97 U	0.51 U	2.8 U	--	0.45 U	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	**136**	**8.4 J**	2.8 U	--	**3.0**	--	--	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC26	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC29
						Sample ID	TG-SC26-10-11-250331	TG-SC27-00-02-250512	TG-SC27-02-04-250512	TG-SC27-04-06-250512	TG-SC27-06-08-250512	TG-SC27-08-10-250512	TG-SC27-10-12-250512	TG-SC28-00-02-250512	TG-SC28-02-04-250512	TG-SC28-04-06-250512	TG-SC28-06-08-250512	TG-SC28-08-10-250512	TG-SC28-10-12-250512	TG-SC29-00-02-250826
						Sample Date	2025-03-31	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-08-26
						Depth Interval	10 - 11 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (µg/kg)																			
Aroclor 1016	SW8082A						--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U	--	--	--	--	--	--
Aroclor 1221	SW8082A						--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U	--	--	--	--	--	--
Aroclor 1232	SW8082A						--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U	--	--	--	--	--	--
Aroclor 1242	SW8082A						--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U	--	--	--	--	--	--
Aroclor 1248	SW8082A						--	--	--	**209**	**28.7 J**	3.4 U	--	**8.0**	--	--	--	--	--	--
Aroclor 1254	SW8082A						--	--	--	**273**	**22.3**	3.4 U	--	**12.7**	--	--	--	--	--	--
Aroclor 1260	SW8082A						--	--	--	**46.8**	**8.3**	3.4 U	--	**4.0**	--	--	--	--	--	--
Aroclor 1262	SW8082A						--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	--	--	**529**	**59 J**	3.4 U	--	**25**	--	--	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC31	TG-SC31
						Sample ID	TG-SC29-02-04-250826	TG-SC29-04-06-250826	TG-SC29-06-08-250826	TG-SC29-08-10-250826	TG-SC29-10-12-250826	TG-SC30-00-02-250826	TG-SC30-02-04-250826	TG-SC30-04-06-250826	TG-SC30-06-08-250826	TG-SC130-06-08-250826	TG-SC30-08-10-250826	TG-SC30-10-12-250826	TG-SC31-00-02-250826	TG-SC31-02-04-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	FD	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	D2216						--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	SM2540G						**73.20**	**69.89**	**73.90**	**76.98**	**74.36**	**72.07**	**76.07**	**86.99**	**82.01**	**81.11**	**88.55**	**78.76**	**65.05**	**69.85**
Total volatile solids	PSEP-TVS						--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)																				
Antimony	SW6020	150			200		0.26 UJ	0.27 UJ	0.26 UJ	0.25 UJ	0.26 UJ	0.26 UJ	0.25 UJ	0.21 UJ	0.24 UJ	0.25 UJ	0.21 UJ	0.24 UJ	0.30 UJ	**0.65 J**
Arsenic	SW6020	57	507.1		700		**4.28**	**7.67**	**3.72**	**2.38**	**1.67**	**5.42**	**3.66**	**3.31**	**4.02**	**4.25**	**1.75**	**1.41**	**10.7**	**51.6**
Cadmium	SW6020	5.1			14		**0.12 J**	**0.25**	**0.07 J**	0.13 U	0.13 U	**0.10 J**	**0.09 J**	0.10 U	0.12 U	0.12 U	0.10 U	0.12 U	**0.19**	**0.24**
Chromium	SW6020	260					**12.0**	**19.1**	**13.1**	**10.2**	**10.2**	**13.3**	**10.9**	**8.83**	**7.96**	**9.36**	**9.35**	**9.64**	**12.5**	**15.7**
Copper	SW6020	390			1300		**18.2**	**42.9**	**19.7**	**13.0**	**10.3**	**27.2**	**16.4**	**8.89**	**8.67**	**9.29**	**9.55**	**9.00**	**46.2**	**109**
Lead	SW6020	450	975		1200		**17.1**	**38.2**	**7.99**	**2.53**	**1.86**	**7.35**	**4.45**	**1.07**	**1.08**	**1.24**	**1.05**	**0.99**	**15.0**	**61.9**
Mercury	SW7471B	0.41	1.5		2.3		**0.0360**	**0.194**	**0.0537**	**0.0163 J**	**0.0113 J**	**0.0688**	**0.0246 J**	**0.00647 J**	**0.0101 J**	**0.00847 J**	**0.00896 J**	**0.00630 J**	**0.0644**	**0.0676**
Selenium	SW6020		3				**1.29 J**	**1.23 J**	**1.02 J**	**0.70 J**	**1.10 J**	**1.12 J**	**1.20 J**	**0.74 J**	**0.95 J**	1.23 U	**0.63 J**	**0.88 J**	**1.01 J**	**0.89 J**
Silver	SW6020	6.1			8.4		0.26 UJ	**0.39 J**	0.26 UJ	0.25 UJ	0.26 UJ	0.26 UJ	0.25 UJ	0.21 UJ	0.24 UJ	0.25 UJ	0.21 UJ	0.24 UJ	0.30 UJ	**0.21 J**
Zinc	SW6020	410			3800		**45.1**	**90.9**	**34.1**	**21.6**	**20.2**	**42.3**	**27.4**	**16.8**	**15.1**	**18.1**	**16.6**	**15.2**	**68.2**	**169**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM			73			--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	35			110		--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	110			120		--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270ESIM	29			210		--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270ESIM	650			760		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270ESIM	57			870		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM	63			970		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270E	1400			5100		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270E	6200			6200		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270ESIM	200			1200		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270ESIM	71			1400		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270ESIM	22	168		230		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	28			130		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270ESIM	400	504		690		--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270ESIM	420			1200		--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

					Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
					Location ID	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC31	TG-SC31
					Sample ID	TG-SC29-02-04-250826	TG-SC29-04-06-250826	TG-SC29-06-08-250826	TG-SC29-08-10-250826	TG-SC29-10-12-250826	TG-SC30-00-02-250826	TG-SC30-02-04-250826	TG-SC30-04-06-250826	TG-SC30-06-08-250826	TG-SC130-06-08-250826	TG-SC30-08-10-250826	TG-SC30-10-12-250826	TG-SC31-00-02-250826	TG-SC31-02-04-250826
					Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
					Depth Interval	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft
					Sample Type Code	N	N	N	N	N	N	N	N	N	FD	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML														
Polycyclic Aromatic Hydrocarbons (µg/kg)																			
2-Methylnaphthalene	SW8270E	670			1900	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270E	500			2000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270E	560			1300	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270E	960			13000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270E	1300			5100	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270E	1600			3600	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270E	670			3200	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270E					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270E	1400			21000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270E	540			1700	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270E	1700	4600		30000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270E	540			3600	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270E	2100			2400	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270E	1500			21000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270E	2600	11980		16000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides (µg/kg)																			
2,4'-DDD (o,p'-DDD)	SW8081B					--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B					--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B					--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B	16				--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B	9				--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B	12				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	SW8081B	9.5				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	SW8081B	1.9			1700	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	SW8081B					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	SW8081B	1.5			270	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonachlor, cis-	SW8081B					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonachlor, trans-	SW8081B					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxychlordane	SW8081B					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37			--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total DDx (U = 0 max limit)	Calculated					--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC31	TG-SC31
						Sample ID	TG-SC29-02-04-250826	TG-SC29-04-06-250826	TG-SC29-06-08-250826	TG-SC29-08-10-250826	TG-SC29-10-12-250826	TG-SC30-00-02-250826	TG-SC30-02-04-250826	TG-SC30-04-06-250826	TG-SC30-06-08-250826	TG-SC130-06-08-250826	TG-SC30-08-10-250826	TG-SC30-10-12-250826	TG-SC31-00-02-250826	TG-SC31-02-04-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	FD	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																			
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				--	--	--	--	--	--	--	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				--	--	--	--	--	--	--	--	--	--	--	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (mg/kg-OC)																			
Aroclor 1016	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

					Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
					Location ID	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC30	TG-SC31	TG-SC31
					Sample ID	TG-SC29-02-04-250826	TG-SC29-04-06-250826	TG-SC29-06-08-250826	TG-SC29-08-10-250826	TG-SC29-10-12-250826	TG-SC30-00-02-250826	TG-SC30-02-04-250826	TG-SC30-04-06-250826	TG-SC30-06-08-250826	TG-SC130-06-08-250826	TG-SC30-08-10-250826	TG-SC30-10-12-250826	TG-SC31-00-02-250826	TG-SC31-02-04-250826
					Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
					Depth Interval	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft
					Sample Type Code	N	N	N	N	N	N	N	N	N	FD	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML														
PCB Aroclors (µg/kg)																			
Aroclor 1016	SW8082A					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082A					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082A					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082A					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082A					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082A					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082A					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262	SW8082A					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A					--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SG06	TG-SG12	TG-SG25	TG-SG27	TG-SG29	TG-SG30	TG-SG31	TG-SG31	TG-SG32
						Sample ID	TG-SC31-04-06-250826	TG-SC31-06-08-250826	TG-SC31-08-10-250826	TG-SC31-10-10.7-250826	TG-SG06-250826	TG-SG12-250826	TG-SG25-250826	TG-SG27-250826	TG-SG29-250826	TG-SG30-250826	TG-SG31-250826	TG-SG131-250826	TG-SG32-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.7 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	FD	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																			
Total organic carbon	SW9060AM						**0.58 J**	**5.30 J**	--	--	**0.55 J**	**0.68 J**	**0.61 J**	**0.82 J**	**0.98 J**	**0.66 J**	**1.41 J**	**2.08 J**	**0.33 J**
Total solids	D2216						--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	SM2540G						**73.64**	**53.60**	**50.36**	**60.82**	**70.66**	**62.32**	**63.86**	**58.94**	**60.11**	**65.36**	**66.32**	**66.86**	**71.08**
Total volatile solids	PSEP-TVS						**3.05**	**13.30**	--	--	**2.77**	**3.58**	**3.32**	**4.13**	**3.85**	**3.15**	**3.25**	**3.16**	**2.27**
Metals (mg/kg)																			
Antimony	SW6020	150			200		0.27 UJ	0.38 UJ	0.39 UJ	0.31 UJ	**3.06 J**	**0.37 J**	0.29 UJ	0.33 UJ	0.31 UJ	0.28 UJ	0.28 UJ	0.30 UJ	0.27 UJ
Arsenic	SW6020	57	507.1		700		**13.9**	**8.59**	**9.41**	**4.78**	**127 J**	**26.5 J**	**10.0 J**	**22.9 J**	**7.18 J**	**5.14 J**	**9.98 J**	**11.6 J**	**9.04 J**
Cadmium	SW6020	5.1			14		**0.08 J**	0.19 U	**0.17 J**	**0.09 J**	**0.31 J**	**0.17 J**	**0.40 J**	**0.19 J**	**0.15 J**	**0.12 J**	**0.18 J**	**0.20 J**	**0.19 J**
Chromium	SW6020	260					**11.9**	**13.4**	**14.0**	**16.4**	**19.1**	**25.0**	**26.4**	**19.3**	**15.2**	**13.4**	**16.3**	**14.1**	**21.6**
Copper	SW6020	390			1300		**46.1**	**33.8**	**35.8**	**38.8**	**133**	**207**	**728**	**81.0**	**50.3**	**30.1**	**87.9**	**104**	**90.8**
Lead	SW6020	450	975		1200		**16.7**	**3.59**	**3.70**	**3.86**	**129 J**	**29.4 J**	**29.7 J**	**26.5 J**	**12.5 J**	**8.62 J**	**14.3 J**	**58.9 J**	**26.0 J**
Mercury	SW7471B	0.41	1.5		2.3		**0.0369**	**0.0238 J**	**0.0361**	**0.0300**	**0.0572**	**0.0804**	**0.0485**	**0.0547**	**0.0390**	**0.0423**	**0.0388**	**0.0323**	**0.0235 J**
Selenium	SW6020		3				**0.89 J**	**1.79 J**	**2.26**	**1.79**	1.30 U	**0.79 J**	**1.40 J**	1.64 U	**0.79 J**	1.40 U	1.41 U	1.48 U	1.33 U
Silver	SW6020	6.1			8.4		0.27 UJ	0.38 UJ	0.39 UJ	0.31 UJ	0.65 UJ	**0.19 J**	**0.59 J**	**0.18 J**	0.31 UJ	0.28 UJ	0.28 UJ	0.30 UJ	0.27 UJ
Zinc	SW6020	410			3800		**58.7**	**22.3**	**32.3**	**33.4**	**384 J**	**162 J**	**2180 J**	**165 J**	**60.3 J**	**51.7 J**	**77.5 J**	**73.8 J**	**65.8 J**
Organometals (µg/kg)																			
Tributyltin (ion)	SW8270ESIM			73			**9.36 J**	3.72 U	--	--	**92.8 J**	**243**	**7.53**	3.36 U	**2.24 J**	**1.71 J**	**151**	**482**	**31.8**
Semivolatile Organics (µg/kg)																			
1,2,4-Trichlorobenzene	SW8270ESIM	31			64		24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	4.7 U	5.0 U	5.0 U	4.4 U	5.0 U
1,2-Dichlorobenzene	SW8270ESIM	35			110		24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	4.7 U	**3.5 J**	**3.1 J**	**3.8 J**	5.0 U
1,4-Dichlorobenzene	SW8270ESIM	110			120		24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	**3.0 J**	**4.5 J**	**4.0 J**	**4.6**	5.0 U
2,4-Dimethylphenol	SW8270ESIM	29			210		99.3 U	19.5 U	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U	20.0 U	17.6 U	20.0 U
2-Methylphenol (o-Cresol)	SW8270ESIM	63			77		24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	**4.7 J**	**5.0**	**3.2 J**	**5.9**	**2.6 J**
4-Methylphenol (p-Cresol)	SW8270ESIM	670			3600		**15.9 J**	**3.4 J**	--	--	**16.6 J**	**37.1**	**5.4**	**48.2**	**9.9**	**21.2**	**19.3**	**15.6**	**11.8**
Benzoic acid	SW8270ESIM	650			760		496 UJ	97.3 UJ	--	--	481 UJ	95.0 UJ	97.3 UJ	87.6 UJ	94.6 UJ	99.1 UJ	100 UJ	88.0 UJ	100 UJ
Benzyl alcohol	SW8270ESIM	57			870		99.3 U	19.5 U	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U	20.0 U	17.6 U	20.0 U
Bis(2-ethylhexyl)phthalate	SW8270E	1300			8300		248 U	48.6 U	--	--	241 U	47.5 U	48.6 U	43.8 U	47.3 U	49.5 U	**112**	**169**	**238**
Butylbenzyl phthalate	SW8270ESIM	63			970		24.8 U	4.9 U	--	--	24.1 U	**3.1 J**	**6.2**	**7.0**	**2.6 J**	**2.8 J**	**5.5**	**4.7**	**36.8**
Di-n-butyl phthalate	SW8270E	1400			5100		99.3 U	19.5 U	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U	20.0 U	17.6 U	20.0 U
Di-n-octyl phthalate	SW8270E	6200			6200		99.3 UJ	19.5 UJ	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U	20.0 U	17.6 U	20.0 U
Diethyl phthalate	SW8270ESIM	200			1200		99.3 U	19.5 U	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U	20.0 U	17.6 U	20.0 U
Dimethyl phthalate	SW8270ESIM	71			1400		24.8 U	4.9 U	--	--	24.1 U	**2.9 J**	**5.0**	4.4 U	**2.5 J**	5.0 U	**25.7**	4.4 U	5.0 U
Hexachlorobenzene	SW8270ESIM	22	168		230		24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	4.7 U	5.0 U	5.0 U	4.4 U	5.0 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	11			270		24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	4.7 U	5.0 U	5.0 U	4.4 U	5.0 U
n-Nitrosodiphenylamine	SW8270ESIM	28			130		24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	4.7 U	5.0 U	5.0 U	4.4 U	5.0 U
Pentachlorophenol	SW8270ESIM	400	504		690		99.3 UJ	19.5 UJ	--	--	96.3 UJ	19.0 UJ	19.5 UJ	17.5 UJ	18.9 UJ	19.8 UJ	20.0 UJ	17.6 UJ	20.0 UJ
Phenol	SW8270ESIM	420			1200		**18.5 J**	**4.6 J**	--	--	**22.6 J**	4.7 U	4.9 U	4.4 U	4.7 U	5.0 U	5.0 U	4.4 U	5.0 U

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SG06	TG-SG12	TG-SG25	TG-SG27	TG-SG29	TG-SG30	TG-SG31	TG-SG31	TG-SG32
						Sample ID	TG-SC31-04-06-250826	TG-SC31-06-08-250826	TG-SC31-08-10-250826	TG-SC31-10-10.7-250826	TG-SG06-250826	TG-SG12-250826	TG-SG25-250826	TG-SG27-250826	TG-SG29-250826	TG-SG30-250826	TG-SG31-250826	TG-SG131-250826	TG-SG32-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.7 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	FD	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																			
2-Methylnaphthalene	SW8270E	670			1900		99.3 U	19.5 U	--	--	96.3 U	19.0 U	**17.2 J**	**10.4 J**	18.9 U	**10.6 J**	20.0 U	**10.7 J**	20.0 U
Acenaphthene	SW8270E	500			2000		99.3 U	19.5 U	--	--	**53.1 J**	**17.4 J**	**28.1**	17.5 U	18.9 U	19.8 U	**11.2 J**	**17.1 J**	**17.8 J**
Acenaphthylene	SW8270E	560			1300		**69.5 J**	19.5 U	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U	20.0 U	17.6 U	20.0 U
Anthracene	SW8270E	960			13000		**118**	19.5 U	--	--	**235**	**67.9**	**30.0**	**27.5**	**25.4**	**17.5 J**	**32.2**	**42.6**	**37.8**
Benzo(a)anthracene	SW8270E	1300			5100		**579**	19.5 U	--	--	**1540**	**206**	**71.6**	**56.3**	**66.4**	**46.1**	**91.3**	**109**	**134**
Benzo(a)pyrene	SW8270E	1600			3600		**640**	19.5 U	--	--	**801**	**190**	**70.5**	**75.7**	**57.0**	**46.4**	**96.6**	**122**	**126**
Benzo(b,j,k)fluoranthenes	SW8270E						**1130**	38.9 U	--	--	**2150**	**387**	**175**	**169**	**142**	**117**	**241**	**264**	**306**
Benzo(g,h,i)perylene	SW8270E	670			3200		**505**	19.5 UJ	--	--	**297 J**	**99.0 J**	**37.2 J**	**29.5 J**	**25.5 J**	**23.7 J**	**44.4 J**	**58.5 J**	**65.0 J**
Carbazole	SW8270E						**121**	19.5 U	--	--	**107**	**17.6 J**	**11.0 J**	17.5 U	18.9 U	19.8 U	**10.3 J**	**10.8 J**	**23.9**
Chrysene	SW8270E	1400			21000		**649**	19.5 U	--	--	**2240**	**279**	**126**	**119**	**154**	**106**	**169**	**161**	**212**
Dibenzo(a,h)anthracene	SW8270ESIM	230			1900		**84.0**	4.9 U	--	--	**82.6**	**28.0**	**10.0**	**8.3**	**6.6**	**5.7**	**11.4**	**13.2**	**13.4**
Dibenzofuran	SW8270E	540			1700		99.3 U	19.5 U	--	--	96.3 U	19.0 U	**20.3**	17.5 U	18.9 U	19.8 U	20.0 U	17.6 U	20.0 U
Fluoranthene	SW8270E	1700	4600		30000		**1310**	19.5 U	--	--	**11400**	**598**	**173**	**99.1**	**135**	**147**	**282**	**187**	**401**
Fluorene	SW8270E	540			3600		99.3 U	19.5 U	--	--	96.3 U	**22.8**	**24.3**	17.5 U	18.9 U	19.8 U	20.0 U	17.6 U	20.0 U
Indeno(1,2,3-c,d)pyrene	SW8270E	600			4400		**403**	19.5 UJ	--	--	**280 J**	**90.4 J**	**34.9 J**	**27.8 J**	**24.5 J**	**21.4 J**	**41.0 J**	**55.2 J**	**57.2 J**
Naphthalene	SW8270E	2100			2400		99.3 U	19.5 U	--	--	96.3 U	**13.3 J**	**38.2**	**12.6 J**	**14.0 J**	**12.7 J**	20.0 U	**10.5 J**	**12.0 J**
Phenanthrene	SW8270E	1500			21000		**560**	19.5 U	--	--	**301**	**259**	**94.6**	**46.8**	**51.1**	**43.8**	**116**	**76.4**	**192**
Pyrene	SW8270E	2600	11980		16000		**1320**	19.5 U	--	--	**6670**	**486**	**188**	**133**	**129**	**134**	**252**	**192**	**351**
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		**1130**	38.9 U	--	--	**2150**	**387**	**175**	**169**	**142**	**117**	**241**	**264**	**306**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						**866**	19.5 UJ	--	--	**1230 J**	**264 J**	**101 J**	**103 J**	**82.5 J**	**66.5 J**	**137 J**	**168 J**	**179 J**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						**866**	19.5 UJ	--	--	**1230 J**	**264 J**	**101 J**	**103 J**	**82.5 J**	**66.5 J**	**137 J**	**168 J**	**179 J**
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		**6600**	38.9 UJ	--	--	**25000 J**	**2400 J**	**886 J**	**720 J**	**740 J**	**650 J**	**1230 J**	**1160 J**	**1670 J**
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		**750 J**	19.5 U	--	--	**589 J**	**380 J**	**215**	**86.9 J**	**90.5 J**	**74.0 J**	**159 J**	**147 J**	**260 J**
Pesticides (µg/kg)																			
2,4'-DDD (o,p'-DDD)	SW8081B						1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ	0.91 UJ	0.92 UJ	0.90 UJ
2,4'-DDE (o,p'-DDE)	SW8081B						1.30 U	1.99 U	--	--	1.00 U	0.94 U	0.84 U	0.93 U	0.98 U	0.88 U	0.91 U	0.92 U	0.90 U
2,4'-DDT (o,p'-DDT)	SW8081B						1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ	0.91 UJ	0.92 UJ	0.90 UJ
4,4'-DDD (p,p'-DDD)	SW8081B	16					1.30 U	1.99 U	--	--	1.00 U	0.94 U	0.84 U	0.93 U	0.98 U	0.88 U	0.91 U	0.92 U	0.90 U
4,4'-DDE (p,p'-DDE)	SW8081B	9					**0.91 J**	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ	0.91 UJ	0.92 UJ	0.90 UJ
4,4'-DDT (p,p'-DDT)	SW8081B	12					1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ	0.91 UJ	0.92 UJ	0.90 UJ
Aldrin	SW8081B	9.5					0.65 UJ	1.00 U	--	--	0.50 UJ	0.47 U	0.42 U	0.46 U	0.49 U	0.44 U	0.45 U	0.46 U	0.45 U
Chlordane, alpha- (Chlordane, cis-)	SW8081B						0.65 UJ	1.00 UJ	--	--	0.50 UJ	0.47 UJ	0.42 UJ	0.46 UJ	0.49 UJ	0.44 UJ	0.45 UJ	0.46 UJ	0.45 UJ
Chlordane, beta- (Chlordane, trans-)	SW8081B						0.65 UJ	1.00 UJ	--	--	0.50 UJ	0.47 UJ	0.42 UJ	0.46 UJ	0.49 UJ	0.44 UJ	0.45 UJ	0.46 UJ	0.45 UJ
Dieldrin	SW8081B	1.9			1700		1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ	0.91 UJ	0.92 UJ	0.90 UJ
Endrin ketone	SW8081B						1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ	0.91 UJ	0.92 UJ	0.90 UJ
Heptachlor	SW8081B	1.5			270		0.65 U	1.00 U	--	--	0.50 U	0.47 U	0.42 U	0.46 U	0.49 U	0.44 U	0.45 U	0.46 U	0.45 U
Hexachlorocyclohexane (BHC), beta-	SW8081B						0.65 UJ	1.00 UJ	--	--	0.50 UJ	0.47 UJ	0.42 UJ	0.46 UJ	0.49 UJ	0.44 UJ	0.45 UJ	0.46 UJ	0.45 UJ
Nonachlor, cis-	SW8081B						1.30 U	1.99 U	--	--	1.00 U	0.94 U	0.84 U	**0.80 J**	0.98 U	**0.78 J**	0.91 U	0.92 U	0.90 U
Nonachlor, trans-	SW8081B						1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ	0.91 UJ	0.92 UJ	0.90 UJ
Oxychlordane	SW8081B						1.30 U	1.99 U	--	--	1.00 U	0.94 U	0.84 U	0.93 U	0.98 U	0.88 U	0.91 U	0.92 U	0.90 U
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50		69		**0.91 J**	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ	0.91 UJ	0.92 UJ	0.90 UJ
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37				1.30 UJ	1.99 UJ	--	--	1.00 UJ	0.94 UJ	0.84 UJ	**0.80 J**	0.98 UJ	**0.78 J**	0.91 UJ	0.92 UJ	0.90 UJ
Total DDx (U = 0 max limit)	Calculated						**0.91 J**	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ	0.91 UJ	0.92 UJ	0.90 UJ

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SG06	TG-SG12	TG-SG25	TG-SG27	TG-SG29	TG-SG30	TG-SG31	TG-SG31	TG-SG32
						Sample ID	TG-SC31-04-06-250826	TG-SC31-06-08-250826	TG-SC31-08-10-250826	TG-SC31-10-10.7-250826	TG-SG06-250826	TG-SG12-250826	TG-SG25-250826	TG-SG27-250826	TG-SG29-250826	TG-SG30-250826	TG-SG31-250826	TG-SG131-250826	TG-SG32-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.7 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	FD	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																			
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**2520**	8.68 U	--	--	**1930**	**1340**	**1520**	**2490**	**2040**	**1910**	**5250**	**1200**	**3240**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						**70.4**	**0.321 J**	--	--	**54.7**	**68.7**	**60.7**	**119**	**81.6**	**73.2**	**68.0**	**60.0**	**95.4**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**286**	0.802 U	--	--	**168**	**142**	**145**	**228**	**204**	**163**	**201**	**125**	**315**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						**34.8**	**0.121 J**	--	--	**20.3**	**21.8**	**22.5**	**45.1**	**34.2**	**28.4**	**27.6**	**19.8**	**23.0**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						**2.85**	0.134 U	--	--	**1.75 J**	**2.46 J**	**2.38 J**	**4.31**	**3.20**	**2.37 J**	**2.36 J**	**2.05 J**	**1.82 J**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**2.56**	0.215 U	--	--	**1.17 J**	**1.30 J**	**1.24 J**	**1.77 J**	**2.04 J**	**1.64 J**	**1.22 J**	**1.01 J**	**1.51 J**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**3.78**	0.107 U	--	--	**3.02**	**3.99**	**3.97**	**7.95**	**6.57**	**5.44**	**5.16**	**3.43**	**2.57**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**14.1**	0.220 U	--	--	**5.16**	**6.36**	**5.69**	**8.93**	**10.2**	**8.40**	**7.69**	**4.92**	**5.52**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**2.15 J**	0.119 U	--	--	**1.25 J**	**1.50 J**	**1.44 J**	**2.91**	**2.42 J**	**2.06 J**	**2.04 J**	**1.35 J**	**0.942 J**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**7.15**	0.239 U	--	--	**2.77**	**3.08**	**2.53**	**4.09**	**5.47**	**3.81**	**3.42**	**2.53**	**2.33 J**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.813 J**	0.162 U	--	--	**0.696 J**	**0.784 J**	**0.750 J**	**1.92 J**	**0.889 J**	**1.71 J**	**0.568 J**	**0.620 J**	**0.609 J**
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**2.30 J**	0.152 U	--	--	**0.707 J**	**0.935 J**	**1.21 J**	**1.14 J**	**1.32 J**	**1.30 J**	**0.963 J**	**0.698 J**	**0.451 J**
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**1.47 J**	**0.0510 J**	--	--	**1.08 J**	**1.76 J**	**1.75 J**	**4.28**	**3.06**	**2.27 J**	**2.40 J**	**1.62 J**	**0.969 J**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**1.48 J**	0.136 U	--	--	**0.959 J**	**1.07 J**	**0.970 J**	**1.27 J**	**1.45 J**	**0.905 J**	**1.39 J**	**1.09 J**	**0.427 J**
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**2.65**	0.0888 U	--	--	**1.08 J**	**1.73 J**	**1.57 J**	**2.99**	**2.82**	**3.06**	**1.65 J**	**1.08 J**	**0.823 J**
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**0.285 J**	**0.0430 J**	--	--	0.0802 U	0.183 UJ	0.114 UJ	0.235 UJ	0.228 UJ	**0.273 J**	0.173 UJ	0.168 UJ	0.125 UJ
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						**1.31 J**	0.0809 U	--	--	**1.07**	**1.62**	**1.39**	**2.60**	**2.31**	**2.07**	**1.39**	**1.47**	**0.890**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4	10				**10.8 J**	**0.0458 J**	--	--	**5.17 J**	**5.56 J**	**5.70 J**	**8.87 J**	**8.44 J**	**7.70 J**	**7.72 J**	**4.6 J**	**6.61 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4	10				**10.8 J**	**0.205 J**	--	--	**5.21 J**	**5.65 J**	**5.76 J**	**8.98 J**	**8.56 J**	**7.70 J**	**7.81 J**	**4.6 J**	**6.67 J**
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**788**	**1.74 J**	--	--	**833**	**535**	**603**	**721**	**636**	**459**	**734**	**465**	**2540**
Total Heptachlorodibenzofuran (HpCDF)	E1613B						**126 J**	**0.342 J**	--	--	**75.8 J**	**91.5**	**91.6**	**198**	**131**	**126 J**	**99.3**	**77.5**	**104**
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**132**	**0.354 J**	--	--	**62.6**	**67.4**	**63.3**	**76.6**	**94.7 J**	**73.9**	**73.8 J**	**55.5 J**	**159**
Total Hexachlorodibenzofuran (HxCDF)	E1613B						**83.8 J**	**0.201 J**	--	--	**41.4**	**49.5 J**	**46.8 J**	**106 J**	**80.2 J**	**83.5**	**57.2 J**	**41.8 J**	**36.1 J**
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**22.8 J**	0.152 U	--	--	**7.33 J**	**11.8 J**	**13.0 J**	**16.1 J**	**17.9 J**	**18.0 J**	**10.3 J**	**12.8 J**	**7.27 J**
Total Pentachlorodibenzofuran (PeCDF)	E1613B						**41.9 J**	**0.0510 J**	--	--	**13.1 J**	**19.5 J**	**16.9 J**	**32.6 J**	**29.3**	**28.7 J**	**19.3 J**	**16.3 J**	**11.1 J**
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**12.1 J**	**0.0430 J**	--	--	**4.15 J**	**6.55 J**	**6.26 J**	**9.13 J**	**10.3 J**	**17.9 J**	**7.60 J**	**7.65 J**	**2.58 J**
Total Tetrachlorodibenzofuran (TCDF)	E1613B						**21.3 J**	**1.06 J**	--	--	**10.4 J**	**13.0 J**	**11.3 J**	**16.0 J**	**18.0 J**	**18.4 J**	**10.6 J**	**10.9 J**	**6.70 J**
PCB Aroclors (mg/kg-OC)																			
Aroclor 1016	SW8082A						0.69 U	0.074 U	--	--	7.24 U	0.54 U	0.56 U	0.45 U	0.40 U	0.53 U	0.26 U	0.18 U	1.1 U
Aroclor 1221	SW8082A						0.69 U	0.074 U	--	--	7.24 U	0.54 U	0.56 U	0.45 U	0.40 U	0.53 U	0.26 U	0.18 U	1.1 U
Aroclor 1232	SW8082A						0.69 U	0.074 U	--	--	7.24 U	0.54 U	0.56 U	0.45 U	0.40 U	0.53 U	0.26 U	0.18 U	1.1 U
Aroclor 1242	SW8082A						0.69 U	0.074 U	--	--	7.24 U	0.54 U	0.56 U	0.45 U	0.40 U	0.53 U	0.26 U	0.18 U	1.1 U
Aroclor 1248	SW8082A						0.69 U	0.074 U	--	--	7.24 U	**2.85**	**0.69**	**0.88**	0.40 U	**1.70**	**0.66**	**0.31**	**2.5**
Aroclor 1254	SW8082A						**1.98**	0.074 U	--	--	**47.1**	**4.35**	**0.98 J**	**1.34 J**	**3.96**	**2.29**	**0.922**	**0.40**	**4.12**
Aroclor 1260	SW8082A						0.69 U	0.074 U	--	--	**14.2 J**	**1.0**	0.56 U	0.45 U	**0.95**	**0.97**	**0.33**	**0.21**	**1.8**
Aroclor 1262	SW8082A						0.69 U	0.074 U	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						0.69 U	0.074 U	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				**1.98**	0.074 U	--	--	**61.3 J**	**8.2**	**2 J**	**2.2 J**	**4.9**	**5.0**	**1.9**	**0.92**	**8.3**

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

						Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SG06	TG-SG12	TG-SG25	TG-SG27	TG-SG29	TG-SG30	TG-SG31	TG-SG31	TG-SG32
						Sample ID	TG-SC31-04-06-250826	TG-SC31-06-08-250826	TG-SC31-08-10-250826	TG-SC31-10-10.7-250826	TG-SG06-250826	TG-SG12-250826	TG-SG25-250826	TG-SG27-250826	TG-SG29-250826	TG-SG30-250826	TG-SG31-250826	TG-SG131-250826	TG-SG32-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.7 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	FD	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML														
PCB Aroclors (µg/kg)																			
Aroclor 1016	SW8082A						4.0 U	3.9 U	--	--	39.8 U	3.7 U	3.4 U	3.7 U	3.9 U	3.5 U	3.6 U	3.7 U	3.6 U
Aroclor 1221	SW8082A						4.0 U	3.9 U	--	--	39.8 U	3.7 U	3.4 U	3.7 U	3.9 U	3.5 U	3.6 U	3.7 U	3.6 U
Aroclor 1232	SW8082A						4.0 U	3.9 U	--	--	39.8 U	3.7 U	3.4 U	3.7 U	3.9 U	3.5 U	3.6 U	3.7 U	3.6 U
Aroclor 1242	SW8082A						4.0 U	3.9 U	--	--	39.8 U	3.7 U	3.4 U	3.7 U	3.9 U	3.5 U	3.6 U	3.7 U	3.6 U
Aroclor 1248	SW8082A						4.0 U	3.9 U	--	--	39.8 U	**19.4**	**4.2**	**7.2**	3.9 U	**11.2**	**9.3**	**6.5**	**8.1**
Aroclor 1254	SW8082A						**11.5**	3.9 U	--	--	**259**	**29.6**	**6.0 J**	**11.0 J**	**38.8**	**15.1**	**13.0**	**8.4**	**13.6**
Aroclor 1260	SW8082A						4.0 U	3.9 U	--	--	**78.0 J**	**6.8**	3.4 U	3.7 U	**9.3**	**6.4**	**4.6**	**4.3**	**5.8**
Aroclor 1262	SW8082A						4.0 U	3.9 U	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						4.0 U	3.9 U	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		**11.5**	3.9 U	--	--	**337 J**	**56**	**10 J**	**18 J**	**48**	**33**	**27**	**19**	**28**

Table 5-1a
Sediment Analytical Results Compared to DMMP Criteria - Tru-Grit

Notes:
Detected concentration is greater than DMMP SL screening level.
Detected concentration is greater than DMMP BT screening level.
Detected concentration is greater than DMMP BT TBT screening level.
Detected concentration is greater than DMMP ML screening level.
Non-detect concentration is above one or more identified screening levels.
Bold: Detected result
a. The value representing the DMMP SL for Total Dioxin/Furan TEQ is the Disposal Site Management Objective.
µg/kg: microgram per kilogram
BT: Bioaccumulation Trigger
cPAH: carcinogenic polycyclic aromatic hydrocarbon
DMMP: Dredged Material Management Program
ft: foot
FD: field duplicate
HPAH: high-molecular-weight polycyclic aromatic hydrocarbon
J: estimated value
LPAH: low-molecular-weight polycyclic aromatic hydrocarbon
mg/kg: milligram per kilogram
ML: Maximum Level
N: normal
ng/kg: nanogram per kilogram
OC: organic carbon
PCB: polychlorinated biphenyl
pct: percent
R: rejected
SE: sediment
SL: Screening Level
TBT: tributyltin
TEQ: toxic equivalency quotient
TOC: total organic carbon
U: compound analyzed for but not detected above detection limit
UJ: compound analyzed for but not detected above estimated detection limit

Table 5-1b
Sediment Core Summary Statistics Compared to DMMP Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	DMMP SL	Number of Detections > DMMP SL	Number of Non-Detects > DMMP SL	Maximum Exceedance Ratio[c]
Conventional Parameters											
Total organic carbon	30	43	43	5.3	0.05	0.606	pct	--	0	0	--
Total solids	37	144	159	90.91	47.18	74.7	pct	--	0	0	--
Total volatile solids	29	34	34	13.3	0.92	2.84	pct	--	0	0	--
Metals											
Antimony	37	144	46	160	0.16	6.75	mg/kg	150	1	0	1.1
Arsenic	37	144	144	1,620	0.92	41.6	mg/kg	57	15	0	28
Cadmium	37	144	109	1.48	0.04	0.22	mg/kg	5.1	0	0	0.29
Chromium	37	144	144	488	7.85	18.9	mg/kg	260	1	0	1.9
Copper	37	144	144	1,260	8.21	102	mg/kg	390	8	0	3.2
Lead	37	144	144	1,290	0.93	45.4	mg/kg	450	3	0	2.9
Mercury	37	144	119	0.344	0.00585	0.0627	mg/kg	0.41	0	0	0.84
Selenium[d]	37	144	101	2.26	0.26	0.852	mg/kg	3	0	0	--
Silver	37	144	88	0.92	0.03	0.221	mg/kg	6.1	0	0	0.15
Zinc	37	144	144	2,970	15.1	174	mg/kg	410	16	0	7.2
Organometals											
Tributyltin (ion)[d]	29	34	11	39.4	1.71	10.1	ug/kg	73	1	0	1.7
Semivolatile Organics											
1,2,4-Trichlorobenzene	29	34	0	--	--	--	ug/kg	31	0	0	--
1,2-Dichlorobenzene	29	34	0	--	--	--	ug/kg	35	0	0	--
1,4-Dichlorobenzene	29	34	1	4.9	4.9	4.9	ug/kg	110	0	0	0.045
2,4-Dimethylphenol	29	34	0	--	--	--	ug/kg	29	0	1	--
2-Methylphenol (o-Cresol)	29	34	0	--	--	--	ug/kg	63	0	0	--
4-Methylphenol (p-Cresol)	29	34	8	88.9	3.1	20.5	ug/kg	670	0	0	0.13
Benzoic acid	29	34	6	124	58.3	107	ug/kg	650	0	0	0.19
Benzyl alcohol	29	34	0	--	--	--	ug/kg	57	0	1	--
Bis(2-ethylhexyl)phthalate	29	34	6	88	28.6	62.1	ug/kg	1,300	0	0	0.068
Butylbenzyl phthalate	29	34	13	49.1	5.6	12.8	ug/kg	63	0	0	0.78
Di-n-butyl phthalate	29	34	0	--	--	--	ug/kg	1,400	0	0	--
Di-n-octyl phthalate	29	34	1	365	365	365	ug/kg	6,200	0	0	0.059
Diethyl phthalate	29	34	10	149	10.2	37.2	ug/kg	200	0	0	0.75
Dimethyl phthalate	29	34	2	3.1	2.5	2.8	ug/kg	71	0	0	0.044
Hexachlorobenzene	29	34	0	--	--	--	ug/kg	22	0	1	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	29	34	0	--	--	--	ug/kg	11	0	1	--
n-Nitrosodiphenylamine	29	34	0	--	--	--	ug/kg	28	0	0	--
Pentachlorophenol	29	34	6	63	40.5	52.3	ug/kg	400	0	0	0.16
Phenol	29	34	3	152	4.6	58.4	ug/kg	420	0	0	0.36

Table 5-1b
Sediment Core Summary Statistics Compared to DMMP Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	DMMP SL	Number of Detections > DMMP SL	Number of Non-Detects > DMMP SL	Maximum Exceedance Ratio[c]
Polycyclic Aromatic Hydrocarbons											
1-Methylnaphthalene	1	2	0	--	--	--	ug/kg	--	0	0	--
2-Methylnaphthalene	29	34	4	21.9	7	13.1	ug/kg	670	0	0	0.033
Acenaphthene	29	34	2	47.3	15.6	31.5	ug/kg	500	0	0	0.095
Acenaphthylene	29	34	3	69.5	11.4	30.8	ug/kg	560	0	0	0.12
Anthracene	29	34	12	118	8.5	29.7	ug/kg	960	0	0	0.12
Benzo(a)anthracene	29	34	16	579	9	88.8	ug/kg	1,300	0	0	0.45
Benzo(a)pyrene	29	34	18	1,060	6.7	151	ug/kg	1,600	0	0	0.66
Benzo(b,j,k)fluoranthenes	29	34	16	1,130	17.3	198	ug/kg	--	0	0	--
Benzo(g,h,i)perylene	29	34	15	505	45.1	125	ug/kg	670	0	0	0.75
Carbazole	29	34	4	121	9.5	47.1	ug/kg	--	0	0	--
Chrysene	29	34	20	649	6.9	95	ug/kg	1,400	0	0	0.46
Dibenzo(a,h)anthracene	29	34	21	84	3.7	18.1	ug/kg	230	0	0	0.37
Dibenzofuran	29	34	1	29.9	29.9	29.9	ug/kg	540	0	0	0.055
Fluoranthene	29	34	22	1,310	10.7	141	ug/kg	1,700	0	0	0.77
Fluorene	29	34	1	46.6	46.6	46.6	ug/kg	540	0	0	0.086
Indeno(1,2,3-c,d)pyrene	29	34	7	403	21	96.8	ug/kg	600	0	0	0.67
Naphthalene	29	34	7	25.8	7.6	17.9	ug/kg	2,100	0	0	0.012
Phenanthrene	29	34	18	560	12.2	81.1	ug/kg	1,500	0	0	0.37
Pyrene	29	34	23	1,320	12.3	161	ug/kg	2,600	0	0	0.51
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	29	34	16	1,130	17.3	198	ug/kg	3,200	0	0	0.35
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	29	34	26	1,060	1.22	127	ug/kg	--	0	0	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	29	34	26	1,060	9.84	131	ug/kg	--	0	0	--
Total HPAH (DMMP) (U = 0 max limit)	29	34	27	6,600	12.2	700	ug/kg	12,000	0	0	0.55
Total LPAH (DMMP) (U = 0 max limit)	29	34	18	750	12.3	119	ug/kg	5,200	0	0	0.14
Pesticides											
2,4'-DDD (o,p'-DDD)	29	34	0	--	--	--	ug/kg	--	0	0	--
2,4'-DDE (o,p'-DDE)	29	34	0	--	--	--	ug/kg	--	0	0	--
2,4'-DDT (o,p'-DDT)	29	34	0	--	--	--	ug/kg	--	0	0	--
4,4'-DDD (p,p'-DDD)	29	34	7	1.8	0.6	1.11	ug/kg	16	0	0	0.11
4,4'-DDE (p,p'-DDE)	29	34	3	2.02	0.91	1.45	ug/kg	9	0	0	0.22
4,4'-DDT (p,p'-DDT)	29	34	3	3.38	0.91	1.82	ug/kg	12	0	0	0.28
Aldrin	29	34	0	--	--	--	ug/kg	9.5	0	0	--
Chlordane, alpha- (Chlordane, cis-)	29	34	0	--	--	--	ug/kg	--	0	0	--
Chlordane, beta- (Chlordane, trans-)	29	34	1	0.99	0.99	0.99	ug/kg	--	0	0	--
Dieldrin	29	34	0	--	--	--	ug/kg	1.9	0	1	--
Endrin ketone	29	34	2	1.81	0.95	1.38	ug/kg	--	0	0	--
Heptachlor	29	34	0	--	--	--	ug/kg	1.5	0	0	--
Hexachlorocyclohexane (BHC), beta-	29	34	1	0.33	0.33	0.33	ug/kg	--	0	0	--
Nonachlor, cis-	29	34	0	--	--	--	ug/kg	--	0	0	--
Nonachlor, trans-	29	34	0	--	--	--	ug/kg	--	0	0	--
Oxychlordane	29	34	0	--	--	--	ug/kg	--	0	0	--
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)[d]	29	34	9	4	0.88	1.95	ug/kg	50	0	0	--
Total Chlordane (DMMP) (U = 0 max limit)	29	34	1	0.99	0.99	0.99	ug/kg	2.8	0	0	0.35
Total DDx (U = 0 max limit)	29	34	9	4	0.88	1.95	ug/kg	--	0	0	--

Table 5-1b
Sediment Core Summary Statistics Compared to DMMP Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	DMMP SL	Number of Detections > DMMP SL	Number of Non-Detects > DMMP SL	Maximum Exceedance Ratio[c]
Dioxin Furans											
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	30	48	45	137,000	1.54	7,970	ng/kg	--	0	0	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	30	48	45	4,290	0.321	339	ng/kg	--	0	0	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	30	48	45	8,300	0.471	572	ng/kg	--	0	0	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	30	48	45	1,440	0.121	118	ng/kg	--	0	0	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	30	48	34	123	0.259	12.5	ng/kg	--	0	0	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	30	48	30	31.6	0.424	4.67	ng/kg	--	0	0	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	30	48	37	187	0.185	15.8	ng/kg	--	0	0	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	30	48	35	264	0.171	26.2	ng/kg	--	0	0	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	30	48	32	59.2	0.29	6.53	ng/kg	--	0	0	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	30	48	34	85.2	0.322	10.7	ng/kg	--	0	0	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	30	48	28	49.2	0.32	5.97	ng/kg	--	0	0	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	30	48	29	24.2	0.165	3.71	ng/kg	--	0	0	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	30	48	32	34.3	0.051	3.81	ng/kg	--	0	0	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	30	48	32	63.6	0.17	7.56	ng/kg	--	0	0	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	30	48	33	70.2	0.196	5.41	ng/kg	--	0	0	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	30	48	20	3.95	0.043	0.775	ng/kg	--	0	0	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	30	48	36	73.5	0.304	6.36	ng/kg	--	0	0	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	30	48	46	15,500	0.921	1,120	ng/kg	--	0	0	--
Total Heptachlorodibenzofuran (HpCDF)	30	48	45	7,120	0.342	540	ng/kg	--	0	0	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	30	48	41	1,720	0.165	156	ng/kg	--	0	0	--
Total Hexachlorodibenzofuran (HxCDF)	30	48	43	3,810	0.201	261	ng/kg	--	0	0	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	30	48	36	269	0.112	23.3	ng/kg	--	0	0	--
Total Pentachlorodibenzofuran (PeCDF)	30	48	41	884	0.051	64.6	ng/kg	--	0	0	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	30	48	38	260	0.043	19.7	ng/kg	--	0	0	--
Total Tetrachlorodibenzofuran (TCDF)	30	48	37	241	0.451	30.6	ng/kg	--	0	0	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)[d]	30	48	48	270	0.000462	18.6	ng/kg	4	26	0	68
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)[d]	30	48	48	270	0.184	18.8	ng/kg	4	26	0	68
PCB Aroclors											
Aroclor 1016	29	37	0	--	--	--	ug/kg	--	0	0	--
Aroclor 1221	29	37	0	--	--	--	ug/kg	--	0	0	--
Aroclor 1232	29	37	0	--	--	--	ug/kg	--	0	0	--
Aroclor 1242	29	37	0	--	--	--	ug/kg	--	0	0	--
Aroclor 1248	29	37	7	209	8	68.5	ug/kg	--	0	0	--
Aroclor 1254	29	37	14	273	11.5	53.6	ug/kg	--	0	0	--
Aroclor 1260	29	37	9	46.8	4	22.5	ug/kg	--	0	0	--
Aroclor 1262	28	36	0	--	--	--	ug/kg	--	0	0	--
Aroclor 1268	28	36	0	--	--	--	ug/kg	--	0	0	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	29	37	14	529	11.5	102	ug/kg	130	4	0	4.1
Total PCB Aroclors (DMMP) (U = 0 max limit)[d]	29	37	14	136	1.98	24.5	mg/kg-OC	38	1	0	3.6

Table 5-1b
Sediment Core Summary Statistics Compared to DMMP Criteria - Tru-Grit

Notes:

a. Totals are calculated either as the sum of all detected results (U = 0) or the sum of all detected results plus half the value of any non-detect result (U = ½). If all results are non-detect, the highest limit value is reported as the sum.

b. Field duplicates included

c. Maximum exceedance ratios are rounded to show two significant figures.

d. The value in the DMMP SL column for selenium, TBT, sum of 4,4'-DDD, 4,4'-DDE, 4,'-DDT, and OC-normalized total PCB aroclors is the DMMP BT. The value representing the DMMP SL for Total Dioxin/Furan TEQ is the Disposal Site Management Objective.

ug/kg: micrograms per kilogram

BT: Bioaccumulation Trigger

cPAH: carcinogenic polycyclic aromatic hydrocarbon

DMMP: Dredged Material Management Program

HPAH: high-molecular-weight polycyclic aromatic hydrocarbon

LPAH: low-molecular-weight polycyclic aromatic hydrocarbon

mg/kg: milligrams per kilogram

ng/kg: nanograms per kilogram

OC: organic carbon

PCB: polychlorinated biphenyl

pct: percent

SL: Screening Level

TBT: tributyltin

TEQ: toxic equivalency quotient

Table 5-1c
Sediment Grab Summary Statistics Compared to DMMP Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	DMMP SL	Number of Detections > DMMP SL	Number of Non-Detects > DMMP SL	Maximum Exceedance Ratio[c]
Conventional Parameters											
Total organic carbon	8	9	9	2.08	0.33	0.902	pct	--	0	0	--
Total solids	8	9	9	71.08	58.94	65.1	pct	--	0	0	--
Total volatile solids	8	9	9	4.13	2.27	3.28	pct	--	0	0	--
Metals											
Antimony	8	9	2	3.06	0.37	1.72	mg/kg	150	0	0	0.02
Arsenic	8	9	9	127	5.14	25.5	mg/kg	57	1	0	2.2
Cadmium	8	9	9	0.4	0.12	0.212	mg/kg	5.1	0	0	0.078
Chromium	8	9	9	26.4	13.4	18.9	mg/kg	260	0	0	0.1
Copper	8	9	9	728	30.1	168	mg/kg	390	1	0	1.9
Lead	8	9	9	129	8.62	37.2	mg/kg	450	0	0	0.29
Mercury	8	9	9	0.0804	0.0235	0.0463	mg/kg	0.41	0	0	0.2
Selenium[d]	8	9	3	1.4	0.79	0.993	mg/kg	3	0	0	--
Silver	8	9	3	0.59	0.18	0.32	mg/kg	6.1	0	0	0.097
Zinc	8	9	9	2,180	51.7	358	mg/kg	410	1	0	5.3
Organometals											
Tributyltin (ion)[d]	8	9	8	482	1.71	127	ug/kg	73	4	0	6.6
Semivolatile Organics											
1,2,4-Trichlorobenzene	8	9	0	--	--	--	ug/kg	31	0	0	--
1,2-Dichlorobenzene	8	9	3	3.8	3.1	3.47	ug/kg	35	0	0	0.11
1,4-Dichlorobenzene	8	9	4	4.6	3	4.03	ug/kg	110	0	0	0.042
2,4-Dimethylphenol	8	9	0	--	--	--	ug/kg	29	0	1	--
2-Methylphenol (o-Cresol)	8	9	5	5.9	2.6	4.28	ug/kg	63	0	0	0.094
4-Methylphenol (p-Cresol)	8	9	9	48.2	5.4	20.6	ug/kg	670	0	0	0.072
Benzoic acid	8	9	0	--	--	--	ug/kg	650	0	0	--
Benzyl alcohol	8	9	0	--	--	--	ug/kg	57	0	1	--
Bis(2-ethylhexyl)phthalate	8	9	3	238	112	173	ug/kg	1,300	0	0	0.18
Butylbenzyl phthalate	8	9	8	36.8	2.6	8.59	ug/kg	63	0	0	0.58
Di-n-butyl phthalate	8	9	0	--	--	--	ug/kg	1,400	0	0	--
Di-n-octyl phthalate	8	9	0	--	--	--	ug/kg	6,200	0	0	--
Diethyl phthalate	8	9	0	--	--	--	ug/kg	200	0	0	--
Dimethyl phthalate	8	9	4	25.7	2.5	9.03	ug/kg	71	0	0	0.36
Hexachlorobenzene	8	9	0	--	--	--	ug/kg	22	0	1	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	8	9	0	--	--	--	ug/kg	11	0	1	--
n-Nitrosodiphenylamine	8	9	0	--	--	--	ug/kg	28	0	0	--
Pentachlorophenol	8	9	0	--	--	--	ug/kg	400	0	0	--
Phenol	8	9	1	22.6	22.6	22.6	ug/kg	420	0	0	0.054

Table 5-1c
Sediment Grab Summary Statistics Compared to DMMP Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	DMMP SL	Number of Detections > DMMP SL	Number of Non-Detects > DMMP SL	Maximum Exceedance Ratio[c]
Polycyclic Aromatic Hydrocarbons											
1-Methylnaphthalene	8	9	0	--	--	--	ug/kg	--	0	0	--
2-Methylnaphthalene	8	9	4	17.2	10.4	12.2	ug/kg	670	0	0	0.026
Acenaphthene	8	9	6	53.1	11.2	24.1	ug/kg	500	0	0	0.11
Acenaphthylene	8	9	0	--	--	--	ug/kg	560	0	0	--
Anthracene	8	9	9	235	17.5	57.3	ug/kg	960	0	0	0.24
Benzo(a)anthracene	8	9	9	1,540	46.1	258	ug/kg	1,300	1	0	1.2
Benzo(a)pyrene	8	9	9	801	46.4	176	ug/kg	1,600	0	0	0.5
Benzo(b,j,k)fluoranthenes	8	9	9	2,150	117	439	ug/kg	--	0	0	--
Benzo(g,h,i)perylene	8	9	9	297	23.7	75.5	ug/kg	670	0	0	0.44
Carbazole	8	9	6	107	10.3	30.1	ug/kg	--	0	0	--
Chrysene	8	9	9	2,240	106	396	ug/kg	1,400	1	0	1.6
Dibenzo(a,h)anthracene	8	9	9	82.6	5.7	19.9	ug/kg	230	0	0	0.36
Dibenzofuran	8	9	1	20.3	20.3	20.3	ug/kg	540	0	0	0.038
Fluoranthene	8	9	9	11,400	99.1	1,490	ug/kg	1,700	1	0	6.7
Fluorene	8	9	2	24.3	22.8	23.6	ug/kg	540	0	0	0.045
Indeno(1,2,3-c,d)pyrene	8	9	9	280	21.4	70.3	ug/kg	600	0	0	0.47
Naphthalene	8	9	7	38.2	10.5	16.2	ug/kg	2,100	0	0	0.018
Phenanthrene	8	9	9	301	43.8	131	ug/kg	1,500	0	0	0.2
Pyrene	8	9	9	6,670	129	948	ug/kg	2,600	1	0	2.6
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	8	9	9	2,150	117	439	ug/kg	3,200	0	0	0.67
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	8	9	9	1,230	66.5	259	ug/kg	--	0	0	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	8	9	9	1,230	66.5	259	ug/kg	--	0	0	--
Total HPAH (DMMP) (U = 0 max limit)	8	9	9	25,000	650	3,830	ug/kg	12,000	1	0	2.1
Total LPAH (DMMP) (U = 0 max limit)	8	9	9	589	74	222	ug/kg	5,200	0	0	0.11
Pesticides											
2,4'-DDD (o,p'-DDD)	8	9	0	--	--	--	ug/kg	--	0	0	--
2,4'-DDE (o,p'-DDE)	8	9	0	--	--	--	ug/kg	--	0	0	--
2,4'-DDT (o,p'-DDT)	8	9	0	--	--	--	ug/kg	--	0	0	--
4,4'-DDD (p,p'-DDD)	8	9	0	--	--	--	ug/kg	16	0	0	--
4,4'-DDE (p,p'-DDE)	8	9	0	--	--	--	ug/kg	9	0	0	--
4,4'-DDT (p,p'-DDT)	8	9	0	--	--	--	ug/kg	12	0	0	--
Aldrin	8	9	0	--	--	--	ug/kg	9.5	0	0	--
Chlordane, alpha- (Chlordane, cis-)	8	9	0	--	--	--	ug/kg	--	0	0	--
Chlordane, beta- (Chlordane, trans-)	8	9	0	--	--	--	ug/kg	--	0	0	--
Dieldrin	8	9	0	--	--	--	ug/kg	1.9	0	0	--
Endrin ketone	8	9	0	--	--	--	ug/kg	--	0	0	--
Heptachlor	8	9	0	--	--	--	ug/kg	1.5	0	0	--
Hexachlorocyclohexane (BHC), beta-	8	9	0	--	--	--	ug/kg	--	0	0	--
Nonachlor, cis-	8	9	2	0.8	0.78	0.79	ug/kg	--	0	0	--
Nonachlor, trans-	8	9	0	--	--	--	ug/kg	--	0	0	--
Oxychlordane	8	9	0	--	--	--	ug/kg	--	0	0	--
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)[d]	8	9	0	--	--	--	ug/kg	50	0	0	--
Total Chlordane (DMMP) (U = 0 max limit)	8	9	2	0.8	0.78	0.79	ug/kg	2.8	0	0	0.29
Total DDx (U = 0 max limit)	8	9	0	--	--	--	ug/kg	--	0	0	--

Table 5-1c
Sediment Grab Summary Statistics Compared to DMMP Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	DMMP SL	Number of Detections > DMMP SL	Number of Non-Detects > DMMP SL	Maximum Exceedance Ratio[c]
Dioxin Furans											
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	8	9	9	5,250	1,200	2,320	ng/kg	--	0	0	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	8	9	9	119	54.7	75.7	ng/kg	--	0	0	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	8	9	9	315	125	188	ng/kg	--	0	0	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	8	9	9	45.1	19.8	27	ng/kg	--	0	0	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	8	9	9	4.31	1.75	2.52	ng/kg	--	0	0	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	8	9	9	2.04	1.01	1.43	ng/kg	--	0	0	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	8	9	9	7.95	2.57	4.68	ng/kg	--	0	0	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	8	9	9	10.2	4.92	6.99	ng/kg	--	0	0	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	8	9	9	2.91	0.942	1.77	ng/kg	--	0	0	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	8	9	9	5.47	2.33	3.34	ng/kg	--	0	0	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	8	9	9	1.92	0.568	0.95	ng/kg	--	0	0	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	8	9	9	1.32	0.451	0.969	ng/kg	--	0	0	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	8	9	9	4.28	0.969	2.13	ng/kg	--	0	0	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	8	9	9	1.45	0.427	1.06	ng/kg	--	0	0	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	8	9	9	3.06	0.823	1.87	ng/kg	--	0	0	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	8	9	1	0.273	0.273	0.273	ng/kg	--	0	0	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	8	9	9	2.6	0.89	1.65	ng/kg	--	0	0	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	8	9	9	2,540	459	836	ng/kg	--	0	0	--
Total Heptachlorodibenzofuran (HpCDF)	8	9	9	198	75.8	111	ng/kg	--	0	0	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	8	9	9	159	55.5	80.8	ng/kg	--	0	0	--
Total Hexachlorodibenzofuran (HxCDF)	8	9	9	106	36.1	60.3	ng/kg	--	0	0	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	8	9	9	18	7.27	12.7	ng/kg	--	0	0	--
Total Pentachlorodibenzofuran (PeCDF)	8	9	9	32.6	11.1	20.8	ng/kg	--	0	0	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	8	9	9	17.9	2.58	8.01	ng/kg	--	0	0	--
Total Tetrachlorodibenzofuran (TCDF)	8	9	9	18.4	6.7	12.8	ng/kg	--	0	0	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)[d]	8	9	9	8.87	4.6	6.71	ng/kg	4	9	0	2.2
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)[d]	8	9	9	8.98	4.6	6.77	ng/kg	4	9	0	2.2
PCB Aroclors											
Aroclor 1016	8	9	0	--	--	--	ug/kg	--	0	0	--
Aroclor 1221	8	9	0	--	--	--	ug/kg	--	0	0	--
Aroclor 1232	8	9	0	--	--	--	ug/kg	--	0	0	--
Aroclor 1242	8	9	0	--	--	--	ug/kg	--	0	0	--
Aroclor 1248	8	9	7	19.4	4.2	9.41	ug/kg	--	0	0	--
Aroclor 1254	8	9	9	259	6	43.8	ug/kg	--	0	0	--
Aroclor 1260	8	9	7	78	4.3	16.5	ug/kg	--	0	0	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	8	9	9	337	10	64	ug/kg	130	1	0	2.6
Total PCB Aroclors (DMMP) (U = 0 max limit)[d]	8	9	9	61.2	0.92	10.5	mg/kg-OC	38	1	0	1.6

Table 5-1c
Sediment Grab Summary Statistics Compared to DMMP Criteria - Tru-Grit

Notes:

a. Totals are calculated either as the sum of all detected results (U = 0) or the sum of all detected results plus half the value of any non-detect result (U = ½). If all results are non-detect, the highest limit value is reported as the sum.

b. Field duplicates included

c. Maximum exceedance ratios are rounded to show two significant figures.

d. The value in the DMMP SL column for selenium, TBT, sum of 4,4'-DDD, 4,4'-DDE, 4,'-DDT, and OC-normalized total PCB aroclors is the DMMP BT. The value representing the DMMP SL for Total Dioxin/Furan TEQ is the Disposal Site Management Objective.

ug/kg: micrograms per kilogram

BT: Bioaccumulation Trigger

cPAH: carcinogenic polycyclic aromatic hydrocarbon

DMMP: Dredged Material Management Program

HPAH: high-molecular-weight polycyclic aromatic hydrocarbon

LPAH: low-molecular-weight polycyclic aromatic hydrocarbon

mg/kg: milligrams per kilogram

ng/kg: nanograms per kilogram

OC: organic carbon

PCB: polychlorinated biphenyl

pct: percent

SL: Screening Level

TBT: tributyltin

TEQ: toxic equivalency quotient

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC01	TG-SC02	TG-SC03	TG-SC03	TG-SC03	TG-SC03	TG-SC04	TG-SC04	TG-SC04	TG-SC05	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE
						Sample ID	TG-SC01-00-01-241113	TG-SC02-00-1.7-241108	TG-SC03-00-02-241108	TG-SC03-02-04-241108	TG-SC03-04-06-241108	TG-SC03-06-6.3-241108	TG-SC04-00-02-241029	TG-SC04-02-04-241029	TG-SC04-04-06-241029	TG-SC05-00-1.6-241113	TG-SC05RE-00-02-250401	TG-SC05RE-02-04-250401	TG-SC05RE-04-06-250401	TG-SC05RE-06-08-250401	TG-SC105RE-06-08-250401
						Sample Date	2024-11-13	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-10-29	2024-10-29	2024-10-29	2024-11-13	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01
						Depth Interval	0 - 1 ft	0 - 1.7 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.3 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 1.6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																					
Total organic carbon	SW9060AM						**0.18**	**0.25**	**1.59**	--	--	--	--	--	**0.37**	--	--	**0.05 J**	--	--	--
Total solids	D2216						--	--	--	--	--	--	--	--	--	--	--	**84.06**	--	--	--
Total solids	SM2540G						**84.24**	**84.53**	**65.44**	**53.75**	**53.08**	**47.18**	**72.13**	**75.71**	**82.14**	**73.02**	**90.91**	**84.39**	**83.53**	**80.07**	**81.69**
Total volatile solids	PSEP-TVS						**2.46**	**1.38**	**3.98**	--	--	--	--	--	**1.73**	--	--	**0.92**	--	--	--
Metals (mg/kg)																					
Antimony	SW6020						**0.32 J**	**0.48 J**	**0.21 J**	0.36 UJ	0.37 UJ	0.42 UJ	**0.87**	**1.61**	**0.51**	**4.68 J**	**0.49 J**	0.23 UJ	0.23 UJ	0.23 UJ	0.24 UJ
Arsenic	SW6020	57	93	57	93		**7.44 J**	**10.2**	**7.07**	**5.70**	**6.73**	**7.71**	**26.5**	**59.1**	**29.4**	**37.3 J**	**9.60**	**2.07**	**0.99**	**0.99**	**0.99**
Cadmium	SW6020	5.1	6.7	5.1	6.7		**0.18 J**	**0.13**	**0.12 J**	**0.13 J**	**0.13 J**	**0.18 J**	**0.23**	**0.28**	**0.15**	**0.18 J**	**0.06 J**	0.11 U	0.11 U	0.12 U	0.12 U
Chromium	SW6020	260	270	260	270		**9.19 J**	**18.7 J**	**10.7 J**	**13.8 J**	**14.3 J**	**11.9 J**	**13.0**	**20.4**	**12.3**	**15.7 J**	**12.7**	**10.6**	**9.79**	**12.0**	**12.3**
Copper	SW6020	390	390	390	390		**49.9 J**	**43.0 J**	**45.2 J**	**32.0 J**	**38.8 J**	**38.3 J**	**120**	**347**	**112**	**155 J**	**66.8**	**11.1**	**10.1**	**9.88**	**10.2**
Lead	SW6020	450	530	450	530		**13.9 J**	**23.4 J**	**8.40 J**	**4.32 J**	**3.90 J**	**3.57 J**	**50.2**	**86.3**	**38.2**	**51.7 J**	**15.0**	**1.31**	**1.18**	**1.12**	**1.09**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.00984 J**	**0.0119 J**	**0.0208 J**	**0.0158 J**	**0.0163 J**	**0.0155 J**	**0.0771**	**0.0529**	**0.0383**	**0.0546 J**	**0.0189 J**	0.0243 U	0.0263 U	0.0275 U	0.0264 U
Selenium	SW6020						**0.76 J**	**0.63**	**0.90**	**1.01**	**1.10**	**1.32**	**0.36 J**	**0.45 J**	**0.45 J**	**0.39 J**	**0.58**	**0.79**	0.57 U	0.59 U	**1.08**
Silver	SW6020	6.1	6.1	6.1	6.1		**0.10 J**	**0.06 J**	**0.10 J**	**0.10 J**	**0.10 J**	**0.09 J**	**0.32**	**0.48**	**0.29**	**0.18 J**	0.21 UJ	0.23 UJ	0.23 UJ	0.23 UJ	0.24 UJ
Zinc	SW6020	410	960	410	960		**62.3 J**	**71.4 J**	**44.2 J**	**31.6 J**	**36.3 J**	**36.8 J**	**148**	**215**	**110**	**234 J**	**81.4**	**21.2**	**20.6**	**21.7**	**18.3**
Organometals (mg/kg-OC)																					
Tributyltin (ion)	SW8270ESIM						--	--	0.241 UJ	--	--	--	--	--	--	--	--	--	--	--	--
Organometals (µg/kg)																					
Tributyltin (ion)	SW8270ESIM						R	**9.47 J**	3.83 UJ	--	--	--	--	--	3.85 U	--	--	3.40 U	--	--	--
Semivolatile Organics (mg/kg-OC)																					
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				--	--	0.31 U	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				--	--	0.31 U	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				--	--	0.31 U	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				--	--	3.14 U	--	--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM	4.9	64				--	--	0.31 U	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270E	220	1700				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270E	58	4500				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270ESIM	61	110				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270ESIM	53	53				--	--	0.31 U	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270ESIM	0.38	2.3				--	--	0.31 U	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				--	--	0.31 U	--	--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	11	11				--	--	0.31 U	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270ESIM						--	--	1.26 UJ	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC01	TG-SC02	TG-SC03	TG-SC03	TG-SC03	TG-SC03	TG-SC04	TG-SC04	TG-SC04	TG-SC05	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE
						Sample ID	TG-SC01-00-01-241113	TG-SC02-00-1.7-241108	TG-SC03-00-02-241108	TG-SC03-02-04-241108	TG-SC03-04-06-241108	TG-SC03-06-6.3-241108	TG-SC04-00-02-241029	TG-SC04-02-04-241029	TG-SC04-04-06-241029	TG-SC05-00-1.6-241113	TG-SC05RE-00-02-250401	TG-SC05RE-02-04-250401	TG-SC05RE-04-06-250401	TG-SC05RE-06-08-250401	TG-SC105RE-06-08-250401
						Sample Date	2024-11-13	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-10-29	2024-10-29	2024-10-29	2024-11-13	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01
						Depth Interval	0 - 1 ft	0 - 1.7 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.3 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 1.6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)																					
1,2,4-Trichlorobenzene	SW8270ESIM			31	51		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--	--
1,2-Dichlorobenzene	SW8270ESIM			35	50		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--	--
1,4-Dichlorobenzene	SW8270ESIM			110	110		5.0 U	**4.9 J**	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--	--
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29		19.9 UJ	20.0 UJ	20.0 UJ	--	--	--	--	--	20.0 UJ	--	--	16.7 U	--	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--	--
Benzoic acid	SW8270ESIM	650	650	650	650		99.4 UJ	100 UJ	100 UJ	--	--	--	--	--	99.9 UJ	--	--	**111 J**	--	--	--
Benzyl alcohol	SW8270ESIM	57	73	57	73		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	16.7 UJ	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900		49.7 U	**88.0**	50.0 U	--	--	--	--	--	49.9 U	--	--	35.5 U	--	--	--
Butylbenzyl phthalate	SW8270ESIM			63	900		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	6.6 U	--	--	--
Di-n-butyl phthalate	SW8270E			1400	1400		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Di-n-octyl phthalate	SW8270E			6200	6200		19.9 U	20.0 U	20.0 U	--	--	--	--	--	**365 J**	--	--	14.2 U	--	--	--
Diethyl phthalate	SW8270ESIM			200	1200		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	16.7 U	--	--	--
Dimethyl phthalate	SW8270ESIM			71	160		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--	--
Hexachlorobenzene	SW8270ESIM			22	70		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	4.2 U	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM			28	40		5.0 U	5.0 U	5.0 U	--	--	--	--	--	5.0 U	--	--	16.7 U	--	--	--
Pentachlorophenol	SW8270ESIM	360	690	360	690		19.9 UJ	20.0 UJ	20.0 UJ	--	--	--	--	--	49.9 U	--	--	16.7 UJ	--	--	--
Phenol	SW8270ESIM	420	1200	420	1200		5.0 U	5.0 U	5.0 U	--	--	--	--	--	9.4 U	--	--	4.2 U	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																					
2-Methylnaphthalene	SW8270E	38	64				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270E	16	57				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270E	66	66				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270E	220	1200				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270E	110	270				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270E	99	210				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	2.52 U	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270E	31	78				--	--	**5.82 J**	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270E						--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270E	110	460				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	12	33				--	--	0.31 U	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270E	15	58				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270E	160	1200				--	--	**1.31**	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270E	23	79				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270E	99	170				--	--	1.26 U	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270E	100	480				--	--	**0.849 J**	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270E	1000	1400				--	--	**1.36**	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	2.52 U	--	--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	**8.50 J**	--	--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	**0.849 J**	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC01	TG-SC02	TG-SC03	TG-SC03	TG-SC03	TG-SC03	TG-SC04	TG-SC04	TG-SC04	TG-SC05	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE
						Sample ID	TG-SC01-00-01-241113	TG-SC02-00-1.7-241108	TG-SC03-00-02-241108	TG-SC03-02-04-241108	TG-SC03-04-06-241108	TG-SC03-06-6.3-241108	TG-SC04-00-02-241029	TG-SC04-02-04-241029	TG-SC04-04-06-241029	TG-SC05-00-1.6-241113	TG-SC05RE-00-02-250401	TG-SC05RE-02-04-250401	TG-SC05RE-04-06-250401	TG-SC05RE-06-08-250401	TG-SC105RE-06-08-250401
						Sample Date	2024-11-13	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-10-29	2024-10-29	2024-10-29	2024-11-13	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01
						Depth Interval	0 - 1 ft	0 - 1.7 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.3 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 1.6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																					
2-Methylnaphthalene	SW8270E			670	670		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Acenaphthene	SW8270E			500	500		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Acenaphthylene	SW8270E			1300	1300		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Anthracene	SW8270E			960	960		19.9 U	**11.9 J**	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Benzo(a)anthracene	SW8270E			1300	1600		**42.8**	**52.3**	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Benzo(a)pyrene	SW8270E			1600	1600		**59.3**	**68.4**	20.0 U	--	--	--	--	--	**1060 J**	--	--	14.2 U	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						**127**	**145**	40.0 U	--	--	--	--	--	40.0 U	--	--	28.4 U	--	--	--
Benzo(g,h,i)perylene	SW8270E			670	720		**102 J**	**108 J**	**92.5 J**	--	--	--	--	--	99.9 U	--	--	14.2 UJ	--	--	--
Carbazole	SW8270E						19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Chrysene	SW8270E			1400	2800		**60.8**	**71.1**	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM			230	230		**15.8**	**16.6**	5.0 U	--	--	--	--	--	10.0 U	--	--	4.2 U	--	--	--
Dibenzofuran	SW8270E			540	540		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Fluoranthene	SW8270E			1700	2500		**94.8**	**106**	**20.9**	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Fluorene	SW8270E			540	540		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		19.9 U	**21.0**	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 UJ	--	--	--
Naphthalene	SW8270E			2100	2100		19.9 U	20.0 U	20.0 U	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Phenanthrene	SW8270E			1500	1500		**41.0**	**43.4**	**13.5 J**	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Pyrene	SW8270E			2600	3300		**117**	**107**	**21.7**	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		**127**	**145**	40.0 U	--	--	--	--	--	40.0 U	--	--	28.4 U	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						**78.5**	**92.6**	20.0 U	--	--	--	--	--	**1060 J**	--	--	14.2 UJ	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						**79.5**	**92.6**	20.0 U	--	--	--	--	--	**1060 J**	--	--	14.2 UJ	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		**620 J**	**695 J**	**135 J**	--	--	--	--	--	**1060 J**	--	--	28.4 UJ	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		**41.0**	**55.3 J**	**13.5 J**	--	--	--	--	--	20.0 U	--	--	14.2 U	--	--	--
Pesticides (mg/kg-OC)																					
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	0.062 UJ	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	0.062 UJ	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	0.062 UJ	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	**0.060 J**	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	**0.0893**	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	**0.057 J**	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	SW8081B						--	--	0.031 U	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	0.031 U	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	0.031 U	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	SW8081B						--	--	0.062 U	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	SW8081B						--	--	0.062 U	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	SW8081B						--	--	0.031 U	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	0.031 U	--	--	--	--	--	--	--	--	--	--	--	--
Nonachlor, cis-	SW8081B						--	--	0.062 U	--	--	--	--	--	--	--	--	--	--	--	--
Nonachlor, trans-	SW8081B						--	--	0.062 UJ	--	--	--	--	--	--	--	--	--	--	--	--
Oxychlordane	SW8081B						--	--	0.062 UJ	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC01	TG-SC02	TG-SC03	TG-SC03	TG-SC03	TG-SC03	TG-SC04	TG-SC04	TG-SC04	TG-SC05	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE
						Sample ID	TG-SC01-00-01-241113	TG-SC02-00-1.7-241108	TG-SC03-00-02-241108	TG-SC03-02-04-241108	TG-SC03-04-06-241108	TG-SC03-06-6.3-241108	TG-SC04-00-02-241029	TG-SC04-02-04-241029	TG-SC04-04-06-241029	TG-SC05-00-1.6-241113	TG-SC05RE-00-02-250401	TG-SC05RE-02-04-250401	TG-SC05RE-04-06-250401	TG-SC05RE-06-08-250401	TG-SC105RE-06-08-250401
						Sample Date	2024-11-13	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-10-29	2024-10-29	2024-10-29	2024-11-13	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01
						Depth Interval	0 - 1 ft	0 - 1.7 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.3 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 1.6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (µg/kg)																					
2,4'-DDD (o,p'-DDD)	SW8081B						0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 U	--	--	0.90 UJ	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 U	--	--	0.90 U	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 U	--	--	0.90 U	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						0.99 U	**0.96 J**	**0.95 J**	--	--	--	--	--	1.00 U	--	--	0.90 U	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						0.99 U	0.99 U	**1.42**	--	--	--	--	--	1.00 UJ	--	--	0.90 U	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						0.99 U	0.99 U	**0.91 J**	--	--	--	--	--	1.00 UJ	--	--	0.90 U	--	--	--
Aldrin	SW8081B						0.49 U	0.50 U	0.50 U	--	--	--	--	--	0.50 UJ	--	--	0.45 U	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						0.49 U	0.50 U	0.50 U	--	--	--	--	--	0.50 UJ	--	--	0.45 U	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						0.49 U	0.50 U	0.50 U	--	--	--	--	--	0.50 UJ	--	--	0.45 U	--	--	--
Dieldrin	SW8081B						0.99 U	0.99 U	0.99 U	--	--	--	--	--	1.00 UJ	--	--	0.90 U	--	--	--
Endrin ketone	SW8081B						0.99 U	0.99 U	0.99 U	--	--	--	--	--	1.00 UJ	--	--	0.90 U	--	--	--
Heptachlor	SW8081B						0.49 U	0.50 U	0.50 U	--	--	--	--	--	0.50 UJ	--	--	0.45 U	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						0.49 U	0.50 U	0.50 U	--	--	--	--	--	0.50 UJ	--	--	0.45 U	--	--	--
Nonachlor, cis-	SW8081B						0.99 U	0.99 U	0.99 U	--	--	--	--	--	1.00 U	--	--	0.90 UJ	--	--	--
Nonachlor, trans-	SW8081B						0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 U	--	--	0.90 U	--	--	--
Oxychlordane	SW8081B						0.99 UJ	0.99 UJ	0.99 UJ	--	--	--	--	--	1.00 U	--	--	0.90 UJ	--	--	--
Total DDx (U = 0 max limit)	Calculated						0.99 UJ	**0.96 J**	**3.3 J**	--	--	--	--	--	1.00 UJ	--	--	0.90 UJ	--	--	--
Dioxin Furans (ng/kg)																					
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**592**	**689**	**446**	--	--	--	--	--	**1460**	--	--	**1.54 J**	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						**15.3**	**36.6**	**15.3**	--	--	--	--	--	**65.3**	--	--	0.505 U	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**57.0**	**86.5**	**50.8**	--	--	--	--	--	**164**	--	--	0.343 U	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						**11.3**	**19.1 J**	**9.90 J**	--	--	--	--	--	**30.6**	--	--	0.186 UJ	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						0.855 UJ	**0.903 J**	**1.11 J**	--	--	--	--	--	**1.27**	--	--	0.289 UJ	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.453 U	**0.688 J**	0.476 U	--	--	--	--	--	**1.50**	--	--	0.246 U	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.843 J**	**1.60**	**1.46**	--	--	--	--	--	**2.46**	--	--	0.145 U	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**2.40 J**	**4.40**	**1.67**	--	--	--	--	--	**7.53**	--	--	0.258 U	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						0.534 U	0.332 U	**0.290 J**	--	--	--	--	--	**1.74**	--	--	0.149 U	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**1.07**	**2.53**	**1.17**	--	--	--	--	--	**3.76**	--	--	0.273 U	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						0.668 U	0.422 U	0.416 U	--	--	--	--	--	**0.557 J**	--	--	0.214 U	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						0.435 U	**0.963 J**	0.581 U	--	--	--	--	--	**1.30**	--	--	0.212 U	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						0.485 U	0.462 U	**0.544 J**	--	--	--	--	--	**1.01**	--	--	0.187 U	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**1.01**	**1.18**	0.291 U	--	--	--	--	--	**0.905 J**	--	--	0.150 U	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						0.516 UJ	0.478 U	**0.365 J**	--	--	--	--	--	**0.752 J**	--	--	0.206 UJ	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						0.284 U	0.247 U	0.227 U	--	--	--	--	--	**0.222 J**	--	--	0.180 U	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						**4.75 J**	**2.29 J**	**0.788 J**	--	--	--	--	--	**3.47 J**	--	--	0.217 U	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						**1.87 J**	**3.51 J**	**1.42 J**	--	--	--	--	--	**6.39 J**	--	--	**0.000462 J**	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						**2.40 J**	**3.75 J**	**1.88 J**	--	--	--	--	--	**6.39 J**	--	--	**0.317 J**	--	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**128**	**182**	**138**	--	--	--	--	--	**466**	--	--	0.128 U	--	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						**33.5 J**	**55.6 J**	**29.6 J**	--	--	--	--	--	**89.1**	--	--	0.105 UJ	--	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**18.4 J**	**34.6**	**8.90**	--	--	--	--	--	**69.1**	--	--	0.109 U	--	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						**23.6**	**27.5**	**14.2**	--	--	--	--	--	**42.1 J**	--	--	0.082 U	--	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**0.257 J**	**2.49**	**1.20**	--	--	--	--	--	**8.24**	--	--	0.086 U	--	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						**20.4 J**	**12.7**	**4.27**	--	--	--	--	--	**16.7**	--	--	UJ	--	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**0.926**	**1.63**	**0.617 J**	--	--	--	--	--	**7.20**	--	--	0.127 U	--	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						**16.1 J**	**8.58**	**1.81**	--	--	--	--	--	**14.4 J**	--	--	0.077 U	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC01	TG-SC02	TG-SC03	TG-SC03	TG-SC03	TG-SC03	TG-SC04	TG-SC04	TG-SC04	TG-SC05	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE	TG-SC05RE
						Sample ID	TG-SC01-00-01-241113	TG-SC02-00-1.7-241108	TG-SC03-00-02-241108	TG-SC03-02-04-241108	TG-SC03-04-06-241108	TG-SC03-06-6.3-241108	TG-SC04-00-02-241029	TG-SC04-02-04-241029	TG-SC04-04-06-241029	TG-SC05-00-1.6-241113	TG-SC05RE-00-02-250401	TG-SC05RE-02-04-250401	TG-SC05RE-04-06-250401	TG-SC05RE-06-08-250401	TG-SC105RE-06-08-250401
						Sample Date	2024-11-13	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-10-29	2024-10-29	2024-10-29	2024-11-13	2025-04-01	2025-04-01	2025-04-01	2025-04-01	2025-04-01
						Depth Interval	0 - 1 ft	0 - 1.7 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.3 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 1.6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)																					
Aroclor 1016	SW8082A						--	--	1.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082A						--	--	1.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082A						--	--	1.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082A						--	--	1.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082A						--	--	1.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082A						--	--	1.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082A						--	--	1.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262	SW8082A						--	--	1.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	--	1.25 U	--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	--	1.25 U	--	--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																					
Aroclor 1016	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	19.7 U	--	--	18.5 U	--	--	--
Aroclor 1221	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	19.7 U	--	--	18.5 U	--	--	--
Aroclor 1232	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	19.7 U	--	--	18.5 U	--	--	--
Aroclor 1242	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	19.7 U	--	--	18.5 U	--	--	--
Aroclor 1248	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	19.7 U	--	--	18.5 U	--	--	--
Aroclor 1254	SW8082A						**19.0 J**	**21.9**	19.9 U	--	--	--	--	--	**48.5**	--	--	18.5 U	--	--	--
Aroclor 1260	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	**27.9**	--	--	18.5 U	--	--	--
Aroclor 1262	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	--	--	--	18.5 U	--	--	--
Aroclor 1268	SW8082A						19.8 U	20.0 U	19.9 U	--	--	--	--	--	--	--	--	18.5 U	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		**19.0 J**	**21.9**	19.9 U	--	--	--	--	--	**76.4**	--	--	18.5 U	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC05RE	TG-SC06	TG-SC06	TG-SC06	TG-SC06	TG-SC07	TG-SC07	TG-SC07	TG-SC08	TG-SC08	TG-SC08	TG-SC09	TG-SC09	TG-SC09	TG-SC09
						Sample ID	TG-SC05RE-08-9.4-250401	TG-SC06-00-02-241108	TG-SC06-02-04-241108	TG-SC06-04-06-241108	TG-SC06-06-07-241108	TG-SC07-00-02-241113	TG-SC07-02-04-241113	TG-SC07-04-5.9-241113	TG-SC08-00-02-241114	TG-SC08-02-04-241114	TG-SC08-04-06-241114	TG-SC09-00-02-241113	TG-SC09-02-04-241113	TG-SC09-04-06-241113	TG-SC09-06-6.7-241113
						Sample Date	2025-04-01	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-13
						Depth Interval	8 - 9.4 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 7 ft	0 - 2 ft	2 - 4 ft	4 - 5.9 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.7 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	**0.74**	**0.69**	--	--	**0.53**	--	--	**1.06**	--	**0.35 J**	--	--	--	--
Total solids	D2216						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	SM2540G						**77.55**	**66.99**	**68.43**	**59.33**	**57.23**	**74.42**	**76.06**	**85.85**	**61.95**	**59.51**	**75.98**	**61.41**	**66.03**	**75.21**	**73.91**
Total volatile solids	PSEP-TVS						--	**3.68**	**2.98**	--	--	**2.51**	--	--	**4.19**	--	--	--	--	--	--
Metals (mg/kg)																				
Antimony	SW6020						0.25 UJ	**2.06 J**	0.28 UJ	0.33 UJ	0.35 UJ	**0.16 J**	0.25 UJ	0.22 UJ	0.31 UJ	**0.86 J**	**3.86 J**	**0.49 J**	**1.23 J**	**1.51 J**	**41.4 J**
Arsenic	SW6020	57	93	57	93		**1.65**	**30.2**	**4.79**	**6.73**	**6.43**	**7.84 J**	**6.76 J**	**2.43**	**9.03 J**	**28.6 J**	**42.5 J**	**17.1 J**	**38.4 J**	**35.1 J**	**221 J**
Cadmium	SW6020	5.1	6.7	5.1	6.7		**0.09 J**	**0.22**	**0.12 J**	**0.06 J**	**0.14 J**	**0.15 J**	**0.10 J**	**0.04 J**	**0.20 J**	**0.39 J**	**0.20 J**	**0.24 J**	**0.26 J**	**0.17 J**	**0.46 J**
Chromium	SW6020	260	270	260	270		**13.4**	**13.0 J**	**11.8 J**	**13.0 J**	**14.8 J**	**10.7 J**	**10.6 J**	**13.8**	**15.9 J**	**23.7 J**	**23.2 J**	**18.8 J**	**48.7 J**	**17.6 J**	**25.5 J**
Copper	SW6020	390	390	390	390		**17.0**	**71.1 J**	**25.1 J**	**37.7 J**	**41.2 J**	**28.4 J**	**22.1 J**	**18.3**	**51.1 J**	**156 J**	**153 J**	**82.3 J**	**342 J**	**132 J**	**382 J**
Lead	SW6020	450	530	450	530		**1.60**	**34.7 J**	**3.11 J**	**3.88 J**	**4.11 J**	**10.1 J**	**6.39 J**	**2.00**	**16.6 J**	**90.5 J**	**112 J**	**23.4 J**	**114 J**	**32.5 J**	**359 J**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.00707 J**	**0.0628**	**0.0154 J**	**0.0182 J**	**0.0266 J**	**0.0381 J**	**0.0246 J**	0.0254 U	**0.0595 J**	**0.185 J**	**0.0733 J**	**0.0943 J**	**0.134 J**	**0.231 J**	**0.317 J**
Selenium	SW6020						**1.49**	**0.59 J**	**0.67 J**	**1.11**	**1.10**	**0.59 J**	**0.59 J**	0.56 U	**0.81 J**	**0.69 J**	**0.46 J**	**0.79 J**	**0.72 J**	**0.52 J**	**0.64 J**
Silver	SW6020	6.1	6.1	6.1	6.1		0.25 UJ	**0.19 J**	**0.06 J**	**0.08 J**	**0.10 J**	**0.08 J**	**0.07 J**	**0.04 J**	**0.17 J**	**0.43 J**	**0.16 J**	**0.35 J**	**0.31 J**	**0.17 J**	**0.37 J**
Zinc	SW6020	410	960	410	960		**21.4**	**122 J**	**27.7 J**	**34.4 J**	**34.0 J**	**56.6 J**	**51.8 J**	**24.8**	**76.2 J**	**172 J**	**153 J**	**105 J**	**314 J**	**145 J**	**911 J**
Organometals (mg/kg-OC)																				
Tributyltin (ion)	SW8270ESIM						--	**1.76 J**	0.559 UJ	--	--	0.719 U	--	--	0.360 U	--	--	--	--	--	--
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM						--	**13.0 J**	3.86 UJ	--	--	3.81 U	--	--	3.82 U	--	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)																				
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				--	0.68 U	0.72 U	--	--	0.94 U	--	--	0.47 U	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				--	0.68 U	0.72 U	--	--	0.94 U	--	--	0.47 U	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				--	0.68 U	0.72 U	--	--	0.94 U	--	--	0.47 U	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				--	**7.42**	7.25 U	--	--	9.42 U	--	--	4.71 U	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM	4.9	64				--	0.68 U	0.72 U	--	--	**1.8**	--	--	**0.92**	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270E	220	1700				--	2.69 U	2.90 U	--	--	3.77 U	--	--	1.89 U	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270E	58	4500				--	2.69 U	2.90 U	--	--	3.77 U	--	--	1.89 U	--	--	--	--	--	--
Diethyl phthalate	SW8270ESIM	61	110				--	2.69 U	2.90 U	--	--	3.77 U	--	--	**3.86**	--	--	--	--	--	--
Dimethyl phthalate	SW8270ESIM	53	53				--	0.68 U	0.72 U	--	--	0.94 U	--	--	**0.29 J**	--	--	--	--	--	--
Hexachlorobenzene	SW8270ESIM	0.38	2.3				--	0.68 U	0.72 U	--	--	0.94 U	--	--	0.47 U	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				--	0.68 U	0.72 U	--	--	0.94 U	--	--	0.47 U	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	11	11				--	0.68 U	0.72 U	--	--	0.94 U	--	--	0.47 U	--	--	--	--	--	--
Pentachlorophenol	SW8270ESIM						--	2.69 UJ	2.90 UJ	--	--	47 UJ	--	--	24 U	--	--	--	--	--	--

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC05RE	TG-SC06	TG-SC06	TG-SC06	TG-SC06	TG-SC07	TG-SC07	TG-SC07	TG-SC08	TG-SC08	TG-SC08	TG-SC09	TG-SC09	TG-SC09	TG-SC09
						Sample ID	TG-SC05RE-08-9.4-250401	TG-SC06-00-02-241108	TG-SC06-02-04-241108	TG-SC06-04-06-241108	TG-SC06-06-07-241108	TG-SC07-00-02-241113	TG-SC07-02-04-241113	TG-SC07-04-5.9-241113	TG-SC08-00-02-241114	TG-SC08-02-04-241114	TG-SC08-04-06-241114	TG-SC09-00-02-241113	TG-SC09-02-04-241113	TG-SC09-04-06-241113	TG-SC09-06-6.7-241113
						Sample Date	2025-04-01	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-13
						Depth Interval	8 - 9.4 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 7 ft	0 - 2 ft	2 - 4 ft	4 - 5.9 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.7 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM			31	51	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM			35	50	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM			110	110	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29	--	19.9 UJ	20.0 UJ	--	--	20.0 UJ	--	--	20.0 UJ	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670	--	5.0 U	5.0 U	--	--	**11.1**	--	--	**88.9**	--	--	--	--	--	--
Benzoic acid	SW8270ESIM	650	650	650	650	--	99.4 UJ	100 UJ	--	--	499 UJ	--	--	499 UJ	--	--	--	--	--	--
Benzyl alcohol	SW8270ESIM	57	73	57	73	--	19.9 U	20.0 U	--	--	20.0 UJ	--	--	R	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900	--	**54.9**	50.0 U	--	--	49.9 U	--	--	49.9 U	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM			63	900	--	5.0 U	5.0 U	--	--	**9.6**	--	--	**9.7**	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270E			1400	1400	--	19.9 U	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270E			6200	6200	--	19.9 U	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--	--	--
Diethyl phthalate	SW8270ESIM			200	1200	--	19.9 U	20.0 U	--	--	20.0 U	--	--	**40.9**	--	--	--	--	--	--
Dimethyl phthalate	SW8270ESIM			71	160	--	5.0 U	5.0 U	--	--	5.0 U	--	--	**3.1 J**	--	--	--	--	--	--
Hexachlorobenzene	SW8270ESIM			22	70	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM			28	40	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--	--	--
Pentachlorophenol	SW8270ESIM	360	690	360	690	--	19.9 UJ	20.0 UJ	--	--	250 UJ	--	--	250 U	--	--	--	--	--	--
Phenol	SW8270ESIM	420	1200	420	1200	--	5.0 U	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																				
2-Methylnaphthalene	SW8270E	38	64			--	**1.96 J**	2.90 U	--	--	3.77 U	--	--	1.89 U	--	--	--	--	--	--
Acenaphthene	SW8270E	16	57			--	**6.39**	2.90 U	--	--	3.77 U	--	--	1.89 U	--	--	--	--	--	--
Acenaphthylene	SW8270E	66	66			--	**1.54 J**	2.90 U	--	--	3.77 U	--	--	1.89 U	--	--	--	--	--	--
Anthracene	SW8270E	220	1200			--	**8.20**	2.90 U	--	--	**4.60**	--	--	**1.11 J**	--	--	--	--	--	--
Benzo(a)anthracene	SW8270E	110	270			--	**30.4**	2.90 U	--	--	**11.9**	--	--	**3.24**	--	--	--	--	--	--
Benzo(a)pyrene	SW8270E	99	210			--	**43**	2.90 U	--	--	**14.8**	--	--	**3.83**	--	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E					--	**86.6**	5.80 U	--	--	**28.1**	--	--	**8.25**	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270E	31	78			--	**20.7 J**	2.90 U	--	--	**21.7**	--	--	**9.53 J**	--	--	--	--	--	--
Carbazole	SW8270E					--	**5.95**	2.90 U	--	--	3.77 U	--	--	1.89 U	--	--	--	--	--	--
Chrysene	SW8270E	110	460			--	**46.5**	2.90 U	--	--	**21.1**	--	--	**6.67**	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	12	33			--	**4.50**	0.72 U	--	--	**3.62**	--	--	**1.47**	--	--	--	--	--	--
Dibenzofuran	SW8270E	15	58			--	**4.04**	2.90 U	--	--	3.77 U	--	--	1.89 U	--	--	--	--	--	--
Fluoranthene	SW8270E	160	1200			--	**60.3**	2.90 U	--	--	**22.5**	--	--	**7.13**	--	--	--	--	--	--
Fluorene	SW8270E	23	79			--	**6.30**	2.90 U	--	--	3.77 U	--	--	1.89 U	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88			--	**12.1**	2.90 U	--	--	**5.92**	--	--	1.89 U	--	--	--	--	--	--
Naphthalene	SW8270E	99	170			--	**3.43**	2.90 U	--	--	**3.83**	--	--	1.89 U	--	--	--	--	--	--
Phenanthrene	SW8270E	100	480			--	**34.3**	2.90 U	--	--	**9.28**	--	--	**2.30**	--	--	--	--	--	--
Pyrene	SW8270E	1000	1400			--	**87.4**	2.90 U	--	--	**35.3**	--	--	**11**	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450			--	**86.6**	5.80 U	--	--	**28.1**	--	--	**8.25**	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300			--	**390 J**	5.80 U	--	--	**165**	--	--	**51 J**	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780			--	**60.2 J**	2.90 U	--	--	**17.7**	--	--	**3.42 J**	--	--	--	--	--	--

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC05RE	TG-SC06	TG-SC06	TG-SC06	TG-SC06	TG-SC07	TG-SC07	TG-SC07	TG-SC08	TG-SC08	TG-SC08	TG-SC09	TG-SC09	TG-SC09	TG-SC09
						Sample ID	TG-SC05RE-08-9.4-250401	TG-SC06-00-02-241108	TG-SC06-02-04-241108	TG-SC06-04-06-241108	TG-SC06-06-07-241108	TG-SC07-00-02-241113	TG-SC07-02-04-241113	TG-SC07-04-5.9-241113	TG-SC08-00-02-241114	TG-SC08-02-04-241114	TG-SC08-04-06-241114	TG-SC09-00-02-241113	TG-SC09-02-04-241113	TG-SC09-04-06-241113	TG-SC09-06-6.7-241113
						Sample Date	2025-04-01	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-13
						Depth Interval	8 - 9.4 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 7 ft	0 - 2 ft	2 - 4 ft	4 - 5.9 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.7 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																					
2-Methylnaphthalene	SW8270E			670	670		--	**14.5 J**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--	--	--
Acenaphthene	SW8270E			500	500		--	**47.3**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--	--	--
Acenaphthylene	SW8270E			1300	1300		--	**11.4 J**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--	--	--
Anthracene	SW8270E			960	960		--	**60.7**	20.0 U	--	--	**24.4**	--	--	**11.8 J**	--	--	--	--	--	--
Benzo(a)anthracene	SW8270E			1300	1600		--	**225**	20.0 U	--	--	**63.1**	--	--	**34.3**	--	--	--	--	--	--
Benzo(a)pyrene	SW8270E			1600	1600		--	**320**	20.0 U	--	--	**78.2**	--	--	**40.6**	--	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	**641**	40.0 U	--	--	**149**	--	--	**87.5**	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270E			670	720		--	**153 J**	20.0 U	--	--	**115**	--	--	**101 J**	--	--	--	--	--	--
Carbazole	SW8270E						--	**44.0**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--	--	--
Chrysene	SW8270E			1400	2800		--	**344**	20.0 U	--	--	**112**	--	--	**70.7**	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM			230	230		--	**33.3**	5.0 U	--	--	**19.2**	--	--	**15.6**	--	--	--	--	--	--
Dibenzofuran	SW8270E			540	540		--	**29.9**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--	--	--
Fluoranthene	SW8270E			1700	2500		--	**446**	20.0 U	--	--	**119**	--	--	**75.6**	--	--	--	--	--	--
Fluorene	SW8270E			540	540		--	**46.6**	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		--	**89.5**	20.0 U	--	--	**31.4**	--	--	20.0 U	--	--	--	--	--	--
Naphthalene	SW8270E			2100	2100		--	**25.4**	20.0 U	--	--	**20.3**	--	--	20.0 U	--	--	--	--	--	--
Phenanthrene	SW8270E			1500	1500		--	**254**	20.0 U	--	--	**49.2**	--	--	**24.4**	--	--	--	--	--	--
Pyrene	SW8270E			2600	3300		--	**647**	20.0 U	--	--	**187**	--	--	**120**	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		--	**641**	40.0 U	--	--	**149**	--	--	**87.5**	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	**422**	20.0 U	--	--	**106**	--	--	**55.0**	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	**422**	20.0 U	--	--	**106**	--	--	**56.0**	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		--	**2900 J**	40.0 U	--	--	**874**	--	--	**550 J**	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		--	**445 J**	20.0 U	--	--	**93.9**	--	--	**36.2 J**	--	--	--	--	--	--
Pesticides (mg/kg-OC)																					
2,4'-DDD (o,p'-DDD)	SW8081B						--	0.135 UJ	0.145 UJ	--	--	0.189 UJ	--	--	0.0943 UJ	--	--	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	0.135 UJ	0.145 UJ	--	--	0.189 UJ	--	--	0.0943 UJ	--	--	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	0.135 UJ	0.145 UJ	--	--	0.189 UJ	--	--	0.0943 UJ	--	--	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	0.135 U	0.145 U	--	--	**0.11 J**	--	--	0.0943 U	--	--	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	0.135 U	0.145 U	--	--	0.189 U	--	--	0.0943 U	--	--	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	0.135 U	0.145 U	--	--	**0.638**	--	--	0.0943 U	--	--	--	--	--	--
Aldrin	SW8081B						--	0.068 U	0.072 U	--	--	0.094 U	--	--	0.047 U	--	--	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	0.068 U	0.072 U	--	--	0.094 U	--	--	0.047 U	--	--	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	0.068 U	0.072 U	--	--	0.094 U	--	--	0.047 U	--	--	--	--	--	--
Dieldrin	SW8081B						--	0.135 U	0.145 U	--	--	0.189 U	--	--	0.0943 U	--	--	--	--	--	--
Endrin ketone	SW8081B						--	0.135 U	0.145 U	--	--	**0.342**	--	--	0.0943 U	--	--	--	--	--	--
Heptachlor	SW8081B						--	0.068 U	0.072 U	--	--	0.094 U	--	--	0.047 U	--	--	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	0.068 U	0.072 U	--	--	0.094 U	--	--	0.047 U	--	--	--	--	--	--
Nonachlor, cis-	SW8081B						--	0.135 U	0.145 U	--	--	0.189 U	--	--	0.0943 U	--	--	--	--	--	--
Nonachlor, trans-	SW8081B						--	0.135 UJ	0.145 UJ	--	--	0.189 UJ	--	--	0.0943 UJ	--	--	--	--	--	--
Oxychlordane	SW8081B						--	0.135 UJ	0.145 UJ	--	--	0.189 UJ	--	--	0.0943 UJ	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC05RE	TG-SC06	TG-SC06	TG-SC06	TG-SC06	TG-SC07	TG-SC07	TG-SC07	TG-SC08	TG-SC08	TG-SC08	TG-SC09	TG-SC09	TG-SC09	TG-SC09
						Sample ID	TG-SC05RE-08-9.4-250401	TG-SC06-00-02-241108	TG-SC06-02-04-241108	TG-SC06-04-06-241108	TG-SC06-06-07-241108	TG-SC07-00-02-241113	TG-SC07-02-04-241113	TG-SC07-04-5.9-241113	TG-SC08-00-02-241114	TG-SC08-02-04-241114	TG-SC08-04-06-241114	TG-SC09-00-02-241113	TG-SC09-02-04-241113	TG-SC09-04-06-241113	TG-SC09-06-6.7-241113
						Sample Date	2025-04-01	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-13
						Depth Interval	8 - 9.4 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 7 ft	0 - 2 ft	2 - 4 ft	4 - 5.9 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.7 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (µg/kg)																					
2,4'-DDD (o,p'-DDD)	SW8081B						--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	1.00 U	1.00 U	--	--	**0.60 J**	--	--	1.00 U	--	--	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	1.00 U	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	1.00 U	1.00 U	--	--	**3.38**	--	--	1.00 U	--	--	--	--	--	--
Aldrin	SW8081B						--	0.50 U	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	0.50 U	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	0.50 U	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--	--	--	--
Dieldrin	SW8081B						--	1.00 U	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--	--	--	--
Endrin ketone	SW8081B						--	1.00 U	1.00 U	--	--	**1.81**	--	--	1.00 U	--	--	--	--	--	--
Heptachlor	SW8081B						--	0.50 U	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	0.50 U	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--	--	--	--
Nonachlor, cis-	SW8081B						--	1.00 U	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--	--	--	--
Nonachlor, trans-	SW8081B						--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--	--	--
Oxychlordane	SW8081B						--	1.00 UJ	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--	--	--	--
Total DDx (U = 0 max limit)	Calculated						--	1.00 UJ	1.00 UJ	--	--	**4.0 J**	--	--	1.00 UJ	--	--	--	--	--	--
Dioxin Furans (ng/kg)																					
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	**3170**	**79.8**	--	--	**790**	--	--	**3730**	--	**10300**	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	**109**	**0.938 J**	--	--	**26.6**	--	--	**150**	--	**124**	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	**370**	**7.22**	--	--	**91.7**	--	--	**442**	--	**944**	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	**53.7**	**1.01**	--	--	**16.3**	--	--	**73.9**	--	**74.8**	--	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	**4.10 J**	0.423 UJ	--	--	**0.821 J**	--	--	**5.33 J**	--	**5.47**	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	**2.59**	0.337 U	--	--	**1.03**	--	--	**3.41**	--	**5.49 J**	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	**8.19**	0.224 U	--	--	**3.90**	--	--	**10.6**	--	**11.1**	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	**13.1 J**	**0.171 J**	--	--	**4.41 J**	--	--	**15.4 J**	--	**43.2**	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	**2.89**	0.211 U	--	--	**2.54**	--	--	**4.13**	--	**4.69**	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	**5.96**	0.374 U	--	--	**1.24**	--	--	**6.18**	--	**18.0**	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	**1.59**	0.312 U	--	--	**1.29**	--	--	**2.39**	--	**0.818 J**	--	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	**2.05 J**	0.404 U	--	--	**0.761 J**	--	--	**2.67**	--	**4.31**	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	**3.27**	0.397 U	--	--	**0.825 J**	--	--	**4.43**	--	**11.2**	--	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	**2.80**	0.218 U	--	--	**3.83**	--	--	**3.73**	--	**6.10**	--	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	**1.67 J**	0.414 UJ	--	--	**1.86 J**	--	--	**2.64 J**	--	**12.1**	--	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	**0.475 J**	0.302 U	--	--	0.287 U	--	--	**0.285 J**	--	**0.536 J**	--	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	**4.47 J**	0.265 UJ	--	--	**19.6 J**	--	--	**6.33 J**	--	**73.5**	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						--	**13 J**	**0.124 J**	--	--	**6.5 J**	--	--	**15 J**	--	**38.5 J**	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						--	**13 J**	**0.644 J**	--	--	**6.6 J**	--	--	**15 J**	--	**38.5 J**	--	--	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	**1370**	**22.5**	--	--	**257**	--	--	**1300**	--	**2530**	--	--	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	**211 J**	**3.36 J**	--	--	**47.8 J**	--	--	**255 J**	--	**237**	--	--	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	**127 J**	0.172 U	--	--	**36.4 J**	--	--	**146 J**	--	**353 J**	--	--	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	**102**	0.099 U	--	--	**73.5**	--	--	**120**	--	**174 J**	--	--	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	**8.52**	0.134 U	--	--	**3.59**	--	--	**13.3**	--	**45.6 J**	--	--	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	**24.5 J**	UJ	--	--	**117 J**	--	--	**34.2 J**	--	**105**	--	--	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	**22.2**	**0.193 J**	--	--	**2.18**	--	--	**15.5**	--	**25.2 J**	--	--	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	**12.6 J**	0.102 UJ	--	--	**111 J**	--	--	**18.1 J**	--	**155 J**	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC05RE	TG-SC06	TG-SC06	TG-SC06	TG-SC06	TG-SC07	TG-SC07	TG-SC07	TG-SC08	TG-SC08	TG-SC08	TG-SC09	TG-SC09	TG-SC09	TG-SC09
						Sample ID	TG-SC05RE-08-9.4-250401	TG-SC06-00-02-241108	TG-SC06-02-04-241108	TG-SC06-04-06-241108	TG-SC06-06-07-241108	TG-SC07-00-02-241113	TG-SC07-02-04-241113	TG-SC07-04-5.9-241113	TG-SC08-00-02-241114	TG-SC08-02-04-241114	TG-SC08-04-06-241114	TG-SC09-00-02-241113	TG-SC09-02-04-241113	TG-SC09-04-06-241113	TG-SC09-06-6.7-241113
						Sample Date	2025-04-01	2024-11-08	2024-11-08	2024-11-08	2024-11-08	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-13
						Depth Interval	8 - 9.4 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 7 ft	0 - 2 ft	2 - 4 ft	4 - 5.9 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.7 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)																					
Aroclor 1016	SW8082A						--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--	--	--
Aroclor 1221	SW8082A						--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--	--	--
Aroclor 1232	SW8082A						--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--	--	--
Aroclor 1242	SW8082A						--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--	--	--
Aroclor 1248	SW8082A						--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--	--	--
Aroclor 1254	SW8082A						--	**15.7**	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--	--	--
Aroclor 1260	SW8082A						--	**4.26 J**	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--	--	--
Aroclor 1262	SW8082A						--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	2.69 U	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	**19.9 J**	2.88 U	--	--	3.74 U	--	--	1.88 U	--	--	--	--	--	--
PCB Aroclors (µg/kg)																					
Aroclor 1016	SW8082A						--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--	--	--
Aroclor 1221	SW8082A						--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--	--	--
Aroclor 1232	SW8082A						--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--	--	--
Aroclor 1242	SW8082A						--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--	--	--
Aroclor 1248	SW8082A						--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--	--	--
Aroclor 1254	SW8082A						--	**116**	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--	--	--
Aroclor 1260	SW8082A						--	**31.5 J**	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--	--	--
Aroclor 1262	SW8082A						--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	19.9 U	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		--	**148 J**	19.9 U	--	--	19.8 U	--	--	19.9 U	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC09RE	TG-SC09RE	TG-SC09RE	TG-SC10	TG-SC10	TG-SC10	TG-SC10RE	TG-SC10RE	TG-SC11	TG-SC11	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC11RE
						Sample ID	TG-SC09RE-06-08-250327	TG-SC09RE-08-10-250327	TG-SC09RE-10-12-250327	TG-SC10-00-02-241112	TG-SC10-02-04-241112	TG-SC10-04-5.2-241112	TG-SC10RE-04-06-250328	TG-SC10RE-06-6.9-250328	TG-SC11-00-02-241111	TG-SC11-02-4.4-241111	TG-SC11RE-02-04-250327	TG-SC11RE-04-06-250327	TG-SC11RE-06-08-250327	TG-SC11RE-08-10-250327	TG-SC11RE-10-11.3-250327
						Sample Date	2025-03-27	2025-03-27	2025-03-27	2024-11-12	2024-11-12	2024-11-12	2025-03-28	2025-03-28	2024-11-11	2024-11-11	2025-03-27	2025-03-27	2025-03-27	2025-03-27	2025-03-27
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 5.2 ft	4 - 6 ft	6 - 6.9 ft	0 - 2 ft	2 - 4.4 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.3 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	**0.48 J**	--	--	--	--	--	**0.33 J**	--	**0.25**	--	**1.18 J**	**0.20 J**	--	--
Total solids	D2216						--	**74.45**	--	--	--	--	--	**76.89**	--	--	--	--	--	--	--
Total solids	SM2540G						**71.21**	**75.07**	**76.92**	**64.79**	**72.86**	**74.60**	**80.13**	**80.70**	**68.70**	**80.75**	**67.40**	**75.63 J**	**80.84 J**	**76.78**	**76.13**
Total volatile solids	PSEP-TVS						--	**2.56**	--	--	--	--	--	**1.74**	--	**1.50**	--	--	--	--	--
Metals (mg/kg)																				
Antimony	SW6020						0.27 UJ	0.26 UJ	0.25 UJ	**0.70 J**	**0.82 J**	**1.75 J**	0.24 UJ	0.25 UJ	**8.78 J**	**0.17 J**	**1.56 J**	0.26 UJ	0.24 UJ	0.25 UJ	0.25 UJ
Arsenic	SW6020	57	93	57	93		**11.1**	**4.71**	**3.62**	**16.0**	**67.8**	**62.5**	**7.09**	**17.1**	**220**	**6.86**	**156**	**8.83**	**1.89**	**2.39**	**2.07**
Cadmium	SW6020	5.1	6.7	5.1	6.7		0.13 U	0.13 U	**0.13**	**0.42**	**0.38**	**1.48**	**0.08 J**	**0.06 J**	**0.79**	**0.11 J**	**0.59**	**0.23**	0.12 U	0.13 U	0.12 U
Chromium	SW6020	260	270	260	270		**10.2 J**	**11.5 J**	**13.0 J**	**15.4 J**	**32.5 J**	**488 J**	**12.1 J**	**11.7 J**	**67.7 J**	**11.9 J**	**55.9 J**	**17.1 J**	**9.18 J**	**11.0 J**	**10.3 J**
Copper	SW6020	390	390	390	390		**16.4**	**17.7**	**18.3**	**203 J**	**776 J**	**615 J**	**20.0**	**17.3**	**484 J**	**24.8 J**	**378**	**36.1**	**10.3**	**15.3**	**14.3**
Lead	SW6020	450	530	450	530		**2.07**	**2.00**	**2.19**	**25.9 J**	**189 J**	**171 J**	**10.3**	**3.86**	**258 J**	**33.6 J**	**342**	**19.1**	**3.00**	**3.08**	**1.76**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.0169 J**	**0.0163 J**	**0.0196 J**	**0.0863**	**0.167**	**0.0985**	**0.0324**	**0.0229 J**	**0.0943**	**0.0279 J**	**0.141**	**0.160**	**0.0155 J**	**0.0168 J**	**0.0174 J**
Selenium	SW6020						**0.68**	**0.69**	0.63 U	**0.82**	**1.06**	**0.98**	0.61 U	0.62 U	**1.06**	**0.60 J**	**1.00**	0.66 U	0.60 U	0.63 U	0.62 U
Silver	SW6020	6.1	6.1	6.1	6.1		0.27 U	0.26 U	0.25 U	**0.40**	**0.71**	**0.68**	0.24 U	0.25 U	**0.57**	**0.08 J**	**0.57**	**0.19 J**	0.24 U	0.25 U	0.25 U
Zinc	SW6020	410	960	410	960		**20.6**	**22.3**	**23.4**	**517 J**	**1170 J**	**322 J**	**28.1**	**24.8**	**746 J**	**35.3 J**	**591**	**45.4**	**18.3**	**24.1**	**22.2**
Organometals (mg/kg-OC)																				
Tributyltin (ion)	SW8270ESIM						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM						--	3.82 U	--	--	--	--	--	3.30 U	--	**2.27 J**	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)																				
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM	4.9	64				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270E	220	1700				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270E	58	4500				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270ESIM	61	110				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270ESIM	53	53				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270ESIM	0.38	2.3				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	11	11				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270ESIM						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC09RE	TG-SC09RE	TG-SC09RE	TG-SC10	TG-SC10	TG-SC10	TG-SC10RE	TG-SC10RE	TG-SC11	TG-SC11	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC11RE
						Sample ID	TG-SC09RE-06-08-250327	TG-SC09RE-08-10-250327	TG-SC09RE-10-12-250327	TG-SC10-00-02-241112	TG-SC10-02-04-241112	TG-SC10-04-5.2-241112	TG-SC10RE-04-06-250328	TG-SC10RE-06-6.9-250328	TG-SC11-00-02-241111	TG-SC11-02-4.4-241111	TG-SC11RE-02-04-250327	TG-SC11RE-04-06-250327	TG-SC11RE-06-08-250327	TG-SC11RE-08-10-250327	TG-SC11RE-10-11.3-250327
						Sample Date	2025-03-27	2025-03-27	2025-03-27	2024-11-12	2024-11-12	2024-11-12	2025-03-28	2025-03-28	2024-11-11	2024-11-11	2025-03-27	2025-03-27	2025-03-27	2025-03-27	2025-03-27
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 5.2 ft	4 - 6 ft	6 - 6.9 ft	0 - 2 ft	2 - 4.4 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.3 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM			31	51		--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM			35	50		--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM			110	110		--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--	--	--	--
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29		--	19.2 U	--	--	--	--	--	15.0 U	--	19.8 UJ	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63		--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--	--	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670		--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--	--	--	--
Benzoic acid	SW8270ESIM	650	650	650	650		--	95.9 UJ	--	--	--	--	--	75.1 UJ	--	98.9 UJ	--	--	--	--	--
Benzyl alcohol	SW8270ESIM	57	73	57	73		--	19.2 UJ	--	--	--	--	--	15.0 UJ	--	19.8 U	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900		--	35.4 UJ	--	--	--	--	--	28.8 U	--	49.5 U	--	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM			63	900		--	7.7 U	--	--	--	--	--	8.5 U	--	4.9 U	--	--	--	--	--
Di-n-butyl phthalate	SW8270E			1400	1400		--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--	--	--	--
Di-n-octyl phthalate	SW8270E			6200	6200		--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--	--	--	--
Diethyl phthalate	SW8270ESIM			200	1200		--	**10.2 J**	--	--	--	--	--	**25.7 J**	--	19.8 U	--	--	--	--	--
Dimethyl phthalate	SW8270ESIM			71	160		--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--	--	--	--
Hexachlorobenzene	SW8270ESIM			22	70		--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120		--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM			28	40		--	19.2 U	--	--	--	--	--	15.0 U	--	4.9 U	--	--	--	--	--
Pentachlorophenol	SW8270ESIM	360	690	360	690		--	19.2 UJ	--	--	--	--	--	**46.9 J**	--	19.8 UJ	--	--	--	--	--
Phenol	SW8270ESIM	420	1200	420	1200		--	4.8 U	--	--	--	--	--	3.8 U	--	4.9 U	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																				
2-Methylnaphthalene	SW8270E	38	64				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270E	16	57				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270E	66	66				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270E	220	1200				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270E	110	270				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270E	99	210				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270E	31	78				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270E						--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270E	110	460				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	12	33				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270E	15	58				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270E	160	1200				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270E	23	79				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270E	99	170				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270E	100	480				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270E	1000	1400				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC09RE	TG-SC09RE	TG-SC09RE	TG-SC10	TG-SC10	TG-SC10	TG-SC10RE	TG-SC10RE	TG-SC11	TG-SC11	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC11RE
						Sample ID	TG-SC09RE-06-08-250327	TG-SC09RE-08-10-250327	TG-SC09RE-10-12-250327	TG-SC10-00-02-241112	TG-SC10-02-04-241112	TG-SC10-04-5.2-241112	TG-SC10RE-04-06-250328	TG-SC10RE-06-6.9-250328	TG-SC11-00-02-241111	TG-SC11-02-4.4-241111	TG-SC11RE-02-04-250327	TG-SC11RE-04-06-250327	TG-SC11RE-06-08-250327	TG-SC11RE-08-10-250327	TG-SC11RE-10-11.3-250327
						Sample Date	2025-03-27	2025-03-27	2025-03-27	2024-11-12	2024-11-12	2024-11-12	2025-03-28	2025-03-28	2024-11-11	2024-11-11	2025-03-27	2025-03-27	2025-03-27	2025-03-27	2025-03-27
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 5.2 ft	4 - 6 ft	6 - 6.9 ft	0 - 2 ft	2 - 4.4 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.3 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																					
2-Methylnaphthalene	SW8270E			670	670		--	14.2 UJ	--	--	--	--	--	**7.0 J**	--	19.8 U	--	--	--	--	--
Acenaphthene	SW8270E			500	500		--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--	--	--	--
Acenaphthylene	SW8270E			1300	1300		--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--	--	--	--
Anthracene	SW8270E			960	960		--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--	--	--	--
Benzo(a)anthracene	SW8270E			1300	1600		--	14.2 UJ	--	--	--	--	--	11.5 U	--	**30.3**	--	--	--	--	--
Benzo(a)pyrene	SW8270E			1600	1600		--	14.2 UJ	--	--	--	--	--	**6.7 J**	--	**41.4**	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	28.3 UJ	--	--	--	--	--	**17.3 J**	--	**67.5**	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270E			670	720		--	14.2 UJ	--	--	--	--	--	11.5 UJ	--	**99.1 J**	--	--	--	--	--
Carbazole	SW8270E						--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--	--	--	--
Chrysene	SW8270E			1400	2800		--	14.2 UJ	--	--	--	--	--	**6.9 J**	--	**43.0**	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM			230	230		--	4.8 U	--	--	--	--	--	3.8 U	--	**15.2**	--	--	--	--	--
Dibenzofuran	SW8270E			540	540		--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--	--	--	--
Fluoranthene	SW8270E			1700	2500		--	14.2 UJ	--	--	--	--	--	**10.7 J**	--	**44.6**	--	--	--	--	--
Fluorene	SW8270E			540	540		--	14.2 UJ	--	--	--	--	--	11.5 U	--	19.8 U	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		--	14.2 UJ	--	--	--	--	--	11.5 UJ	--	19.8 U	--	--	--	--	--
Naphthalene	SW8270E			2100	2100		--	14.2 UJ	--	--	--	--	--	**7.6 J**	--	19.8 U	--	--	--	--	--
Phenanthrene	SW8270E			1500	1500		--	14.2 UJ	--	--	--	--	--	**12.2**	--	**23.6**	--	--	--	--	--
Pyrene	SW8270E			2600	3300		--	14.2 UJ	--	--	--	--	--	**17.8**	--	**111**	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		--	28.3 UJ	--	--	--	--	--	**17.3 J**	--	**67.5**	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	14.2 UJ	--	--	--	--	--	**8.50 J**	--	**53.1**	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	14.2 UJ	--	--	--	--	--	**9.84 J**	--	**54.1**	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		--	28.3 UJ	--	--	--	--	--	**59 J**	--	**452 J**	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		--	14.2 UJ	--	--	--	--	--	**20 J**	--	**23.6**	--	--	--	--	--
Pesticides (mg/kg-OC)																					
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonachlor, cis-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonachlor, trans-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxychlordane	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC09RE	TG-SC09RE	TG-SC09RE	TG-SC10	TG-SC10	TG-SC10	TG-SC10RE	TG-SC10RE	TG-SC11	TG-SC11	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC11RE
						Sample ID	TG-SC09RE-06-08-250327	TG-SC09RE-08-10-250327	TG-SC09RE-10-12-250327	TG-SC10-00-02-241112	TG-SC10-02-04-241112	TG-SC10-04-5.2-241112	TG-SC10RE-04-06-250328	TG-SC10RE-06-6.9-250328	TG-SC11-00-02-241111	TG-SC11-02-4.4-241111	TG-SC11RE-02-04-250327	TG-SC11RE-04-06-250327	TG-SC11RE-06-08-250327	TG-SC11RE-08-10-250327	TG-SC11RE-10-11.3-250327
						Sample Date	2025-03-27	2025-03-27	2025-03-27	2024-11-12	2024-11-12	2024-11-12	2025-03-28	2025-03-28	2024-11-11	2024-11-11	2025-03-27	2025-03-27	2025-03-27	2025-03-27	2025-03-27
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 5.2 ft	4 - 6 ft	6 - 6.9 ft	0 - 2 ft	2 - 4.4 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.3 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (µg/kg)																				
2,4'-DDD (o,p'-DDD)	SW8081B						--	0.95 UJ	--	--	--	--	--	0.86 UJ	--	1.00 UJ	--	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 UJ	--	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 UJ	--	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	0.95 U	--	--	--	--	--	0.86 U	--	**0.88 J**	--	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 U	--	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 U	--	--	--	--	--
Aldrin	SW8081B						--	0.47 U	--	--	--	--	--	0.43 U	--	0.50 U	--	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	0.47 U	--	--	--	--	--	0.43 U	--	0.50 U	--	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	0.47 U	--	--	--	--	--	0.43 U	--	0.50 U	--	--	--	--	--
Dieldrin	SW8081B						--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 U	--	--	--	--	--
Endrin ketone	SW8081B						--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 U	--	--	--	--	--
Heptachlor	SW8081B						--	0.47 U	--	--	--	--	--	0.43 U	--	0.50 U	--	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	0.47 U	--	--	--	--	--	0.43 U	--	0.50 U	--	--	--	--	--
Nonachlor, cis-	SW8081B						--	0.95 UJ	--	--	--	--	--	0.86 UJ	--	1.00 U	--	--	--	--	--
Nonachlor, trans-	SW8081B						--	0.95 U	--	--	--	--	--	0.86 U	--	1.00 UJ	--	--	--	--	--
Oxychlordane	SW8081B						--	0.95 UJ	--	--	--	--	--	0.86 UJ	--	1.00 UJ	--	--	--	--	--
Total DDx (U = 0 max limit)	Calculated						--	0.95 UJ	--	--	--	--	--	0.86 UJ	--	**0.88 J**	--	--	--	--	--
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	**8.97 J**	--	--	--	--	--	**36.9**	--	**19800 J**	--	**56600**	**141**	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	**0.641 J**	--	--	--	--	--	**8.23**	--	**873**	--	**3550**	**19.1**	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	**1.08 J**	--	--	--	--	--	**6.57**	--	**1580**	--	**4080**	**19.8**	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	**0.497 J**	--	--	--	--	--	**5.86 J**	--	**382**	--	**954**	**11.2**	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	0.345 UJ	--	--	--	--	--	**0.259 J**	--	**28.9 J**	--	**83.3**	**0.725 J**	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	0.287 U	--	--	--	--	--	0.217 U	--	**7.83**	--	**23.1**	**0.424 J**	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	0.200 U	--	--	--	--	--	**0.335 J**	--	**43.6**	--	**92.0**	**0.763 J**	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	0.307 U	--	--	--	--	--	0.241 U	--	**59.7 J**	--	**128**	**0.991 J**	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	0.200 U	--	--	--	--	--	**0.515 J**	--	**17.3**	--	**33.6**	**0.611 J**	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	0.323 U	--	--	--	--	--	**0.322 J**	--	**19.6**	--	**55.3**	**0.817 J**	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	0.268 U	--	--	--	--	--	0.213 U	--	**18.5**	--	**20.6**	0.334 U	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	0.304 U	--	--	--	--	--	**0.264 J**	--	**4.66**	--	**16.9**	**0.346 J**	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	0.206 U	--	--	--	--	--	0.224 U	--	**6.07**	--	**15.3**	**0.260 J**	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	0.204 U	--	--	--	--	--	**0.496 J**	--	**21.5**	--	**36.4**	**0.490 J**	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	0.214 UJ	--	--	--	--	--	0.226 UJ	--	**7.31 J**	--	**35.4**	**0.711 J**	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	0.213 U	--	--	--	--	--	0.146 U	--	**0.721 J**	--	**3.17**	**0.0980 J**	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	0.276 U	--	--	--	--	--	**0.528 J**	--	**24.9 J**	--	**7.93**	**0.366 J**	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						--	**0.0187 J**	--	--	--	--	--	**0.624 J**	--	**55.2 J**	--	**140**	**1.48 J**	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						--	**0.417 J**	--	--	--	--	--	**0.768 J**	--	**55.2 J**	--	**140**	**1.49 J**	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	**2.57**	--	--	--	--	--	**13.1**	--	**3030**	--	**7180**	**38.7**	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	**0.497 J**	--	--	--	--	--	**13.3 J**	--	**1790 J**	--	**4750**	**26.1**	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	0.131 U	--	--	--	--	--	**4.23**	--	**375 J**	--	**961**	**10.2 J**	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	0.106 U	--	--	--	--	--	**6.68**	--	**907**	--	**2020 J**	**13.0 J**	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	0.128 U	--	--	--	--	--	**1.72**	--	**32.0**	--	**166 J**	**3.29 J**	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	UJ	--	--	--	--	--	**2.13 J**	--	**245 J**	--	**437 J**	**6.51 J**	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	0.139 U	--	--	--	--	--	**2.06**	--	**38.8**	--	**108 J**	**2.33 J**	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	0.082 U	--	--	--	--	--	**3.35**	--	**99.4 J**	--	**128 J**	**5.19 J**	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC09RE	TG-SC09RE	TG-SC09RE	TG-SC10	TG-SC10	TG-SC10	TG-SC10RE	TG-SC10RE	TG-SC11	TG-SC11	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC11RE	TG-SC11RE
						Sample ID	TG-SC09RE-06-08-250327	TG-SC09RE-08-10-250327	TG-SC09RE-10-12-250327	TG-SC10-00-02-241112	TG-SC10-02-04-241112	TG-SC10-04-5.2-241112	TG-SC10RE-04-06-250328	TG-SC10RE-06-6.9-250328	TG-SC11-00-02-241111	TG-SC11-02-4.4-241111	TG-SC11RE-02-04-250327	TG-SC11RE-04-06-250327	TG-SC11RE-06-08-250327	TG-SC11RE-08-10-250327	TG-SC11RE-10-11.3-250327
						Sample Date	2025-03-27	2025-03-27	2025-03-27	2024-11-12	2024-11-12	2024-11-12	2025-03-28	2025-03-28	2024-11-11	2024-11-11	2025-03-27	2025-03-27	2025-03-27	2025-03-27	2025-03-27
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 5.2 ft	4 - 6 ft	6 - 6.9 ft	0 - 2 ft	2 - 4.4 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.3 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																				
Aroclor 1016	SW8082A						--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--	--	--	--
Aroclor 1221	SW8082A						--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--	--	--	--
Aroclor 1232	SW8082A						--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--	--	--	--
Aroclor 1242	SW8082A						--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--	--	--	--
Aroclor 1248	SW8082A						--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--	--	--	--
Aroclor 1254	SW8082A						--	15.1 U	--	--	--	--	--	13.0 U	--	**46.2**	--	--	--	--	--
Aroclor 1260	SW8082A						--	15.1 U	--	--	--	--	--	13.0 U	--	**21.0**	--	--	--	--	--
Aroclor 1262	SW8082A						--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--	--	--	--
Aroclor 1268	SW8082A						--	15.1 U	--	--	--	--	--	13.0 U	--	19.9 U	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		--	15.1 U	--	--	--	--	--	13.0 U	--	**67.2**	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC12	TG-SC12	TG-SC12	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC13	TG-SC13	TG-SC14	TG-SC14	TG-SC14	TG-SC15	TG-SC15	TG-SC15RE
						Sample ID	TG-SC12-00-02-241111	TG-SC112-00-02-241111	TG-SC12-02-4.5-241111	TG-SC12RE-04-06-250328	TG-SC12RE-06-08-250328	TG-SC12RE-08-10-250328	TG-SC12RE-10-11.2-250328	TG-SC13-00-02-241113	TG-SC13-02-3.3-241113	TG-SC14-00-02-241114	TG-SC14-02-04-241114	TG-SC14-04-6.1-241114	TG-SC15-00-02-241113	TG-SC15-02-3.2-241113	TG-SC15RE-02-04-250328
						Sample Date	2024-11-11	2024-11-11	2024-11-11	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2025-03-28
						Depth Interval	0 - 2 ft	0 - 2 ft	2 - 4.5 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 3.3 ft	0 - 2 ft	2 - 4 ft	4 - 6.1 ft	0 - 2 ft	2 - 3.2 ft	2 - 4 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	--	--	**0.44 J**	**0.25 J**	**0.18 J**	--	**0.63**	--	--	**0.39**	**1.33**	--	--	--
Total solids	D2216						--	--	--	**80.02**	--	--	--	--	--	--	--	--	--	--	--
Total solids	SM2540G						**77.06**	**76.00**	**84.33**	**78.78**	**76.95 J**	**77.69**	**80.80**	**69.01**	**77.18**	**72.43**	**78.45**	**62.94**	**74.36**	**86.59**	**80.77**
Total volatile solids	PSEP-TVS						--	--	--	**2.42**	--	--	--	**2.88**	--	--	**2.38**	**4.17**	--	--	--
Metals (mg/kg)																				
Antimony	SW6020						**3.03 J**	**3.73 J**	**1.51**	0.26 UJ	0.26 UJ	0.25 UJ	0.24 UJ	0.29 UJ	**0.36 J**	**7.30 J**	**1.79 J**	0.30 UJ	**160 J**	**25.1 J**	**9.48 J**
Arsenic	SW6020	57	93	57	93		**50.9**	**79.2**	**90.8 J**	**6.45**	**3.38**	**2.77**	**1.80**	**5.91 J**	**8.31 J**	**93.2 J**	**29.0 J**	**8.39 J**	**1620 J**	**1030 J**	**641**
Cadmium	SW6020	5.1	6.7	5.1	6.7		**0.25**	**0.63**	**0.14**	**0.15**	0.13 U	0.13 U	0.12 U	**0.11 J**	**0.08 J**	**0.19 J**	**0.15 J**	**0.11 J**	**1.15 J**	**1.01 J**	**1.00**
Chromium	SW6020	260	270	260	270		**33.7 J**	**32.6 J**	**36.2**	**14.6 J**	**15.7 J**	**12.8 J**	**8.98 J**	**13.8 J**	**10.7 J**	**13.0 J**	**11.2 J**	**13.1 J**	**61.6 J**	**32.9 J**	**35.0 J**
Copper	SW6020	390	390	390	390		**174 J**	**193 J**	**295**	**26.6**	**26.8**	**19.3**	**9.01**	**32.5 J**	**23.0 J**	**74.8 J**	**32.1 J**	**33.2 J**	**1260 J**	**1180 J**	**684**
Lead	SW6020	450	530	450	530		**50.0 J**	**71.3 J**	**73.0 J**	**11.5**	**2.62**	**2.03**	**0.95**	**9.78 J**	**6.57 J**	**58.0 J**	**21.3 J**	**3.83 J**	**1290 J**	**853 J**	**569**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.0404**	**0.0764**	**0.0378**	**0.145**	**0.0303**	**0.0277**	**0.0220 J**	**0.0511 J**	**0.0238 J**	**0.0560 J**	**0.0435 J**	**0.0206 J**	**0.340 J**	**0.118 J**	**0.344**
Selenium	SW6020						**0.76**	**0.61 J**	**0.75**	**0.69**	**0.67**	0.64 U	0.59 U	**0.50 J**	**0.30 J**	**0.30 J**	**0.44 J**	**0.55 J**	**1.27 J**	**1.03 J**	**0.86**
Silver	SW6020	6.1	6.1	6.1	6.1		**0.19 J**	**0.23 J**	**0.23 J**	**0.13 J**	0.26 U	0.25 U	0.24 U	**0.12 J**	**0.08 J**	**0.17 J**	**0.09 J**	**0.08 J**	**0.92 J**	**0.82 J**	**0.90**
Zinc	SW6020	410	960	410	960		**399 J**	**443 J**	**229 J**	**38.4**	**32.1**	**27.8**	**19.1**	**47.7 J**	**40.0 J**	**191 J**	**86.8 J**	**35.0 J**	**495 J**	**2850 J**	**1870**
Organometals (mg/kg-OC)																				
Tributyltin (ion)	SW8270ESIM						--	--	--	--	--	--	--	0.606 U	--	--	--	0.290 U	--	--	--
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM						--	--	--	3.46 U	--	--	--	3.82 U	--	--	**5.91**	3.86 U	--	--	--
Semivolatile Organics (mg/kg-OC)																				
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				--	--	--	--	--	--	--	0.79 U	--	--	--	0.38 U	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				--	--	--	--	--	--	--	0.79 U	--	--	--	0.38 U	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				--	--	--	--	--	--	--	0.79 U	--	--	--	0.38 U	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				--	--	--	--	--	--	--	7.94 U	--	--	--	3.75 U	--	--	--
Butylbenzyl phthalate	SW8270ESIM	4.9	64				--	--	--	--	--	--	--	**0.98**	--	--	--	**0.42**	--	--	--
Di-n-butyl phthalate	SW8270E	220	1700				--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Di-n-octyl phthalate	SW8270E	58	4500				--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Diethyl phthalate	SW8270ESIM	61	110				--	--	--	--	--	--	--	**1.79 J**	--	--	--	**11.2**	--	--	--
Dimethyl phthalate	SW8270ESIM	53	53				--	--	--	--	--	--	--	0.79 U	--	--	--	0.38 U	--	--	--
Hexachlorobenzene	SW8270ESIM	0.38	2.3				--	--	--	--	--	--	--	0.79 U	--	--	--	0.38 U	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				--	--	--	--	--	--	--	0.79 U	--	--	--	0.38 U	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	11	11				--	--	--	--	--	--	--	0.79 U	--	--	--	0.38 U	--	--	--
Pentachlorophenol	SW8270ESIM						--	--	--	--	--	--	--	40 UJ	--	--	--	19 UJ	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC12	TG-SC12	TG-SC12	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC13	TG-SC13	TG-SC14	TG-SC14	TG-SC14	TG-SC15	TG-SC15	TG-SC15RE
						Sample ID	TG-SC12-00-02-241111	TG-SC112-00-02-241111	TG-SC12-02-4.5-241111	TG-SC12RE-04-06-250328	TG-SC12RE-06-08-250328	TG-SC12RE-08-10-250328	TG-SC12RE-10-11.2-250328	TG-SC13-00-02-241113	TG-SC13-02-3.3-241113	TG-SC14-00-02-241114	TG-SC14-02-04-241114	TG-SC14-04-6.1-241114	TG-SC15-00-02-241113	TG-SC15-02-3.2-241113	TG-SC15RE-02-04-250328
						Sample Date	2024-11-11	2024-11-11	2024-11-11	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2025-03-28
						Depth Interval	0 - 2 ft	0 - 2 ft	2 - 4.5 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 3.3 ft	0 - 2 ft	2 - 4 ft	4 - 6.1 ft	0 - 2 ft	2 - 3.2 ft	2 - 4 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM			31	51		--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U	5.0 U	--	--	--
1,2-Dichlorobenzene	SW8270ESIM			35	50		--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U	5.0 U	--	--	--
1,4-Dichlorobenzene	SW8270ESIM			110	110		--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U	5.0 U	--	--	--
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29		--	--	--	18.9 U	--	--	--	20.0 UJ	--	--	20.0 UJ	20.0 UJ	--	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63		--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U	5.0 U	--	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670		--	--	--	4.7 U	--	--	--	**19.8**	--	--	5.0 U	5.0 U	--	--	--
Benzoic acid	SW8270ESIM	650	650	650	650		--	--	--	**121 J**	--	--	--	500 UJ	--	--	499 UJ	499 UJ	--	--	--
Benzyl alcohol	SW8270ESIM	57	73	57	73		--	--	--	18.9 UJ	--	--	--	20.0 UJ	--	--	20.0 UJ	20.0 UJ	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900		--	--	--	37.2 U	--	--	--	50.0 U	--	--	49.9 U	49.9 U	--	--	--
Butylbenzyl phthalate	SW8270ESIM			63	900		--	--	--	8.0 U	--	--	--	**6.2**	--	--	**5.7**	**5.6**	--	--	--
Di-n-butyl phthalate	SW8270E			1400	1400		--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Di-n-octyl phthalate	SW8270E			6200	6200		--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Diethyl phthalate	SW8270ESIM			200	1200		--	--	--	18.9 U	--	--	--	**11.3 J**	--	--	20.0 U	**149**	--	--	--
Dimethyl phthalate	SW8270ESIM			71	160		--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U	5.0 U	--	--	--
Hexachlorobenzene	SW8270ESIM			22	70		--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U	5.0 U	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120		--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U	5.0 U	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM			28	40		--	--	--	18.9 U	--	--	--	5.0 U	--	--	5.0 U	5.0 U	--	--	--
Pentachlorophenol	SW8270ESIM	360	690	360	690		--	--	--	**60.9 J**	--	--	--	250 UJ	--	--	250 UJ	250 UJ	--	--	--
Phenol	SW8270ESIM	420	1200	420	1200		--	--	--	4.7 U	--	--	--	5.0 U	--	--	5.0 U	5.0 U	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																				
2-Methylnaphthalene	SW8270E	38	64				--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Acenaphthene	SW8270E	16	57				--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Acenaphthylene	SW8270E	66	66				--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Anthracene	SW8270E	220	1200				--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Benzo(a)anthracene	SW8270E	110	270				--	--	--	--	--	--	--	**1.78 J**	--	--	--	1.50 U	--	--	--
Benzo(a)pyrene	SW8270E	99	210				--	--	--	--	--	--	--	**2.08 J**	--	--	--	1.50 U	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	--	--	--	--	6.35 U	--	--	--	3.00 U	--	--	--
Benzo(g,h,i)perylene	SW8270E	31	78				--	--	--	--	--	--	--	**14.7 J**	--	--	--	1.50 U	--	--	--
Carbazole	SW8270E						--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Chrysene	SW8270E	110	460				--	--	--	--	--	--	--	**2.21 J**	--	--	--	1.50 U	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	12	33				--	--	--	--	--	--	--	**2.08**	--	--	--	**0.917**	--	--	--
Dibenzofuran	SW8270E	15	58				--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Fluoranthene	SW8270E	160	1200				--	--	--	--	--	--	--	**4.11**	--	--	--	1.50 U	--	--	--
Fluorene	SW8270E	23	79				--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88				--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Naphthalene	SW8270E	99	170				--	--	--	--	--	--	--	3.17 U	--	--	--	1.50 U	--	--	--
Phenanthrene	SW8270E	100	480				--	--	--	--	--	--	--	**2.35 J**	--	--	--	1.50 U	--	--	--
Pyrene	SW8270E	1000	1400				--	--	--	--	--	--	--	**5.35**	--	--	--	1.50 U	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	--	--	--	--	--	6.35 U	--	--	--	3.00 U	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	--	--	--	--	--	**32.3 J**	--	--	--	**0.917**	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	--	--	--	--	--	**2.35 J**	--	--	--	1.50 U	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC12	TG-SC12	TG-SC12	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC13	TG-SC13	TG-SC14	TG-SC14	TG-SC14	TG-SC15	TG-SC15	TG-SC15RE
						Sample ID	TG-SC12-00-02-241111	TG-SC112-00-02-241111	TG-SC12-02-4.5-241111	TG-SC12RE-04-06-250328	TG-SC12RE-06-08-250328	TG-SC12RE-08-10-250328	TG-SC12RE-10-11.2-250328	TG-SC13-00-02-241113	TG-SC13-02-3.3-241113	TG-SC14-00-02-241114	TG-SC14-02-04-241114	TG-SC14-04-6.1-241114	TG-SC15-00-02-241113	TG-SC15-02-3.2-241113	TG-SC15RE-02-04-250328
						Sample Date	2024-11-11	2024-11-11	2024-11-11	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2025-03-28
						Depth Interval	0 - 2 ft	0 - 2 ft	2 - 4.5 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 3.3 ft	0 - 2 ft	2 - 4 ft	4 - 6.1 ft	0 - 2 ft	2 - 3.2 ft	2 - 4 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E			670	670		--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Acenaphthene	SW8270E			500	500		--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Acenaphthylene	SW8270E			1300	1300		--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Anthracene	SW8270E			960	960		--	--	--	**8.5 J**	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Benzo(a)anthracene	SW8270E			1300	1600		--	--	--	**12.4 J**	--	--	--	**11.2 J**	--	--	20.0 U	20.0 U	--	--	--
Benzo(a)pyrene	SW8270E			1600	1600		--	--	--	**20.4 J**	--	--	--	**13.1 J**	--	--	20.0 U	20.0 U	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	**47.6 J**	--	--	--	40.0 U	--	--	40.0 U	39.9 U	--	--	--
Benzo(g,h,i)perylene	SW8270E			670	720		--	--	--	14.9 UJ	--	--	--	**92.9 J**	--	--	**91.7 J**	20.0 U	--	--	--
Carbazole	SW8270E						--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Chrysene	SW8270E			1400	2800		--	--	--	**21.5**	--	--	--	**13.9 J**	--	--	**10.1 J**	20.0 U	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM			230	230		--	--	--	**3.7 J**	--	--	--	**13.1**	--	--	**12.8**	**12.2**	--	--	--
Dibenzofuran	SW8270E			540	540		--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Fluoranthene	SW8270E			1700	2500		--	--	--	**18.0**	--	--	--	**25.9**	--	--	**25.9**	20.0 U	--	--	--
Fluorene	SW8270E			540	540		--	--	--	14.9 U	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		--	--	--	14.9 UJ	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Naphthalene	SW8270E			2100	2100		--	--	--	**15.4**	--	--	--	20.0 U	--	--	20.0 U	20.0 U	--	--	--
Phenanthrene	SW8270E			1500	1500		--	--	--	**17.0**	--	--	--	**14.8 J**	--	--	20.0 U	20.0 U	--	--	--
Pyrene	SW8270E			2600	3300		--	--	--	**93.7**	--	--	--	**33.7**	--	--	**26.5**	20.0 U	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		--	--	--	**47.6 J**	--	--	--	40.0 U	--	--	40.0 U	39.9 U	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	**27.0 J**	--	--	--	**15.7 J**	--	--	**1.38 J**	**1.22**	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	**27.7 J**	--	--	--	**18.7 J**	--	--	**15.4 J**	**15.3**	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		--	--	--	**220 J**	--	--	--	**204 J**	--	--	**167 J**	**12.2**	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		--	--	--	**41 J**	--	--	--	**14.8 J**	--	--	20.0 U	20.0 U	--	--	--
Pesticides (mg/kg-OC)																				
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	--	--	--	--	0.159 UJ	--	--	--	0.0752 UJ	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	--	--	--	--	0.159 UJ	--	--	--	0.0752 UJ	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	--	--	--	--	0.159 UJ	--	--	--	0.0752 UJ	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	--	--	--	--	--	0.159 U	--	--	--	0.0752 U	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	--	--	--	--	--	0.159 U	--	--	--	0.0752 U	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	--	--	--	--	--	0.159 U	--	--	--	0.0752 U	--	--	--
Aldrin	SW8081B						--	--	--	--	--	--	--	0.079 U	--	--	--	0.038 U	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	--	--	--	--	0.079 U	--	--	--	0.038 U	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	--	--	--	--	0.079 U	--	--	--	0.038 U	--	--	--
Dieldrin	SW8081B						--	--	--	--	--	--	--	0.159 U	--	--	--	0.0752 U	--	--	--
Endrin ketone	SW8081B						--	--	--	--	--	--	--	0.159 U	--	--	--	0.0752 U	--	--	--
Heptachlor	SW8081B						--	--	--	--	--	--	--	0.079 U	--	--	--	0.038 U	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	--	--	--	--	0.079 U	--	--	--	0.038 U	--	--	--
Nonachlor, cis-	SW8081B						--	--	--	--	--	--	--	0.159 U	--	--	--	0.0752 U	--	--	--
Nonachlor, trans-	SW8081B						--	--	--	--	--	--	--	0.159 UJ	--	--	--	0.0752 UJ	--	--	--
Oxychlordane	SW8081B						--	--	--	--	--	--	--	0.159 UJ	--	--	--	0.0752 UJ	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC12	TG-SC12	TG-SC12	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC13	TG-SC13	TG-SC14	TG-SC14	TG-SC14	TG-SC15	TG-SC15	TG-SC15RE
						Sample ID	TG-SC12-00-02-241111	TG-SC112-00-02-241111	TG-SC12-02-4.5-241111	TG-SC12RE-04-06-250328	TG-SC12RE-06-08-250328	TG-SC12RE-08-10-250328	TG-SC12RE-10-11.2-250328	TG-SC13-00-02-241113	TG-SC13-02-3.3-241113	TG-SC14-00-02-241114	TG-SC14-02-04-241114	TG-SC14-04-6.1-241114	TG-SC15-00-02-241113	TG-SC15-02-3.2-241113	TG-SC15RE-02-04-250328
						Sample Date	2024-11-11	2024-11-11	2024-11-11	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2025-03-28
						Depth Interval	0 - 2 ft	0 - 2 ft	2 - 4.5 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 3.3 ft	0 - 2 ft	2 - 4 ft	4 - 6.1 ft	0 - 2 ft	2 - 3.2 ft	2 - 4 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (µg/kg)																				
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	0.97 UJ	--	--	--	1.00 UJ	--	--	0.99 UJ	1.00 UJ	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	0.97 U	--	--	--	1.00 UJ	--	--	0.99 UJ	1.00 UJ	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	0.97 U	--	--	--	1.00 UJ	--	--	0.99 UJ	1.00 UJ	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	--	**1.19**	--	--	--	1.00 U	--	--	0.99 U	1.00 U	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	--	0.97 U	--	--	--	1.00 U	--	--	0.99 U	1.00 U	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	--	0.97 U	--	--	--	1.00 U	--	--	0.99 U	1.00 U	--	--	--
Aldrin	SW8081B						--	--	--	0.49 U	--	--	--	0.50 U	--	--	0.50 U	0.50 U	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	0.49 U	--	--	--	0.50 U	--	--	0.50 U	0.50 U	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	0.49 U	--	--	--	0.50 U	--	--	0.50 U	0.50 U	--	--	--
Dieldrin	SW8081B						--	--	--	0.97 U	--	--	--	1.00 U	--	--	0.99 U	1.00 U	--	--	--
Endrin ketone	SW8081B						--	--	--	0.97 U	--	--	--	1.00 U	--	--	0.99 U	1.00 U	--	--	--
Heptachlor	SW8081B						--	--	--	0.49 U	--	--	--	0.50 U	--	--	0.50 U	0.50 U	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	0.49 U	--	--	--	0.50 U	--	--	0.50 U	0.50 U	--	--	--
Nonachlor, cis-	SW8081B						--	--	--	0.97 UJ	--	--	--	1.00 U	--	--	0.99 U	1.00 U	--	--	--
Nonachlor, trans-	SW8081B						--	--	--	0.97 U	--	--	--	1.00 UJ	--	--	0.99 UJ	1.00 UJ	--	--	--
Oxychlordane	SW8081B						--	--	--	0.97 UJ	--	--	--	1.00 UJ	--	--	0.99 UJ	1.00 UJ	--	--	--
Total DDx (U = 0 max limit)	Calculated						--	--	--	**1.19 J**	--	--	--	1.00 UJ	--	--	0.99 UJ	1.00 UJ	--	--	--
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	--	--	**22700 J**	22.7 U	**36.2**	--	**1520**	--	--	**1410**	**8.70 J**	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	--	--	**1960**	**1.12 J**	**2.28 J**	--	**82.3**	--	--	**120**	**0.377 J**	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	**1650**	**1.77 J**	**2.62**	--	**162**	--	--	**130**	**1.01 J**	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	**531 J**	**0.483 J**	**0.658 J**	--	**29.0**	--	--	**64.7 J**	**0.460 J**	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	**44.3 J**	0.117 U	0.110 U	--	**2.16 J**	--	--	**2.44 J**	0.457 UJ	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	**11.2**	0.204 U	0.159 U	--	**1.33**	--	--	**0.968 J**	0.306 U	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	**32.4**	0.102 U	0.101 U	--	**4.13**	--	--	**2.72**	0.217 U	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	**56.2 J**	0.213 U	0.159 U	--	**6.29 J**	--	--	**5.18**	0.306 U	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	**13.4**	0.109 U	0.104 U	--	**1.49**	--	--	**1.06**	0.218 U	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	**27.4**	0.231 U	0.173 U	--	**2.82**	--	--	**1.97**	0.332 U	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	**10.8**	0.145 U	0.149 U	--	**0.581 J**	--	--	0.780 U	0.290 U	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	**8.67**	0.105 U	0.124 U	--	**0.830 J**	--	--	0.618 U	0.324 U	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	**4.25**	0.0799 U	0.0713 U	--	**1.52**	--	--	**0.481 J**	0.262 U	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	**21.2**	0.117 U	0.121 U	--	**1.09**	--	--	**2.03**	0.198 U	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	**4.79 J**	0.0683 U	0.0643 U	--	**0.541 J**	--	--	**0.742 J**	0.268 U	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	**0.841 J**	0.0661 U	0.0657 U	--	**0.216 J**	--	--	0.253 U	0.257 U	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	**4.25 J**	0.0776 U	0.0704 U	--	**2.40 J**	--	--	**1.67 J**	0.221 U	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						--	--	--	**58.4 J**	**0.0229 J**	**0.0443 J**	--	**5.68 J**	--	--	**4.2 J**	**0.0174 J**	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						--	--	--	**58.4 J**	**0.184 J**	**0.202 J**	--	**5.68 J**	--	--	**4.7 J**	**0.459 J**	--	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	**2880**	**4.97**	**5.65 J**	--	**443**	--	--	**241**	**2.63**	--	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	**2680 J**	**1.68 J**	**2.68 J**	--	**120 J**	--	--	**216 J**	0.180 UJ	--	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	**351 J**	**0.699 J**	**0.450 J**	--	**57.5 J**	--	--	**38.5**	0.146 U	--	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	**789**	**0.805 J**	**1.02 J**	--	**45.2**	--	--	**62.9**	**0.388 J**	--	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	**39.7**	**0.112 J**	0.124 U	--	**3.97**	--	--	**0.695 J**	0.137 U	--	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	**90.5 J**	**0.176 J**	**0.164 J**	--	**9.60 J**	--	--	**13.6**	U	--	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	**26.2**	0.0661 U	0.0657 U	--	**5.32**	--	--	**4.15**	0.130 U	--	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	**39.9**	0.0776 U	0.0704 U	--	**7.90 J**	--	--	**7.42**	0.066 U	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC12	TG-SC12	TG-SC12	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC12RE	TG-SC13	TG-SC13	TG-SC14	TG-SC14	TG-SC14	TG-SC15	TG-SC15	TG-SC15RE
						Sample ID	TG-SC12-00-02-241111	TG-SC112-00-02-241111	TG-SC12-02-4.5-241111	TG-SC12RE-04-06-250328	TG-SC12RE-06-08-250328	TG-SC12RE-08-10-250328	TG-SC12RE-10-11.2-250328	TG-SC13-00-02-241113	TG-SC13-02-3.3-241113	TG-SC14-00-02-241114	TG-SC14-02-04-241114	TG-SC14-04-6.1-241114	TG-SC15-00-02-241113	TG-SC15-02-3.2-241113	TG-SC15RE-02-04-250328
						Sample Date	2024-11-11	2024-11-11	2024-11-11	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2025-03-28
						Depth Interval	0 - 2 ft	0 - 2 ft	2 - 4.5 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 3.3 ft	0 - 2 ft	2 - 4 ft	4 - 6.1 ft	0 - 2 ft	2 - 3.2 ft	2 - 4 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	--	--	--	--	--	--	3.16 U	--	--	--	1.50 U	--	--	--
Aroclor 1221	SW8082A						--	--	--	--	--	--	--	3.16 U	--	--	--	1.50 U	--	--	--
Aroclor 1232	SW8082A						--	--	--	--	--	--	--	3.16 U	--	--	--	1.50 U	--	--	--
Aroclor 1242	SW8082A						--	--	--	--	--	--	--	3.16 U	--	--	--	1.50 U	--	--	--
Aroclor 1248	SW8082A						--	--	--	--	--	--	--	3.16 U	--	--	--	1.50 U	--	--	--
Aroclor 1254	SW8082A						--	--	--	--	--	--	--	3.16 U	--	--	--	1.50 U	--	--	--
Aroclor 1260	SW8082A						--	--	--	--	--	--	--	3.16 U	--	--	--	1.50 U	--	--	--
Aroclor 1262	SW8082A						--	--	--	--	--	--	--	3.16 U	--	--	--	1.50 U	--	--	--
Aroclor 1268	SW8082A						--	--	--	--	--	--	--	3.16 U	--	--	--	1.50 U	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	--	--	--	--	--	--	3.16 U	--	--	--	1.50 U	--	--	--
PCB Aroclors (µg/kg)																				
Aroclor 1016	SW8082A						--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U	19.9 U	--	--	--
Aroclor 1221	SW8082A						--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U	19.9 U	--	--	--
Aroclor 1232	SW8082A						--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U	19.9 U	--	--	--
Aroclor 1242	SW8082A						--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U	19.9 U	--	--	--
Aroclor 1248	SW8082A						--	--	--	**62.1**	--	--	--	19.9 U	--	--	19.9 U	19.9 U	--	--	--
Aroclor 1254	SW8082A						--	--	--	**32.4**	--	--	--	19.9 U	--	--	**20.7**	19.9 U	--	--	--
Aroclor 1260	SW8082A						--	--	--	14.6 U	--	--	--	19.9 U	--	--	**24.3**	19.9 U	--	--	--
Aroclor 1262	SW8082A						--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U	19.9 U	--	--	--
Aroclor 1268	SW8082A						--	--	--	14.6 U	--	--	--	19.9 U	--	--	19.9 U	19.9 U	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		--	--	--	**94.5**	--	--	--	19.9 U	--	--	**45.0**	19.9 U	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC16	TG-SC16	TG-SC16	TG-SC16	TG-SC17	TG-SC17	TG-SC17	TG-SC18	TG-SC18	TG-SC18
						Sample ID	TG-SC15RE-04-06-250328	TG-SC115RE-04-06-250328	TG-SC15RE-06-08-250328	TG-SC15RE-08-10-250328	TG-SC15RE-10-10.9-250328	TG-SC16-00-02-241114	TG-SC16-02-04-241114	TG-SC116-02-04-241114	TG-SC16-04-5.4-241114	TG-SC17-00-02-241114	TG-SC17-02-04-241114	TG-SC17-04-6.2-241114	TG-SC18-00-02-241101	TG-SC18-02-04-241101	TG-SC18-04-06-241101
						Sample Date	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-01	2024-11-01	2024-11-01
						Depth Interval	4 - 6 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.9 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 6.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft
						Sample Type Code	N	FD	N	N	N	N	N	FD	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						**0.15 J**	--	--	--	--	--	--	--	**0.29**	--	--	**0.28**	**0.60**	--	**0.22**
Total solids	D2216						**81.21**	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	SM2540G						**80.35**	**80.25**	**74.07**	**79.95**	**79.93**	**65.11**	**74.28**	**74.97**	**79.50**	**63.67**	**68.67**	**77.16**	**71.16**	**71.93**	**80.61**
Total volatile solids	PSEP-TVS						**1.49**	--	--	--	--	--	--	--	**2.00**	--	--	**1.47**	**2.77**	--	**1.59**
Metals (mg/kg)																				
Antimony	SW6020						0.25 UJ	0.23 UJ	0.26 UJ	0.23 UJ	0.23 UJ	**2.87 J**	**0.28 J**	**1.17 J**	0.24 UJ	**0.59 J**	**10.8 J**	0.27 UJ	**0.28**	**0.34**	0.24 U
Arsenic	SW6020	57	93	57	93		**6.58**	**6.43**	**3.22**	**4.22**	**10.1**	**83.6 J**	**33.0**	**33.2 J**	**12.1**	**17.7**	**146**	**5.75**	**28.1**	**31.9**	**3.66**
Cadmium	SW6020	5.1	6.7	5.1	6.7		0.12 U	0.12 U	**0.12 J**	**0.14**	**0.07 J**	**0.30 J**	**0.14**	**0.12 J**	**0.15**	**0.19**	**0.44**	**0.08 J**	**0.28**	**0.20**	**0.10 J**
Chromium	SW6020	260	270	260	270		**10.3 J**	**9.79 J**	**12.0 J**	**11.1 J**	**10.9 J**	**24.8 J**	**11.5**	**16.3 J**	**10.1**	**15.3**	**24.2**	**10.5**	**17.1**	**14.4**	**8.95**
Copper	SW6020	390	390	390	390		**14.7**	**11.6**	**16.2**	**13.4**	**13.0**	**250 J**	**48.3**	**78.7 J**	**19.6**	**56.9**	**232**	**16.1**	**71.4**	**65.3**	**13.7**
Lead	SW6020	450	530	450	530		**1.55**	**1.27**	**1.96**	**1.55**	**1.60**	**77.7 J**	**7.68**	**20.1 J**	**2.26**	**26.3**	**193**	**4.06**	**36.1**	**33.0**	**1.70**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.0109 J**	**0.0107 J**	**0.0156 J**	**0.0190 J**	**0.0148 J**	**0.318 J**	0.0306 U	**0.0257 J**	0.0263 U	**0.0364**	**0.0722**	0.0240 U	**0.105**	**0.0520**	**0.0137 J**
Selenium	SW6020						0.62 U	0.58 U	**0.91**	**0.61**	**1.14**	**1.14 J**	**1.10**	**0.48 J**	**0.92**	**1.01**	**0.92**	0.67 U	**0.64 J**	**0.56 J**	**0.56 J**
Silver	SW6020	6.1	6.1	6.1	6.1		0.25 U	0.23 U	0.26 U	0.23 U	0.23 U	**0.30 J**	**0.09 J**	**0.12 J**	**0.05 J**	**0.26 J**	**0.47**	**0.06 J**	**0.24 J**	**0.19 J**	**0.04 J**
Zinc	SW6020	410	960	410	960		**21.6**	**20.4**	**24.1**	**22.2**	**22.8**	**1090 J**	**109**	**210 J**	**24.1**	**92.3**	**646**	**24.3**	**118**	**98.8**	**20.5**
Organometals (mg/kg-OC)																				
Tributyltin (ion)	SW8270ESIM						--	--	--	--	--	--	--	--	--	--	--	--	**0.910 J**	--	--
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM						2.91 U	--	--	--	--	--	--	--	3.85 U	--	--	3.83 U	**5.46 J**	--	3.84 UJ
Semivolatile Organics (mg/kg-OC)																				
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				--	--	--	--	--	--	--	--	--	--	--	--	0.82 U	--	--
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				--	--	--	--	--	--	--	--	--	--	--	--	0.82 U	--	--
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				--	--	--	--	--	--	--	--	--	--	--	--	0.82 U	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				--	--	--	--	--	--	--	--	--	--	--	--	**12.2**	--	--
Butylbenzyl phthalate	SW8270ESIM	4.9	64				--	--	--	--	--	--	--	--	--	--	--	--	0.82 U	--	--
Di-n-butyl phthalate	SW8270E	220	1700				--	--	--	--	--	--	--	--	--	--	--	--	3.28 U	--	--
Di-n-octyl phthalate	SW8270E	58	4500				--	--	--	--	--	--	--	--	--	--	--	--	3.28 U	--	--
Diethyl phthalate	SW8270ESIM	61	110				--	--	--	--	--	--	--	--	--	--	--	--	3.28 U	--	--
Dimethyl phthalate	SW8270ESIM	53	53				--	--	--	--	--	--	--	--	--	--	--	--	0.82 U	--	--
Hexachlorobenzene	SW8270ESIM	0.38	2.3				--	--	--	--	--	--	--	--	--	--	--	--	0.82 U	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				--	--	--	--	--	--	--	--	--	--	--	--	0.82 U	--	--
n-Nitrosodiphenylamine	SW8270ESIM	11	11				--	--	--	--	--	--	--	--	--	--	--	--	0.82 U	--	--
Pentachlorophenol	SW8270ESIM						--	--	--	--	--	--	--	--	--	--	--	--	**6.75 J**	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC16	TG-SC16	TG-SC16	TG-SC16	TG-SC17	TG-SC17	TG-SC17	TG-SC18	TG-SC18	TG-SC18
						Sample ID	TG-SC15RE-04-06-250328	TG-SC115RE-04-06-250328	TG-SC15RE-06-08-250328	TG-SC15RE-08-10-250328	TG-SC15RE-10-10.9-250328	TG-SC16-00-02-241114	TG-SC16-02-04-241114	TG-SC116-02-04-241114	TG-SC16-04-5.4-241114	TG-SC17-00-02-241114	TG-SC17-02-04-241114	TG-SC17-04-6.2-241114	TG-SC18-00-02-241101	TG-SC18-02-04-241101	TG-SC18-04-06-241101
						Sample Date	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-01	2024-11-01	2024-11-01
						Depth Interval	4 - 6 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.9 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 6.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft
						Sample Type Code	N	FD	N	N	N	N	N	FD	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM			31	51		4.3 U	--	--	--	--	--	--	--	5.0 U	--	--	5.0 U	4.9 U	--	5.0 U
1,2-Dichlorobenzene	SW8270ESIM			35	50		4.3 U	--	--	--	--	--	--	--	5.0 U	--	--	5.0 U	4.9 U	--	5.0 U
1,4-Dichlorobenzene	SW8270ESIM			110	110		4.3 U	--	--	--	--	--	--	--	5.0 U	--	--	5.0 U	4.9 U	--	5.0 U
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29		17.0 U	--	--	--	--	--	--	--	20.0 UJ	--	--	20.0 UJ	19.7 UJ	--	19.9 UJ
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63		4.3 U	--	--	--	--	--	--	--	5.0 U	--	--	5.0 U	4.9 U	--	5.0 U
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670		**3.1 J**	--	--	--	--	--	--	--	5.0 U	--	--	5.0 U	4.9 U	--	5.0 U
Benzoic acid	SW8270ESIM	650	650	650	650		**107 J**	--	--	--	--	--	--	--	500 UJ	--	--	500 UJ	98.6 UJ	--	99.7 UJ
Benzyl alcohol	SW8270ESIM	57	73	57	73		17.0 UJ	--	--	--	--	--	--	--	20.0 UJ	--	--	20.0 UJ	19.7 U	--	19.9 UJ
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900		33.1 U	--	--	--	--	--	--	--	50.0 U	--	--	50.0 U	**73.4**	--	49.9 U
Butylbenzyl phthalate	SW8270ESIM			63	900		7.4 U	--	--	--	--	--	--	--	**5.6**	--	--	**5.8**	4.9 U	--	5.0 U
Di-n-butyl phthalate	SW8270E			1400	1400		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	19.7 U	--	19.9 U
Di-n-octyl phthalate	SW8270E			6200	6200		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	19.7 U	--	19.9 U
Diethyl phthalate	SW8270ESIM			200	1200		17.0 U	--	--	--	--	--	--	--	**15.7 J**	--	--	20.0 U	19.7 U	--	**16.3 J**
Dimethyl phthalate	SW8270ESIM			71	160		4.3 U	--	--	--	--	--	--	--	5.0 U	--	--	5.0 U	4.9 U	--	5.0 U
Hexachlorobenzene	SW8270ESIM			22	70		4.3 U	--	--	--	--	--	--	--	5.0 U	--	--	5.0 U	4.9 U	--	5.0 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120		4.3 U	--	--	--	--	--	--	--	5.0 U	--	--	5.0 U	4.9 U	--	5.0 U
n-Nitrosodiphenylamine	SW8270ESIM			28	40		17.0 U	--	--	--	--	--	--	--	5.0 U	--	--	5.0 U	4.9 U	--	5.0 U
Pentachlorophenol	SW8270ESIM	360	690	360	690		17.0 UJ	--	--	--	--	--	--	--	250 UJ	--	--	250 UJ	**40.5 J**	--	19.9 UJ
Phenol	SW8270ESIM	420	1200	420	1200		4.3 U	--	--	--	--	--	--	--	5.0 U	--	--	5.0 U	4.9 U	--	5.0 U
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																				
2-Methylnaphthalene	SW8270E	38	64				--	--	--	--	--	--	--	--	--	--	--	--	3.28 U	--	--
Acenaphthene	SW8270E	16	57				--	--	--	--	--	--	--	--	--	--	--	--	**2.60 J**	--	--
Acenaphthylene	SW8270E	66	66				--	--	--	--	--	--	--	--	--	--	--	--	3.28 U	--	--
Anthracene	SW8270E	220	1200				--	--	--	--	--	--	--	--	--	--	--	--	**2.72 J**	--	--
Benzo(a)anthracene	SW8270E	110	270				--	--	--	--	--	--	--	--	--	--	--	--	**9.77**	--	--
Benzo(a)pyrene	SW8270E	99	210				--	--	--	--	--	--	--	--	--	--	--	--	**9.82**	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	--	--	--	--	--	--	--	--	--	**20.2**	--	--
Benzo(g,h,i)perylene	SW8270E	31	78				--	--	--	--	--	--	--	--	--	--	--	--	**19.5 J**	--	--
Carbazole	SW8270E						--	--	--	--	--	--	--	--	--	--	--	--	**2.30 J**	--	--
Chrysene	SW8270E	110	460				--	--	--	--	--	--	--	--	--	--	--	--	**14.1**	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	12	33				--	--	--	--	--	--	--	--	--	--	--	--	**2.80**	--	--
Dibenzofuran	SW8270E	15	58				--	--	--	--	--	--	--	--	--	--	--	--	3.28 U	--	--
Fluoranthene	SW8270E	160	1200				--	--	--	--	--	--	--	--	--	--	--	--	**25.8**	--	--
Fluorene	SW8270E	23	79				--	--	--	--	--	--	--	--	--	--	--	--	3.28 U	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88				--	--	--	--	--	--	--	--	--	--	--	--	**5.52**	--	--
Naphthalene	SW8270E	99	170				--	--	--	--	--	--	--	--	--	--	--	--	**1.93 J**	--	--
Phenanthrene	SW8270E	100	480				--	--	--	--	--	--	--	--	--	--	--	--	**14.5**	--	--
Pyrene	SW8270E	1000	1400				--	--	--	--	--	--	--	--	--	--	--	--	**23**	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	--	--	--	--	--	--	--	--	--	--	**20.2**	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	--	--	--	--	--	--	--	--	--	--	**130 J**	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	--	--	--	--	--	--	--	--	--	--	**22 J**	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC16	TG-SC16	TG-SC16	TG-SC16	TG-SC17	TG-SC17	TG-SC17	TG-SC18	TG-SC18	TG-SC18
						Sample ID	TG-SC15RE-04-06-250328	TG-SC115RE-04-06-250328	TG-SC15RE-06-08-250328	TG-SC15RE-08-10-250328	TG-SC15RE-10-10.9-250328	TG-SC16-00-02-241114	TG-SC16-02-04-241114	TG-SC116-02-04-241114	TG-SC16-04-5.4-241114	TG-SC17-00-02-241114	TG-SC17-02-04-241114	TG-SC17-04-6.2-241114	TG-SC18-00-02-241101	TG-SC18-02-04-241101	TG-SC18-04-06-241101
						Sample Date	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-01	2024-11-01	2024-11-01
						Depth Interval	4 - 6 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.9 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 6.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft
						Sample Type Code	N	FD	N	N	N	N	N	FD	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E			670	670		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	19.7 U	--	19.9 U
Acenaphthene	SW8270E			500	500		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**15.6 J**	--	19.9 U
Acenaphthylene	SW8270E			1300	1300		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	19.7 U	--	19.9 U
Anthracene	SW8270E			960	960		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**16.3 J**	--	19.9 U
Benzo(a)anthracene	SW8270E			1300	1600		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**58.6**	--	19.9 U
Benzo(a)pyrene	SW8270E			1600	1600		13.2 UJ	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**58.9**	--	19.9 U
Benzo(b,j,k)fluoranthenes	SW8270E						26.5 UJ	--	--	--	--	--	--	--	40.0 U	--	--	40.0 U	**121**	--	39.9 U
Benzo(g,h,i)perylene	SW8270E			670	720		13.2 UJ	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**117 J**	--	19.9 U
Carbazole	SW8270E						13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**13.8 J**	--	19.9 U
Chrysene	SW8270E			1400	2800		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**84.5**	--	19.9 U
Dibenzo(a,h)anthracene	SW8270ESIM			230	230		4.3 U	--	--	--	--	--	--	--	**12.3**	--	--	**12.7**	**16.8**	--	5.0 U
Dibenzofuran	SW8270E			540	540		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	19.7 U	--	19.9 U
Fluoranthene	SW8270E			1700	2500		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**155**	--	19.9 U
Fluorene	SW8270E			540	540		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	19.7 U	--	19.9 U
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		13.2 UJ	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**33.1**	--	19.9 U
Naphthalene	SW8270E			2100	2100		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**11.6 J**	--	19.9 U
Phenanthrene	SW8270E			1500	1500		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**86.9**	--	19.9 U
Pyrene	SW8270E			2600	3300		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	**12.3 J**	**140**	--	19.9 U
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		26.5 UJ	--	--	--	--	--	--	--	40.0 U	--	--	40.0 U	**121**	--	39.9 U
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						13.2 UJ	--	--	--	--	--	--	--	**1.23**	--	--	**1.27**	**82.7**	--	19.9 U
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						13.2 UJ	--	--	--	--	--	--	--	**15.3**	--	--	**15.4**	**82.7**	--	19.9 U
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		26.5 UJ	--	--	--	--	--	--	--	**12.3**	--	--	**25.0 J**	**780 J**	--	39.9 U
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		13.2 U	--	--	--	--	--	--	--	20.0 U	--	--	20.0 U	**130 J**	--	19.9 U
Pesticides (mg/kg-OC)																				
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.167 UJ	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.167 UJ	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.167 UJ	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	**0.300 J**	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.167 U	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.167 U	--	--
Aldrin	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.083 U	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.083 U	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.083 U	--	--
Dieldrin	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.167 U	--	--
Endrin ketone	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.167 U	--	--
Heptachlor	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.083 U	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.083 U	--	--
Nonachlor, cis-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.167 U	--	--
Nonachlor, trans-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.167 UJ	--	--
Oxychlordane	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	0.167 UJ	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC16	TG-SC16	TG-SC16	TG-SC16	TG-SC17	TG-SC17	TG-SC17	TG-SC18	TG-SC18	TG-SC18
						Sample ID	TG-SC15RE-04-06-250328	TG-SC115RE-04-06-250328	TG-SC15RE-06-08-250328	TG-SC15RE-08-10-250328	TG-SC15RE-10-10.9-250328	TG-SC16-00-02-241114	TG-SC16-02-04-241114	TG-SC116-02-04-241114	TG-SC16-04-5.4-241114	TG-SC17-00-02-241114	TG-SC17-02-04-241114	TG-SC17-04-6.2-241114	TG-SC18-00-02-241101	TG-SC18-02-04-241101	TG-SC18-04-06-241101
						Sample Date	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-01	2024-11-01	2024-11-01
						Depth Interval	4 - 6 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.9 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 6.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft
						Sample Type Code	N	FD	N	N	N	N	N	FD	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (µg/kg)																					
2,4'-DDD (o,p'-DDD)	SW8081B						0.78 UJ	--	--	--	--	--	--	--	1.00 UJ	--	--	1.00 UJ	1.00 UJ	--	1.00 UJ
2,4'-DDE (o,p'-DDE)	SW8081B						0.78 U	--	--	--	--	--	--	--	1.00 UJ	--	--	1.00 UJ	1.00 UJ	--	1.00 UJ
2,4'-DDT (o,p'-DDT)	SW8081B						0.78 U	--	--	--	--	--	--	--	1.00 UJ	--	--	1.00 UJ	1.00 UJ	--	1.00 UJ
4,4'-DDD (p,p'-DDD)	SW8081B						0.78 U	--	--	--	--	--	--	--	1.00 U	--	--	1.00 U	**1.80 J**	--	1.00 U
4,4'-DDE (p,p'-DDE)	SW8081B						0.78 U	--	--	--	--	--	--	--	1.00 U	--	--	**2.02**	1.00 U	--	1.00 U
4,4'-DDT (p,p'-DDT)	SW8081B						0.78 U	--	--	--	--	--	--	--	1.00 U	--	--	**1.16**	1.00 U	--	1.00 U
Aldrin	SW8081B						0.39 U	--	--	--	--	--	--	--	0.50 U	--	--	0.50 U	0.50 U	--	0.50 U
Chlordane, alpha- (Chlordane, cis-)	SW8081B						0.39 U	--	--	--	--	--	--	--	0.50 U	--	--	0.47 U	0.50 U	--	0.50 U
Chlordane, beta- (Chlordane, trans-)	SW8081B						0.39 U	--	--	--	--	--	--	--	0.50 U	--	--	**0.99**	0.50 U	--	0.50 U
Dieldrin	SW8081B						0.78 U	--	--	--	--	--	--	--	1.00 U	--	--	1.00 U	1.00 U	--	1.00 U
Endrin ketone	SW8081B						0.78 U	--	--	--	--	--	--	--	1.00 U	--	--	**0.95 J**	1.00 U	--	1.00 U
Heptachlor	SW8081B						0.39 U	--	--	--	--	--	--	--	0.50 U	--	--	0.50 U	0.50 U	--	0.50 U
Hexachlorocyclohexane (BHC), beta-	SW8081B						0.39 U	--	--	--	--	--	--	--	0.50 U	--	--	0.50 U	0.50 U	--	0.50 U
Nonachlor, cis-	SW8081B						0.78 UJ	--	--	--	--	--	--	--	1.00 U	--	--	1.00 U	1.00 U	--	1.00 U
Nonachlor, trans-	SW8081B						0.78 U	--	--	--	--	--	--	--	1.00 UJ	--	--	1.00 UJ	1.00 UJ	--	1.00 UJ
Oxychlordane	SW8081B						0.78 UJ	--	--	--	--	--	--	--	1.00 UJ	--	--	1.00 UJ	1.00 UJ	--	1.00 UJ
Total DDx (U = 0 max limit)	Calculated						0.78 UJ	--	--	--	--	--	--	--	1.00 UJ	--	--	**3.18 J**	**1.80 J**	--	1.00 UJ
Dioxin Furans (ng/kg)																					
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**1.81 J**	--	--	--	--	--	--	--	**4.85 J**	--	--	**2300**	**5680 J**	--	**111**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						0.561 U	--	--	--	--	--	--	--	0.497 U	--	--	**135**	**140**	--	**1.46 J**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						0.407 U	--	--	--	--	--	--	--	**0.471 J**	--	--	**187**	**578**	--	**8.84**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						0.217 UJ	--	--	--	--	--	--	--	**0.456 J**	--	--	**56.7 J**	**87.8 J**	--	**1.48 J**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						0.384 UJ	--	--	--	--	--	--	--	0.352 UJ	--	--	**3.29 J**	**5.23 J**	--	0.371 UJ
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.279 U	--	--	--	--	--	--	--	0.281 U	--	--	**1.46**	**5.25**	--	0.398 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						0.153 U	--	--	--	--	--	--	--	0.226 U	--	--	**4.99**	**13.6**	--	**0.185 J**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.285 U	--	--	--	--	--	--	--	0.293 U	--	--	**6.99**	**30.2**	--	0.429 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						0.153 U	--	--	--	--	--	--	--	0.214 U	--	--	**2.54**	**4.96**	--	0.217 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.306 U	--	--	--	--	--	--	--	0.312 U	--	--	**3.16**	**12.5**	--	0.450 U
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						0.225 U	--	--	--	--	--	--	--	0.298 U	--	--	**1.47**	**4.79**	--	0.306 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						0.336 U	--	--	--	--	--	--	--	0.370 U	--	--	**1.17**	**4.80**	--	0.352 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						0.194 U	--	--	--	--	--	--	--	0.262 U	--	--	**0.841 J**	**3.50**	--	0.331 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						0.161 U	--	--	--	--	--	--	--	0.221 U	--	--	**1.82**	**2.59**	--	0.206 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						0.208 UJ	--	--	--	--	--	--	--	0.283 U	--	--	**1.06**	**2.75**	--	0.334 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						0.215 U	--	--	--	--	--	--	--	0.193 U	--	--	**0.283 J**	**0.525 J**	--	0.216 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						0.224 U	--	--	--	--	--	--	--	0.231 U	--	--	**2.23 J**	**6.74 J**	--	0.225 U
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						**0.000543 J**	--	--	--	--	--	--	--	**0.0107 J**	--	--	**7.5 J**	**23 J**	--	**0.155 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						**0.405 J**	--	--	--	--	--	--	--	**0.444 J**	--	--	**7.5 J**	**23 J**	--	**0.608 J**
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						0.159 U	--	--	--	--	--	--	--	**0.921 J**	--	--	**340**	**1270**	--	**8.84**
Total Heptachlorodibenzofuran (HpCDF)	E1613B						0.127 UJ	--	--	--	--	--	--	--	**0.456 J**	--	--	**232 J**	**357 J**	--	**5.65 J**
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						0.124 U	--	--	--	--	--	--	--	**0.165 J**	--	--	**42.2**	**250**	--	0.221 U
Total Hexachlorodibenzofuran (HxCDF)	E1613B						0.091 U	--	--	--	--	--	--	--	0.131 U	--	--	**97.5**	**220**	--	**2.59**
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						0.149 U	--	--	--	--	--	--	--	0.142 U	--	--	**2.93**	**24.7**	--	0.144 U
Total Pentachlorodibenzofuran (PeCDF)	E1613B						UJ	--	--	--	--	--	--	--	U	--	--	**20.1**	**57.5**	--	**0.174 J**
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						0.142 U	--	--	--	--	--	--	--	**0.229 J**	--	--	**6.09**	**29.2**	--	0.128 U
Total Tetrachlorodibenzofuran (TCDF)	E1613B						0.081 U	--	--	--	--	--	--	--	0.089 U	--	--	**9.83**	**34.7**	--	0.088 U

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC15RE	TG-SC16	TG-SC16	TG-SC16	TG-SC16	TG-SC17	TG-SC17	TG-SC17	TG-SC18	TG-SC18	TG-SC18
						Sample ID	TG-SC15RE-04-06-250328	TG-SC115RE-04-06-250328	TG-SC15RE-06-08-250328	TG-SC15RE-08-10-250328	TG-SC15RE-10-10.9-250328	TG-SC16-00-02-241114	TG-SC16-02-04-241114	TG-SC116-02-04-241114	TG-SC16-04-5.4-241114	TG-SC17-00-02-241114	TG-SC17-02-04-241114	TG-SC17-04-6.2-241114	TG-SC18-00-02-241101	TG-SC18-02-04-241101	TG-SC18-04-06-241101
						Sample Date	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-14	2024-11-01	2024-11-01	2024-11-01
						Depth Interval	4 - 6 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.9 ft	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 6.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft
						Sample Type Code	N	FD	N	N	N	N	N	FD	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	3.27 U	--	--
Aroclor 1221	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	3.27 U	--	--
Aroclor 1232	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	3.27 U	--	--
Aroclor 1242	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	3.27 U	--	--
Aroclor 1248	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	**10.7**	--	--
Aroclor 1254	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	**8.43**	--	--
Aroclor 1260	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	**4.32**	--	--
Aroclor 1262	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	3.27 U	--	--
Aroclor 1268	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	3.27 U	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	--	--	--	--	--	--	--	--	--	--	--	**23**	--	--
PCB Aroclors (µg/kg)																				
Aroclor 1016	SW8082A						17.0 U	--	--	--	--	--	--	--	19.5 U	--	--	19.8 U	19.6 U	--	20.0 U
Aroclor 1221	SW8082A						17.0 U	--	--	--	--	--	--	--	19.5 U	--	--	19.8 U	19.6 U	--	20.0 U
Aroclor 1232	SW8082A						17.0 U	--	--	--	--	--	--	--	19.5 U	--	--	19.8 U	19.6 U	--	20.0 U
Aroclor 1242	SW8082A						17.0 U	--	--	--	--	--	--	--	19.5 U	--	--	19.8 U	19.6 U	--	20.0 U
Aroclor 1248	SW8082A						17.0 U	--	--	--	--	--	--	--	19.5 U	--	--	19.8 U	**63.9**	--	20.0 U
Aroclor 1254	SW8082A						17.0 U	--	--	--	--	--	--	--	19.5 U	--	--	19.8 U	**50.6**	--	20.0 U
Aroclor 1260	SW8082A						17.0 U	--	--	--	--	--	--	--	19.5 U	--	--	19.8 U	**25.9**	--	20.0 U
Aroclor 1262	SW8082A						17.0 U	--	--	--	--	--	--	--	19.5 U	--	--	19.8 U	19.6 U	--	20.0 U
Aroclor 1268	SW8082A						17.0 U	--	--	--	--	--	--	--	19.5 U	--	--	19.8 U	19.6 U	--	20.0 U
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		17.0 U	--	--	--	--	--	--	--	19.5 U	--	--	19.8 U	**140**	--	20.0 U

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC18	TG-SC18	TG-SC19	TG-SC19	TG-SC19	TG-SC20	TG-SC20	TG-SC20	TG-SC21	TG-SC21	TG-SC21	TG-SC22	TG-SC22	TG-SC22	TG-SC22
						Sample ID	TG-SC18-06-08-241101	TG-SC18-08-9.9-241101	TG-SC19-00-02-241112	TG-SC19-02-04-241112	TG-SC19-04-5.4-241112	TG-SC20-00-02-241114	TG-SC20-02-04-241114	TG-SC20-04-4.8-241114	TG-SC21-00-02-241113	TG-SC21-02-04-241113	TG-SC21-04-06-241113	TG-SC22-00-02-241114	TG-SC22-02-04-241114	TG-SC22-04-06-241114	TG-SC22-06-6.8-241114
						Sample Date	2024-11-01	2024-11-01	2024-11-12	2024-11-12	2024-11-12	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-14
						Depth Interval	6 - 8 ft	8 - 9.9 ft	0 - 2 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 4.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	--	**0.61**	--	--	**0.61**	--	--	**0.67**	--	--	**0.70**	--	--	--
Total solids	D2216						--	--	--	--	--	--	--	--	--	**79.46**	--	--	**79.77**	--	--
Total solids	SM2540G						**84.32**	**85.90**	**66.72**	**79.29**	**86.18**	**71.67**	**73.56**	**78.21**	**68.44**	**78.77**	**81.55**	**69.81**	**78.61**	**68.96**	**76.75**
Total volatile solids	PSEP-TVS						--	--	**2.98**	--	--	**2.84**	--	--	**2.99**	--	--	**2.91**	--	--	--
Metals (mg/kg)																				
Antimony	SW6020						0.24 U	0.23 U	0.29 UJ	0.24 UJ	0.22 U	0.27 UJ	0.26 UJ	0.25 UJ	0.27 UJ	0.25 UJ	0.24 UJ	0.28 UJ	0.25 UJ	0.28 UJ	0.26 UJ
Arsenic	SW6020	57	93	57	93		**4.59**	**4.61**	**5.92**	**4.59**	**3.98 J**	**4.65**	**1.86**	**1.42**	**6.17**	**3.97**	**1.21**	**5.35**	**1.52**	**1.49**	**1.59**
Cadmium	SW6020	5.1	6.7	5.1	6.7		**0.05 J**	**0.05 J**	**0.14 J**	**0.07 J**	0.11 U	**0.08 J**	**0.07 J**	0.12 U	**0.12 J**	**0.12 J**	0.12 U	**0.12 J**	0.13 U	**0.04 J**	**0.04 J**
Chromium	SW6020	260	270	260	270		**10.8**	**9.78**	**14.8 J**	**9.46 J**	**8.29**	**11.1**	**10.4**	**9.03**	**12.4**	**9.90**	**9.00**	**12.7**	**17.4**	**11.0**	**12.2**
Copper	SW6020	390	390	390	390		**9.91**	**8.84**	**36.5 J**	**19.5 J**	**10.1**	**27.2**	**14.5**	**11.0**	**31.4**	**18.9**	**8.96**	**33.0**	**12.1**	**16.9**	**20.4**
Lead	SW6020	450	530	450	530		**1.36**	**1.23**	**12.6 J**	**4.86 J**	**1.36 J**	**7.14**	**1.68**	**1.17**	**8.01**	**3.31**	**1.06**	**9.44**	**1.73**	**1.59**	**2.02**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.00720 J**	0.0242 U	**0.0494**	**0.0122 J**	**0.00694 J**	0.0335 U	0.0302 U	0.0257 U	0.0323 U	0.0290 U	0.0238 U	**0.00942 J**	0.0222 U	0.0281 U	0.0303 U
Selenium	SW6020						**0.50 J**	**0.35 J**	**0.83**	**0.56 J**	**0.58**	0.68 U	0.65 U	0.62 U	0.68 U	0.62 U	0.61 U	0.78 U	0.63 U	0.69 U	0.64 U
Silver	SW6020	6.1	6.1	6.1	6.1		**0.04 J**	**0.03 J**	**0.11 J**	**0.06 J**	**0.03 J**	**0.09 J**	**0.04 J**	0.25 U	**0.10 J**	**0.05 J**	0.24 U	**0.13 J**	0.25 U	**0.04 J**	**0.04 J**
Zinc	SW6020	410	960	410	960		**19.2**	**18.6**	**51.2 J**	**29.4 J**	**19.5 J**	**38.8**	**19.9**	**17.7**	**48.4**	**26.1**	**16.5**	**45.6**	**18.8**	**20.6**	**24.2**
Organometals (mg/kg-OC)																					
Tributyltin (ion)	SW8270ESIM						--	--	0.631 UJ	--	--	**0.343 J**	--	--	**2.96**	--	--	0.549 U	--	--	--
Organometals (µg/kg)																					
Tributyltin (ion)	SW8270ESIM						--	--	3.85 UJ	--	--	**2.09 J**	--	--	**19.8**	--	--	3.84 U	--	--	--
Semivolatile Organics (mg/kg-OC)																					
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				--	--	0.82 U	--	--	0.82 U	--	--	0.75 U	--	--	0.71 U	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				--	--	0.82 U	--	--	0.82 U	--	--	0.75 U	--	--	0.71 U	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				--	--	0.82 U	--	--	0.82 U	--	--	0.75 U	--	--	0.71 U	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				--	--	8.18 U	--	--	8.18 U	--	--	7.45 U	--	--	7.14 U	--	--	--
Butylbenzyl phthalate	SW8270ESIM	4.9	64				--	--	0.82 U	--	--	**1.1**	--	--	**0.84**	--	--	**0.94**	--	--	--
Di-n-butyl phthalate	SW8270E	220	1700				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	2.86 U	--	--	--
Di-n-octyl phthalate	SW8270E	58	4500				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	2.86 U	--	--	--
Diethyl phthalate	SW8270ESIM	61	110				--	--	3.28 U	--	--	**4.61**	--	--	**5.13**	--	--	2.86 U	--	--	--
Dimethyl phthalate	SW8270ESIM	53	53				--	--	0.82 U	--	--	0.82 U	--	--	0.75 U	--	--	0.71 U	--	--	--
Hexachlorobenzene	SW8270ESIM	0.38	2.3				--	--	0.82 U	--	--	0.82 U	--	--	0.75 U	--	--	0.71 U	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				--	--	0.82 U	--	--	0.82 U	--	--	0.75 U	--	--	0.71 U	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	11	11				--	--	0.82 U	--	--	0.82 U	--	--	0.75 U	--	--	0.71 U	--	--	--
Pentachlorophenol	SW8270ESIM						--	--	3.28 UJ	--	--	41 UJ	--	--	37 UJ	--	--	36 UJ	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC18	TG-SC18	TG-SC19	TG-SC19	TG-SC19	TG-SC20	TG-SC20	TG-SC20	TG-SC21	TG-SC21	TG-SC21	TG-SC22	TG-SC22	TG-SC22	TG-SC22
						Sample ID	TG-SC18-06-08-241101	TG-SC18-08-9.9-241101	TG-SC19-00-02-241112	TG-SC19-02-04-241112	TG-SC19-04-5.4-241112	TG-SC20-00-02-241114	TG-SC20-02-04-241114	TG-SC20-04-4.8-241114	TG-SC21-00-02-241113	TG-SC21-02-04-241113	TG-SC21-04-06-241113	TG-SC22-00-02-241114	TG-SC22-02-04-241114	TG-SC22-04-06-241114	TG-SC22-06-6.8-241114
						Sample Date	2024-11-01	2024-11-01	2024-11-12	2024-11-12	2024-11-12	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-14
						Depth Interval	6 - 8 ft	8 - 9.9 ft	0 - 2 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 4.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM			31	51		--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--
1,2-Dichlorobenzene	SW8270ESIM			35	50		--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--
1,4-Dichlorobenzene	SW8270ESIM			110	110		--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29		--	--	20.0 UJ	--	--	20.0 UJ	--	--	20.0 UJ	--	--	20.0 UJ	--	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63		--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670		--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--
Benzoic acid	SW8270ESIM	650	650	650	650		--	--	99.9 UJ	--	--	499 UJ	--	--	499 UJ	--	--	500 UJ	--	--	--
Benzyl alcohol	SW8270ESIM	57	73	57	73		--	--	20.0 U	--	--	20.0 UJ	--	--	20.0 UJ	--	--	20.0 UJ	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900		--	--	49.9 U	--	--	49.9 U	--	--	49.9 U	--	--	50.0 U	--	--	--
Butylbenzyl phthalate	SW8270ESIM			63	900		--	--	5.0 U	--	--	**7.0**	--	--	**5.6**	--	--	**6.6**	--	--	--
Di-n-butyl phthalate	SW8270E			1400	1400		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--
Di-n-octyl phthalate	SW8270E			6200	6200		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--
Diethyl phthalate	SW8270ESIM			200	1200		--	--	20.0 U	--	--	**28.1**	--	--	**34.4**	--	--	20.0 U	--	--	--
Dimethyl phthalate	SW8270ESIM			71	160		--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--
Hexachlorobenzene	SW8270ESIM			22	70		--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120		--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM			28	40		--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--
Pentachlorophenol	SW8270ESIM	360	690	360	690		--	--	20.0 UJ	--	--	250 UJ	--	--	250 UJ	--	--	250 UJ	--	--	--
Phenol	SW8270ESIM	420	1200	420	1200		--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	5.0 U	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																				
2-Methylnaphthalene	SW8270E	38	64				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	2.86 U	--	--	--
Acenaphthene	SW8270E	16	57				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	2.86 U	--	--	--
Acenaphthylene	SW8270E	66	66				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	2.86 U	--	--	--
Anthracene	SW8270E	220	1200				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	**1.76 J**	--	--	--
Benzo(a)anthracene	SW8270E	110	270				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	**3.91**	--	--	--
Benzo(a)pyrene	SW8270E	99	210				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	**4.31**	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	6.56 U	--	--	6.56 U	--	--	5.96 U	--	--	**7.91**	--	--	--
Benzo(g,h,i)perylene	SW8270E	31	78				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	**13.8 J**	--	--	--
Carbazole	SW8270E						--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	2.86 U	--	--	--
Chrysene	SW8270E	110	460				--	--	3.28 U	--	--	**2.49 J**	--	--	**1.76 J**	--	--	**4.61**	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	12	33				--	--	0.82 U	--	--	**2.07**	--	--	**1.90**	--	--	**1.99**	--	--	--
Dibenzofuran	SW8270E	15	58				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	2.86 U	--	--	--
Fluoranthene	SW8270E	160	1200				--	--	3.28 U	--	--	3.28 U	--	--	**1.97 J**	--	--	**9.64**	--	--	--
Fluorene	SW8270E	23	79				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	2.86 U	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	2.86 U	--	--	--
Naphthalene	SW8270E	99	170				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	2.86 U	--	--	--
Phenanthrene	SW8270E	100	480				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	**6.07**	--	--	--
Pyrene	SW8270E	1000	1400				--	--	3.28 U	--	--	3.28 U	--	--	**3.76**	--	--	**9.47**	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	6.56 U	--	--	6.56 U	--	--	5.96 U	--	--	**7.91**	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	6.56 U	--	--	**4.56 J**	--	--	**9.39 J**	--	--	**56 J**	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	3.28 U	--	--	3.28 U	--	--	2.99 U	--	--	**7.83 J**	--	--	--

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC18	TG-SC18	TG-SC19	TG-SC19	TG-SC19	TG-SC20	TG-SC20	TG-SC20	TG-SC21	TG-SC21	TG-SC21	TG-SC22	TG-SC22	TG-SC22	TG-SC22
						Sample ID	TG-SC18-06-08-241101	TG-SC18-08-9.9-241101	TG-SC19-00-02-241112	TG-SC19-02-04-241112	TG-SC19-04-5.4-241112	TG-SC20-00-02-241114	TG-SC20-02-04-241114	TG-SC20-04-4.8-241114	TG-SC21-00-02-241113	TG-SC21-02-04-241113	TG-SC21-04-06-241113	TG-SC22-00-02-241114	TG-SC22-02-04-241114	TG-SC22-04-06-241114	TG-SC22-06-6.8-241114
						Sample Date	2024-11-01	2024-11-01	2024-11-12	2024-11-12	2024-11-12	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-14
						Depth Interval	6 - 8 ft	8 - 9.9 ft	0 - 2 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 4.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																					
2-Methylnaphthalene	SW8270E			670	670		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--
Acenaphthene	SW8270E			500	500		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--
Acenaphthylene	SW8270E			1300	1300		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--
Anthracene	SW8270E			960	960		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	**12.3 J**	--	--	--
Benzo(a)anthracene	SW8270E			1300	1600		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	**27.4**	--	--	--
Benzo(a)pyrene	SW8270E			1600	1600		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	**30.2**	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	40.0 U	--	--	40.0 U	--	--	39.9 U	--	--	**55.4**	--	--	--
Benzo(g,h,i)perylene	SW8270E			670	720		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	**96.9 J**	--	--	--
Carbazole	SW8270E						--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--
Chrysene	SW8270E			1400	2800		--	--	20.0 U	--	--	**15.2 J**	--	--	**11.8 J**	--	--	**32.3**	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM			230	230		--	--	5.0 U	--	--	**12.6**	--	--	**12.7**	--	--	**13.9**	--	--	--
Dibenzofuran	SW8270E			540	540		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--
Fluoranthene	SW8270E			1700	2500		--	--	20.0 U	--	--	20.0 U	--	--	**13.2 J**	--	--	**67.5**	--	--	--
Fluorene	SW8270E			540	540		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--
Naphthalene	SW8270E			2100	2100		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	--
Phenanthrene	SW8270E			1500	1500		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	**42.5**	--	--	--
Pyrene	SW8270E			2600	3300		--	--	20.0 U	--	--	20.0 U	--	--	**25.2**	--	--	**66.3**	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		--	--	40.0 U	--	--	40.0 U	--	--	39.9 U	--	--	**55.4**	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	20.0 U	--	--	**1.41 J**	--	--	**1.39 J**	--	--	**40.2**	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	20.0 U	--	--	**15.4 J**	--	--	**15.4 J**	--	--	**41.2**	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		--	--	40.0 U	--	--	**27.8 J**	--	--	**62.9 J**	--	--	**390 J**	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		--	--	20.0 U	--	--	20.0 U	--	--	20.0 U	--	--	**54.8 J**	--	--	--
Pesticides (mg/kg-OC)																					
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	0.16 UJ	--	--	0.164 UJ	--	--	0.149 UJ	--	--	0.143 UJ	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	0.16 UJ	--	--	0.164 UJ	--	--	0.149 UJ	--	--	0.143 UJ	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	0.16 UJ	--	--	0.164 UJ	--	--	0.149 UJ	--	--	0.143 UJ	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	0.16 U	--	--	0.164 U	--	--	0.149 U	--	--	0.143 U	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	0.16 U	--	--	0.164 U	--	--	0.149 U	--	--	0.143 U	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	0.16 U	--	--	0.164 U	--	--	0.149 U	--	--	0.143 U	--	--	--
Aldrin	SW8081B						--	--	0.080 U	--	--	0.082 U	--	--	0.075 U	--	--	0.071 UJ	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	0.080 U	--	--	0.082 U	--	--	0.075 U	--	--	0.071 U	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	0.080 U	--	--	0.082 U	--	--	0.075 U	--	--	0.071 UJ	--	--	--
Dieldrin	SW8081B						--	--	0.16 U	--	--	0.164 U	--	--	0.149 U	--	--	0.143 U	--	--	--
Endrin ketone	SW8081B						--	--	0.16 U	--	--	0.164 U	--	--	0.149 U	--	--	0.143 U	--	--	--
Heptachlor	SW8081B						--	--	0.080 U	--	--	0.082 U	--	--	0.075 U	--	--	0.071 UJ	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	0.080 U	--	--	0.082 U	--	--	0.075 U	--	--	0.071 U	--	--	--
Nonachlor, cis-	SW8081B						--	--	0.16 U	--	--	0.164 U	--	--	0.149 U	--	--	0.143 U	--	--	--
Nonachlor, trans-	SW8081B						--	--	0.16 UJ	--	--	0.164 UJ	--	--	0.149 UJ	--	--	0.143 UJ	--	--	--
Oxychlordane	SW8081B						--	--	0.16 UJ	--	--	0.164 UJ	--	--	0.149 UJ	--	--	0.143 UJ	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC18	TG-SC18	TG-SC19	TG-SC19	TG-SC19	TG-SC20	TG-SC20	TG-SC20	TG-SC21	TG-SC21	TG-SC21	TG-SC22	TG-SC22	TG-SC22	TG-SC22
						Sample ID	TG-SC18-06-08-241101	TG-SC18-08-9.9-241101	TG-SC19-00-02-241112	TG-SC19-02-04-241112	TG-SC19-04-5.4-241112	TG-SC20-00-02-241114	TG-SC20-02-04-241114	TG-SC20-04-4.8-241114	TG-SC21-00-02-241113	TG-SC21-02-04-241113	TG-SC21-04-06-241113	TG-SC22-00-02-241114	TG-SC22-02-04-241114	TG-SC22-04-06-241114	TG-SC22-06-6.8-241114
						Sample Date	2024-11-01	2024-11-01	2024-11-12	2024-11-12	2024-11-12	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-14
						Depth Interval	6 - 8 ft	8 - 9.9 ft	0 - 2 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 4.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (µg/kg)																					
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	0.98 U	--	--	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	0.98 U	--	--	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	0.98 U	--	--	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--
Aldrin	SW8081B						--	--	0.49 U	--	--	0.50 U	--	--	0.50 U	--	--	0.50 UJ	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	0.49 U	--	--	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	0.49 U	--	--	0.50 U	--	--	0.50 U	--	--	0.50 UJ	--	--	--
Dieldrin	SW8081B						--	--	0.98 U	--	--	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--
Endrin ketone	SW8081B						--	--	0.98 U	--	--	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--
Heptachlor	SW8081B						--	--	0.49 U	--	--	0.50 U	--	--	0.50 U	--	--	0.50 UJ	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	0.49 U	--	--	0.50 U	--	--	0.50 U	--	--	0.50 U	--	--	--
Nonachlor, cis-	SW8081B						--	--	0.98 U	--	--	1.00 U	--	--	1.00 U	--	--	1.00 U	--	--	--
Nonachlor, trans-	SW8081B						--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--
Oxychlordane	SW8081B						--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--
Total DDx (U = 0 max limit)	Calculated						--	--	0.98 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	1.00 UJ	--	--	--
Dioxin Furans (ng/kg)																					
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	--	**1210**	--	--	**903**	--	--	**2230**	**333**	--	**3760**	**134**	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	--	**47.0**	--	--	**44.6**	--	--	**293**	**15.9**	--	**48.9**	**7.96**	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	**110**	--	--	**93.9**	--	--	**275**	**35.0**	--	**365**	**9.98**	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	**24.5**	--	--	**19.5 J**	--	--	**83.5 J**	**5.47**	--	**32.2 J**	**2.72**	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	**2.11 J**	--	--	**1.02 J**	--	--	**6.13 J**	0.442 U	--	**2.33 J**	**0.287 J**	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	**0.740 J**	--	--	**0.804 J**	--	--	**0.945 J**	0.479 U	--	**1.43**	0.211 U	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	**3.11**	--	--	**2.73**	--	--	**3.89**	**1.13**	--	**6.91**	**0.248 J**	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	**4.68 J**	--	--	**3.87**	--	--	**8.82**	**1.64**	--	**8.68**	0.225 U	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	**1.14**	--	--	**1.29**	--	--	**1.19**	0.257 U	--	**2.16**	0.194 U	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	**2.37**	--	--	**2.42**	--	--	**2.37**	0.531 U	--	**3.21**	0.237 U	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	**0.879 J**	--	--	**0.320 J**	--	--	**1.00**	0.284 U	--	**1.78**	0.242 U	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	0.640 U	--	--	0.615 U	--	--	**0.715 J**	**0.165 J**	--	**0.988 J**	0.173 U	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	0.608 U	--	--	**0.856 J**	--	--	**1.38**	**0.325 J**	--	**2.51**	0.186 U	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	**1.11**	--	--	**0.818 J**	--	--	**2.39**	**0.170 J**	--	**2.07**	0.195 U	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	**0.780 J**	--	--	**0.818 J**	--	--	**0.725 J**	**0.330 J**	--	**1.96**	0.200 U	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	0.299 U	--	--	0.206 U	--	--	0.181 U	0.152 U	--	**0.405 J**	0.172 U	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	**1.71 J**	--	--	**1.71 J**	--	--	**1.16**	**0.758 J**	--	**2.53 J**	**0.304 J**	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						--	--	**3.6 J**	--	--	**3.10 J**	--	--	**7.55 J**	**1.15 J**	--	**10.1 J**	**0.228 J**	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						--	--	**4.0 J**	--	--	**3.51 J**	--	--	**7.64 J**	**1.31 J**	--	**10.1 J**	**0.498 J**	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	**270**	--	--	**241**	--	--	**562**	**85.5**	--	**1350**	**20.6**	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	**86.2 J**	--	--	**71.9 J**	--	--	**395 J**	**21.1**	--	**109 J**	**3.01**	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	**39.4 J**	--	--	**24.0**	--	--	**58.3**	**11.8**	--	**97.8**	0.105 U	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	**35.9**	--	--	**28.0**	--	--	**86.1**	**11.2**	--	**65.0**	**3.32**	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	**1.79**	--	--	**3.84**	--	--	**6.67**	**0.165 J**	--	**7.13**	0.049 U	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	**10.8 J**	--	--	**10.3**	--	--	**14.8**	**3.26**	--	**22.2**	**0.326 J**	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	**5.95**	--	--	**7.28**	--	--	**5.41**	**0.436 J**	--	**7.35**	0.089 U	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	**2.56 J**	--	--	**3.35**	--	--	**5.31**	**1.58 J**	--	**5.46**	**0.451 J**	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC18	TG-SC18	TG-SC19	TG-SC19	TG-SC19	TG-SC20	TG-SC20	TG-SC20	TG-SC21	TG-SC21	TG-SC21	TG-SC22	TG-SC22	TG-SC22	TG-SC22
						Sample ID	TG-SC18-06-08-241101	TG-SC18-08-9.9-241101	TG-SC19-00-02-241112	TG-SC19-02-04-241112	TG-SC19-04-5.4-241112	TG-SC20-00-02-241114	TG-SC20-02-04-241114	TG-SC20-04-4.8-241114	TG-SC21-00-02-241113	TG-SC21-02-04-241113	TG-SC21-04-06-241113	TG-SC22-00-02-241114	TG-SC22-02-04-241114	TG-SC22-04-06-241114	TG-SC22-06-6.8-241114
						Sample Date	2024-11-01	2024-11-01	2024-11-12	2024-11-12	2024-11-12	2024-11-14	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-14
						Depth Interval	6 - 8 ft	8 - 9.9 ft	0 - 2 ft	2 - 4 ft	4 - 5.4 ft	0 - 2 ft	2 - 4 ft	4 - 4.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 6.8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)																					
Aroclor 1016	SW8082A						--	--	3.23 U	--	--	3.25 U	--	--	2.96 U	--	--	2.81 U	--	--	--
Aroclor 1221	SW8082A						--	--	3.23 U	--	--	3.25 U	--	--	2.96 U	--	--	2.81 U	--	--	--
Aroclor 1232	SW8082A						--	--	3.23 U	--	--	3.25 U	--	--	2.96 U	--	--	2.81 U	--	--	--
Aroclor 1242	SW8082A						--	--	3.23 U	--	--	3.25 U	--	--	2.96 U	--	--	2.81 U	--	--	--
Aroclor 1248	SW8082A						--	--	3.23 U	--	--	3.25 U	--	--	2.96 U	--	--	2.81 U	--	--	--
Aroclor 1254	SW8082A						--	--	3.23 U	--	--	3.25 U	--	--	2.96 U	--	--	2.81 U	--	--	--
Aroclor 1260	SW8082A						--	--	3.23 U	--	--	3.25 U	--	--	2.96 U	--	--	2.81 U	--	--	--
Aroclor 1262	SW8082A						--	--	3.23 U	--	--	3.25 U	--	--	2.96 U	--	--	2.81 U	--	--	--
Aroclor 1268	SW8082A						--	--	3.23 U	--	--	3.25 U	--	--	2.96 U	--	--	2.81 U	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	--	3.23 U	--	--	3.25 U	--	--	2.96 U	--	--	2.81 U	--	--	--
PCB Aroclors (µg/kg)																					
Aroclor 1016	SW8082A						--	--	19.7 U	--	--	19.8 U	--	--	19.8 U	--	--	19.7 U	--	--	--
Aroclor 1221	SW8082A						--	--	19.7 U	--	--	19.8 U	--	--	19.8 U	--	--	19.7 U	--	--	--
Aroclor 1232	SW8082A						--	--	19.7 U	--	--	19.8 U	--	--	19.8 U	--	--	19.7 U	--	--	--
Aroclor 1242	SW8082A						--	--	19.7 U	--	--	19.8 U	--	--	19.8 U	--	--	19.7 U	--	--	--
Aroclor 1248	SW8082A						--	--	19.7 U	--	--	19.8 U	--	--	19.8 U	--	--	19.7 U	--	--	--
Aroclor 1254	SW8082A						--	--	19.7 U	--	--	19.8 U	--	--	19.8 U	--	--	19.7 U	--	--	--
Aroclor 1260	SW8082A						--	--	19.7 U	--	--	19.8 U	--	--	19.8 U	--	--	19.7 U	--	--	--
Aroclor 1262	SW8082A						--	--	19.7 U	--	--	19.8 U	--	--	19.8 U	--	--	19.7 U	--	--	--
Aroclor 1268	SW8082A						--	--	19.7 U	--	--	19.8 U	--	--	19.8 U	--	--	19.7 U	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		--	--	19.7 U	--	--	19.8 U	--	--	19.8 U	--	--	19.7 U	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC23	TG-SC23	TG-SC23	TG-SC23	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25
						Sample ID	TG-SC23-00-02-241113	TG-SC23-02-04-241113	TG-SC123-02-04-241113	TG-SC23-04-5.5-241113	TG-SC24-00-02-241028	TG-SC24-02-04-241028	TG-SC24-04-06-241028	TG-SC24-06-08-241028	TG-SC24-08-10-241028	TG-SC24-10-11.2-241028	TG-SC25-00-02-250328	TG-SC25-02-04-250328	TG-SC25-04-06-250328	TG-SC25-06-08-250328	TG-SC125-06-08-250328
						Sample Date	2024-11-13	2024-11-13	2024-11-13	2024-11-13	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28
						Depth Interval	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																					
Total organic carbon	SW9060AM						**0.65**	--	--	--	**0.66**	--	--	--	--	--	--	--	**0.34**	--	--
Total solids	D2216						--	**74.34**	**75.19**	--	--	**75.47**	--	--	--	--	--	--	**76.11**	--	--
Total solids	SM2540G						**64.90**	**70.46**	**70.59**	**84.22**	**67.38**	**71.76**	**83.23**	**81.90**	**69.27**	**79.40**	**73.58**	**84.47**	**78.65**	**72.37**	**75.12**
Total volatile solids	PSEP-TVS						**2.98**	--	--	--	**3.01**	--	--	--	--	--	--	--	**2.04**	--	--
Metals (mg/kg)																					
Antimony	SW6020						0.30 UJ	0.27 UJ	0.28 UJ	0.23 UJ	0.27 U	0.28 U	0.23 U	0.23 U	0.27 U	0.24 U	0.27 UJ	0.23 UJ	0.25 UJ	**0.73 J**	**1.33 J**
Arsenic	SW6020	57	93	57	93		**6.70**	**4.91**	**3.64**	**1.12**	**5.43**	**3.45**	**1.08**	**1.19**	**1.85**	**1.33**	**10.1**	**10.4**	**5.72**	**36.1**	**34.4**
Cadmium	SW6020	5.1	6.7	5.1	6.7		**0.15 J**	**0.11 J**	**0.15**	0.12 U	**0.12 J**	**0.09 J**	0.12 U	0.12 U	**0.19**	0.12 U	**0.50**	**0.18**	**0.21**	**0.22**	**0.27**
Chromium	SW6020	260	270	260	270		**16.9**	**12.2**	**11.7**	**9.68**	**13.6**	**10.7**	**8.70**	**7.85**	**10.3**	**9.89**	**23.1**	**13.6**	**13.6**	**16.1**	**21.7**
Copper	SW6020	390	390	390	390		**41.0**	**29.2**	**27.3**	**8.53**	**32.2**	**22.6**	**8.21**	**8.54**	**16.3**	**15.1**	**1060 J**	**286 J**	**17.1 J**	**91.8 J**	**69.3 J**
Lead	SW6020	450	530	450	530		**11.1**	**7.69**	**5.69**	**0.98**	**7.93**	**4.92**	**0.94**	**1.02**	**1.58**	**1.48**	**40.0**	**17.7**	**7.45**	**42.2**	**45.3**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.00781 J**	0.0313 U	0.0271 U	0.0239 U	**0.0544**	**0.0429**	0.0251 U	0.0289 U	**0.00922 J**	**0.0109 J**	**0.0418**	**0.0224 J**	**0.0219 J**	**0.113**	**0.123**
Selenium	SW6020						**1.31**	0.73 U	0.69 U	0.58 U	**0.61 J**	**0.48 J**	**0.32 J**	**0.26 J**	**0.50 J**	**0.33 J**	**1.31**	**0.71**	**1.49**	**1.07**	**1.03**
Silver	SW6020	6.1	6.1	6.1	6.1		**0.15 J**	**0.11 J**	**0.08 J**	0.23 U	**0.13 J**	**0.10 J**	0.23 U	0.23 U	**0.05 J**	**0.04 J**	**0.76**	**0.23**	0.25 U	**0.18 J**	**0.18 J**
Zinc	SW6020	410	960	410	960		**56.5**	**38.8**	**31.3**	**16.3**	**43.2**	**30.3**	**15.5**	**15.6**	**20.3**	**19.5**	**2970**	**693**	**37.0**	**130**	**132**
Organometals (mg/kg-OC)																					
Tributyltin (ion)	SW8270ESIM						**0.392 J**	--	--	--	0.583 UJ	--	--	--	--	--	--	--	--	--	--
Organometals (µg/kg)																					
Tributyltin (ion)	SW8270ESIM						**2.55 J**	--	--	--	3.85 UJ	--	--	--	--	--	--	--	3.58 U	--	--
Semivolatile Organics (mg/kg-OC)																					
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				0.77 U	--	--	--	0.76 U	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				0.77 U	--	--	--	0.76 U	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				0.77 U	--	--	--	0.76 U	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				7.69 U	--	--	--	7.55 U	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM	4.9	64				**0.89**	--	--	--	0.76 U	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270E	220	1700				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270E	58	4500				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270ESIM	61	110				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270ESIM	53	53				0.77 U	--	--	--	0.76 U	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270ESIM	0.38	2.3				0.77 U	--	--	--	0.76 U	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				0.77 U	--	--	--	0.76 U	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	11	11				0.77 U	--	--	--	0.76 U	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270ESIM						38 UJ	--	--	--	**6.41 J**	--	--	--	--	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC23	TG-SC23	TG-SC23	TG-SC23	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25
						Sample ID	TG-SC23-00-02-241113	TG-SC23-02-04-241113	TG-SC123-02-04-241113	TG-SC23-04-5.5-241113	TG-SC24-00-02-241028	TG-SC24-02-04-241028	TG-SC24-04-06-241028	TG-SC24-06-08-241028	TG-SC24-08-10-241028	TG-SC24-10-11.2-241028	TG-SC25-00-02-250328	TG-SC25-02-04-250328	TG-SC25-04-06-250328	TG-SC25-06-08-250328	TG-SC125-06-08-250328
						Sample Date	2024-11-13	2024-11-13	2024-11-13	2024-11-13	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28
						Depth Interval	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)																					
1,2,4-Trichlorobenzene	SW8270ESIM			31	51		5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 U	--	--
1,2-Dichlorobenzene	SW8270ESIM			35	50		5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 UJ	--	--
1,4-Dichlorobenzene	SW8270ESIM			110	110		5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 UJ	--	--
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29		20.0 UJ	--	--	--	19.9 UJ	--	--	--	--	--	--	--	22.8 UJ	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63		5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 UJ	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670		5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 UJ	--	--
Benzoic acid	SW8270ESIM	650	650	650	650		500 UJ	--	--	--	**58.3 J**	--	--	--	--	--	--	--	114 UJ	--	--
Benzyl alcohol	SW8270ESIM	57	73	57	73		20.0 UJ	--	--	--	19.9 U	--	--	--	--	--	--	--	22.8 U	--	--
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900		50.0 U	--	--	--	49.8 U	--	--	--	--	--	--	--	**66.0 J**	--	--
Butylbenzyl phthalate	SW8270ESIM			63	900		**5.8**	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 U	--	--
Di-n-butyl phthalate	SW8270E			1400	1400		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	18.5 U	--	--
Di-n-octyl phthalate	SW8270E			6200	6200		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	18.5 U	--	--
Diethyl phthalate	SW8270ESIM			200	1200		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	22.8 U	--	--
Dimethyl phthalate	SW8270ESIM			71	160		5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 U	--	--
Hexachlorobenzene	SW8270ESIM			22	70		5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 U	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120		5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 U	--	--
n-Nitrosodiphenylamine	SW8270ESIM			28	40		5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 U	--	--
Pentachlorophenol	SW8270ESIM	360	690	360	690		250 UJ	--	--	--	**42.3 J**	--	--	--	--	--	--	--	22.8 UJ	--	--
Phenol	SW8270ESIM	420	1200	420	1200		5.0 U	--	--	--	5.0 U	--	--	--	--	--	--	--	5.7 UJ	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																					
2-Methylnaphthalene	SW8270E	38	64				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270E	16	57				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270E	66	66				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270E	220	1200				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270E	110	270				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270E	99	210				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						6.15 U	--	--	--	6.05 U	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270E	31	78				3.08 U	--	--	--	**14.1 J**	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270E						3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270E	110	460				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	12	33				**1.97**	--	--	--	**1.94**	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270E	15	58				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270E	160	1200				**1.83 J**	--	--	--	**2.06 J**	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270E	23	79				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270E	99	170				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270E	100	480				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270E	1000	1400				**3.05 J**	--	--	--	**2.44 J**	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				6.15 U	--	--	--	6.05 U	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				**6.85 J**	--	--	--	**20.6 J**	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				3.08 U	--	--	--	3.02 U	--	--	--	--	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC23	TG-SC23	TG-SC23	TG-SC23	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25
						Sample ID	TG-SC23-00-02-241113	TG-SC23-02-04-241113	TG-SC123-02-04-241113	TG-SC23-04-5.5-241113	TG-SC24-00-02-241028	TG-SC24-02-04-241028	TG-SC24-04-06-241028	TG-SC24-06-08-241028	TG-SC24-08-10-241028	TG-SC24-10-11.2-241028	TG-SC25-00-02-250328	TG-SC25-02-04-250328	TG-SC25-04-06-250328	TG-SC25-06-08-250328	TG-SC125-06-08-250328
						Sample Date	2024-11-13	2024-11-13	2024-11-13	2024-11-13	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28
						Depth Interval	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																					
2-Methylnaphthalene	SW8270E			670	670		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	**21.9 J**	--	--
Acenaphthene	SW8270E			500	500		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	18.5 UJ	--	--
Acenaphthylene	SW8270E			1300	1300		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	18.5 UJ	--	--
Anthracene	SW8270E			960	960		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	**13.3 J**	--	--
Benzo(a)anthracene	SW8270E			1300	1600		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	**26.0**	--	--
Benzo(a)pyrene	SW8270E			1600	1600		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	**20.9**	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						40.0 U	--	--	--	39.9 U	--	--	--	--	--	--	--	**56.1**	--	--
Benzo(g,h,i)perylene	SW8270E			670	720		20.0 U	--	--	--	**93.2 J**	--	--	--	--	--	--	--	18.5 UJ	--	--
Carbazole	SW8270E						20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	**9.5 J**	--	--
Chrysene	SW8270E			1400	2800		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	**34.1**	--	--
Dibenzo(a,h)anthracene	SW8270ESIM			230	230		**12.8**	--	--	--	**12.8**	--	--	--	--	--	--	--	5.7 UJ	--	--
Dibenzofuran	SW8270E			540	540		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	18.5 U	--	--
Fluoranthene	SW8270E			1700	2500		**11.9 J**	--	--	--	**13.6 J**	--	--	--	--	--	--	--	**70.1**	--	--
Fluorene	SW8270E			540	540		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	18.5 U	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	18.5 UJ	--	--
Naphthalene	SW8270E			2100	2100		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	**25.8 J**	--	--
Phenanthrene	SW8270E			1500	1500		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	**53.4 J**	--	--
Pyrene	SW8270E			2600	3300		**19.8 J**	--	--	--	**16.1 J**	--	--	--	--	--	--	--	**83.2 J**	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		40.0 U	--	--	--	39.9 U	--	--	--	--	--	--	--	**56.1**	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						**1.28**	--	--	--	**1.28**	--	--	--	--	--	--	--	**29.5 J**	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						**15.4**	--	--	--	**15.3**	--	--	--	--	--	--	--	**30.7 J**	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		**44.5 J**	--	--	--	**136 J**	--	--	--	--	--	--	--	**290 J**	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		20.0 U	--	--	--	19.9 U	--	--	--	--	--	--	--	**92.5 J**	--	--
Pesticides (mg/kg-OC)																					
2,4'-DDD (o,p'-DDD)	SW8081B						0.154 UJ	--	--	--	0.15 UJ	--	--	--	--	--	--	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						0.154 UJ	--	--	--	0.15 UJ	--	--	--	--	--	--	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						0.154 UJ	--	--	--	0.15 UJ	--	--	--	--	--	--	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						0.154 U	--	--	--	0.15 U	--	--	--	--	--	--	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						0.154 U	--	--	--	0.15 U	--	--	--	--	--	--	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						0.154 U	--	--	--	0.15 U	--	--	--	--	--	--	--	--	--	--
Aldrin	SW8081B						0.077 U	--	--	--	0.076 U	--	--	--	--	--	--	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						0.077 U	--	--	--	0.076 U	--	--	--	--	--	--	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						0.077 U	--	--	--	0.076 U	--	--	--	--	--	--	--	--	--	--
Dieldrin	SW8081B						0.154 U	--	--	--	0.15 U	--	--	--	--	--	--	--	--	--	--
Endrin ketone	SW8081B						0.154 U	--	--	--	0.15 U	--	--	--	--	--	--	--	--	--	--
Heptachlor	SW8081B						0.077 U	--	--	--	0.076 U	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						0.077 U	--	--	--	0.076 U	--	--	--	--	--	--	--	--	--	--
Nonachlor, cis-	SW8081B						0.154 U	--	--	--	0.15 U	--	--	--	--	--	--	--	--	--	--
Nonachlor, trans-	SW8081B						0.154 UJ	--	--	--	0.15 UJ	--	--	--	--	--	--	--	--	--	--
Oxychlordane	SW8081B						0.154 UJ	--	--	--	0.15 UJ	--	--	--	--	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC23	TG-SC23	TG-SC23	TG-SC23	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25
						Sample ID	TG-SC23-00-02-241113	TG-SC23-02-04-241113	TG-SC123-02-04-241113	TG-SC23-04-5.5-241113	TG-SC24-00-02-241028	TG-SC24-02-04-241028	TG-SC24-04-06-241028	TG-SC24-06-08-241028	TG-SC24-08-10-241028	TG-SC24-10-11.2-241028	TG-SC25-00-02-250328	TG-SC25-02-04-250328	TG-SC25-04-06-250328	TG-SC25-06-08-250328	TG-SC125-06-08-250328
						Sample Date	2024-11-13	2024-11-13	2024-11-13	2024-11-13	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28
						Depth Interval	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (µg/kg)																					
2,4'-DDD (o,p'-DDD)	SW8081B						1.00 UJ	--	--	--	0.99 UJ	--	--	--	--	--	--	--	0.86 U	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						1.00 UJ	--	--	--	0.99 UJ	--	--	--	--	--	--	--	0.86 U	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						1.00 UJ	--	--	--	0.99 UJ	--	--	--	--	--	--	--	0.86 U	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						1.00 U	--	--	--	0.99 U	--	--	--	--	--	--	--	0.86 UJ	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						1.00 U	--	--	--	0.99 U	--	--	--	--	--	--	--	0.86 U	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						1.00 U	--	--	--	0.99 U	--	--	--	--	--	--	--	0.86 U	--	--
Aldrin	SW8081B						0.50 U	--	--	--	0.50 U	--	--	--	--	--	--	--	0.43 U	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						0.50 U	--	--	--	0.50 U	--	--	--	--	--	--	--	0.43 U	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						0.50 U	--	--	--	0.50 U	--	--	--	--	--	--	--	0.43 U	--	--
Dieldrin	SW8081B						1.00 U	--	--	--	0.99 U	--	--	--	--	--	--	--	0.86 U	--	--
Endrin ketone	SW8081B						1.00 U	--	--	--	0.99 U	--	--	--	--	--	--	--	0.86 U	--	--
Heptachlor	SW8081B						0.50 U	--	--	--	0.50 U	--	--	--	--	--	--	--	0.43 U	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						0.50 U	--	--	--	0.50 U	--	--	--	--	--	--	--	0.43 U	--	--
Nonachlor, cis-	SW8081B						1.00 U	--	--	--	0.99 U	--	--	--	--	--	--	--	0.86 U	--	--
Nonachlor, trans-	SW8081B						1.00 UJ	--	--	--	0.99 UJ	--	--	--	--	--	--	--	0.86 U	--	--
Oxychlordane	SW8081B						1.00 UJ	--	--	--	0.99 UJ	--	--	--	--	--	--	--	0.86 U	--	--
Total DDx (U = 0 max limit)	Calculated						1.00 UJ	--	--	--	0.99 UJ	--	--	--	--	--	--	--	0.86 UJ	--	--
Dioxin Furans (ng/kg)																					
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**1560**	**1200**	**1640**	--	**1340**	**672**	--	--	--	--	--	--	**12600 J**	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						**59.1**	**56.1**	**88.2**	--	**45.9**	**28.5**	--	--	--	--	--	--	**98.3**	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**163**	**108**	**143**	--	**146**	**60.3**	--	--	--	--	--	--	**494**	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						**28.0 J**	**24.2**	**31.2**	--	**24.3 J**	**12.2**	--	--	--	--	--	--	**74.4**	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						**2.65 J**	**2.16**	**2.26**	--	**2.53 J**	**0.754 J**	--	--	--	--	--	--	**4.91**	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**0.917 J**	**0.502 J**	**0.866 J**	--	**1.33**	0.408 U	--	--	--	--	--	--	**3.44**	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**5.67**	**5.23**	**4.20**	--	**4.80**	**1.88**	--	--	--	--	--	--	**8.07**	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**6.74**	**4.84**	**6.31**	--	**5.72**	**2.82**	--	--	--	--	--	--	**18.5**	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**2.28**	**1.92**	**0.833 J**	--	**1.27**	**0.602 J**	--	--	--	--	--	--	**3.18**	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**3.17**	**2.22**	**2.08**	--	**2.81**	**1.51**	--	--	--	--	--	--	**9.50**	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						**1.19**	**1.53 J**	**1.49 J**	--	**1.30**	**0.379 J**	--	--	--	--	--	--	**2.89**	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**0.665 J**	**0.498 J**	**0.791 J**	--	**0.890 J**	0.297 U	--	--	--	--	--	--	**2.75**	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**2.34**	**2.17**	**1.24**	--	**1.84**	**0.453 J**	--	--	--	--	--	--	**1.69 J**	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						0.300 U	**0.684 J**	**0.524 J**	--	**1.38**	0.236 U	--	--	--	--	--	--	**3.87**	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**0.988 J**	**1.70**	**1.01**	--	**0.976 J**	**0.450 J**	--	--	--	--	--	--	**1.69**	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						0.203 U	**0.238 J**	0.191 U	--	0.253 U	0.205 U	--	--	--	--	--	--	0.170 U	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						**2.71 J**	**4.96 J**	**2.37 J**	--	**2.33**	**1.03 J**	--	--	--	--	--	--	**2.75 J**	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						**5.72 J**	**5.2 J**	**5.28 J**	--	**5.48 J**	**1.91 J**	--	--	--	--	--	--	**18.1 J**	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						**5.84 J**	**5.2 J**	**5.38 J**	--	**5.60 J**	**2.20 J**	--	--	--	--	--	--	**18.2 J**	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**392**	**235**	**310**	--	**359**	**140**	--	--	--	--	--	--	**932**	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						**101 J**	**92.6 J**	**134 J**	--	**87.2 J**	**45.8 J**	--	--	--	--	--	--	**245**	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**53.8**	**25.1**	**44.8**	--	**50.6**	**20.6**	--	--	--	--	--	--	**118**	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						**49.7**	**47.8**	**59.7**	--	**30.5 J**	**19.1**	--	--	--	--	--	--	**139**	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**6.87**	**1.54**	**5.24 J**	--	**2.70**	**1.27**	--	--	--	--	--	--	**11.1**	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						**17.4**	**11.3**	**15.1**	--	**7.92 J**	**3.47**	--	--	--	--	--	--	**33.5**	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**4.55**	**1.79**	**5.00 J**	--	**4.93**	**1.27**	--	--	--	--	--	--	**13.6**	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						**6.38**	**8.96 J**	**5.06 J**	--	**5.48**	**1.37 J**	--	--	--	--	--	--	**11.8**	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC23	TG-SC23	TG-SC23	TG-SC23	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC24	TG-SC25	TG-SC25	TG-SC25	TG-SC25	TG-SC25
						Sample ID	TG-SC23-00-02-241113	TG-SC23-02-04-241113	TG-SC123-02-04-241113	TG-SC23-04-5.5-241113	TG-SC24-00-02-241028	TG-SC24-02-04-241028	TG-SC24-04-06-241028	TG-SC24-06-08-241028	TG-SC24-08-10-241028	TG-SC24-10-11.2-241028	TG-SC25-00-02-250328	TG-SC25-02-04-250328	TG-SC25-04-06-250328	TG-SC25-06-08-250328	TG-SC125-06-08-250328
						Sample Date	2024-11-13	2024-11-13	2024-11-13	2024-11-13	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2024-10-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28	2025-03-28
						Depth Interval	0 - 2 ft	2 - 4 ft	2 - 4 ft	4 - 5.5 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11.2 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	6 - 8 ft
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)																					
Aroclor 1016	SW8082A						3.15 U	--	--	--	3.00 U	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082A						3.15 U	--	--	--	3.00 U	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082A						3.15 U	--	--	--	3.00 U	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082A						3.15 U	--	--	--	3.00 U	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082A						3.15 U	--	--	--	3.00 U	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082A						3.15 U	--	--	--	3.00 U	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082A						3.15 U	--	--	--	3.00 U	--	--	--	--	--	--	--	--	--	--
Aroclor 1262	SW8082A						3.15 U	--	--	--	3.00 U	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						3.15 U	--	--	--	3.00 U	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				3.15 U	--	--	--	3.00 U	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																					
Aroclor 1016	SW8082A						20.5 U	--	--	--	19.8 U	--	--	--	--	--	--	--	4.0 U	--	--
Aroclor 1221	SW8082A						20.5 U	--	--	--	19.8 U	--	--	--	--	--	--	--	4.0 U	--	--
Aroclor 1232	SW8082A						20.5 U	--	--	--	19.8 U	--	--	--	--	--	--	--	4.0 U	--	--
Aroclor 1242	SW8082A						20.5 U	--	--	--	19.8 U	--	--	--	--	--	--	--	4.0 U	--	--
Aroclor 1248	SW8082A						20.5 U	--	--	--	19.8 U	--	--	--	--	--	--	--	**22.6**	--	--
Aroclor 1254	SW8082A						20.5 U	--	--	--	19.8 U	--	--	--	--	--	--	--	**21.2**	--	--
Aroclor 1260	SW8082A						20.5 U	--	--	--	19.8 U	--	--	--	--	--	--	--	**12.4**	--	--
Aroclor 1262	SW8082A						20.5 U	--	--	--	19.8 U	--	--	--	--	--	--	--	4.0 U	--	--
Aroclor 1268	SW8082A						20.5 U	--	--	--	19.8 U	--	--	--	--	--	--	--	4.0 U	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		20.5 U	--	--	--	19.8 U	--	--	--	--	--	--	--	**56.2**	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC25	TG-SC25	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC28
						Sample ID	TG-SC25-08-10-250328	TG-SC25-10-11.8-250328	TG-SC26-00-02-250331	TG-SC26-02-04-250331	TG-SC26-04-06-250331	TG-SC26-06-08-250331	TG-SC26-08-10-250331	TG-SC26-10-11-250331	TG-SC27-00-02-250512	TG-SC27-02-04-250512	TG-SC27-04-06-250512	TG-SC27-06-08-250512	TG-SC27-08-10-250512	TG-SC27-10-12-250512	TG-SC28-00-02-250512
						Sample Date	2025-03-28	2025-03-28	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12
						Depth Interval	8 - 10 ft	10 - 11.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						**0.40 J**	**0.12 J**	--	--	--	**0.26 J**	**0.11 J**	--	--	--	**0.39**	**0.71 J**	**0.12 J**	--	**0.82**
Total solids	D2216						**76.14**	--	--	--	--	**80.00**	--	--	--	--	**79.68**	--	--	--	**66.24**
Total solids	SM2540G						**78.16**	**81.64 J**	**68.54**	**70.69**	**71.77**	**79.76**	**85.09**	**79.98**	**63.46 J**	**73.10 J**	**83.63**	**70.16**	**83.19**	**79.94 J**	**64.26 J**
Total volatile solids	PSEP-TVS						**2.07**	--	--	--	--	**1.70**	--	--	--	--	**2.10**	--	--	--	**3.90**
Metals (mg/kg)																				
Antimony	SW6020						0.27 UJ	0.23 UJ	0.29 UJ	0.28 UJ	**0.92 J**	0.25 UJ	0.22 UJ	0.24 UJ	**0.54 J**	**1.96 J**	**0.87 J**	0.28 UJ	0.26 UJ	0.25 UJ	0.30 UJ
Arsenic	SW6020	57	93	57	93		**6.22**	**1.55**	**7.64**	**13.0**	**39.5**	**5.33**	**1.89**	**0.92**	**34.3**	**117**	**19.4**	**10.6**	**5.35**	**1.71**	**7.07**
Cadmium	SW6020	5.1	6.7	5.1	6.7		**0.12 J**	**0.07 J**	**0.15**	**0.33**	**0.21**	**0.12 J**	0.11 U	0.12 U	**0.38**	**0.44**	**0.16**	**0.26**	**0.09 J**	0.12 U	**0.18**
Chromium	SW6020	260	270	260	270		**16.0**	**10.6**	**16.8**	**20.9**	**27.9**	**12.7**	**9.18**	**10.1**	**23.5**	**27.0**	**12.9**	**43.0**	**10.9**	**8.21**	**12.4**
Copper	SW6020	390	390	390	390		**26.9 J**	**12.4 J**	**58.7**	**307**	**397**	**16.8**	**10.8**	**8.47**	**278 J**	**307 J**	**91.3 J**	**71.8 J**	**23.1 J**	**10.0 J**	**41.7 J**
Lead	SW6020	450	530	450	530		**11.9**	**1.38**	**12.1**	**31.7**	**54.7**	**3.77**	**1.15**	**1.00**	**42.3**	**124**	**26.3**	**19.6**	**10.3**	**1.19**	**10.4**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.112**	**0.00923 J**	**0.0441**	**0.0757**	**0.196**	**0.0287**	0.0278 U	0.0254 U	**0.113**	**0.0798**	**0.0587**	**0.325**	**0.125**	**0.00886 J**	**0.107**
Selenium	SW6020						0.68 U	**0.76**	**1.22**	**1.59**	**1.37**	0.62 U	**0.68**	**1.09**	1.51 U	1.26 U	1.17 U	1.39 U	1.29 U	1.24 U	1.47 U
Silver	SW6020	6.1	6.1	6.1	6.1		0.27 U	0.23 U	0.29 UJ	**0.41 J**	**0.21 J**	0.25 UJ	0.22 UJ	0.24 UJ	**0.47**	**0.43**	**0.14 J**	**0.18 J**	**0.13 J**	0.25 U	0.29 U
Zinc	SW6020	410	960	410	960		**36.6**	**19.3**	**100**	**824**	**216**	**40.2**	**18.1**	**17.9**	**717**	**732**	**75.0**	**59.0**	**33.3**	**18.3**	**64.7**
Organometals (mg/kg-OC)																				
Tributyltin (ion)	SW8270ESIM						--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.209 J**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM						2.96 U	--	--	--	--	3.37 U	--	--	--	--	**39.4 J**	--	--	--	**1.71 J**
Semivolatile Organics (mg/kg-OC)																				
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82 U
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82 UJ
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82 UJ
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.18 U
Butylbenzyl phthalate	SW8270ESIM	4.9	64				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**5.99**
Di-n-butyl phthalate	SW8270E	220	1700				--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 U
Di-n-octyl phthalate	SW8270E	58	4500				--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 U
Diethyl phthalate	SW8270ESIM	61	110				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.89**
Dimethyl phthalate	SW8270ESIM	53	53				--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82 U
Hexachlorobenzene	SW8270ESIM	0.38	2.3				--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82 U
n-Nitrosodiphenylamine	SW8270ESIM	11	11				--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82 U
Pentachlorophenol	SW8270ESIM						--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 UJ

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC25	TG-SC25	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC28
						Sample ID	TG-SC25-08-10-250328	TG-SC25-10-11.8-250328	TG-SC26-00-02-250331	TG-SC26-02-04-250331	TG-SC26-04-06-250331	TG-SC26-06-08-250331	TG-SC26-08-10-250331	TG-SC26-10-11-250331	TG-SC27-00-02-250512	TG-SC27-02-04-250512	TG-SC27-04-06-250512	TG-SC27-06-08-250512	TG-SC27-08-10-250512	TG-SC27-10-12-250512	TG-SC28-00-02-250512
						Sample Date	2025-03-28	2025-03-28	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12
						Depth Interval	8 - 10 ft	10 - 11.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM			31	51		4.7 U	--	--	--	--	4.8 U	--	--	--	--	5.9 U	--	--	--	6.7 U
1,2-Dichlorobenzene	SW8270ESIM			35	50		4.7 U	--	--	--	--	4.8 U	--	--	--	--	5.9 UJ	--	--	--	6.7 UJ
1,4-Dichlorobenzene	SW8270ESIM			110	110		4.7 U	--	--	--	--	4.8 U	--	--	--	--	5.9 UJ	--	--	--	6.7 UJ
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29		18.7 U	--	--	--	--	19.1 U	--	--	--	--	23.4 U	--	--	--	26.8 U
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63		4.7 U	--	--	--	--	4.8 U	--	--	--	--	5.9 U	--	--	--	6.7 U
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670		**4.8**	--	--	--	--	4.8 U	--	--	--	--	5.9 U	--	--	--	**16.6**
Benzoic acid	SW8270ESIM	650	650	650	650		**124 J**	--	--	--	--	**123 J**	--	--	--	--	117 UJ	--	--	--	134 UJ
Benzyl alcohol	SW8270ESIM	57	73	57	73		18.7 UJ	--	--	--	--	19.1 UJ	--	--	--	--	23.4 U	--	--	--	26.8 U
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900		**28.6 J**	--	--	--	--	36.9 U	--	--	--	--	**61.8**	--	--	--	67.1 U
Butylbenzyl phthalate	SW8270ESIM			63	900		4.7 U	--	--	--	--	4.8 U	--	--	--	--	**43.8**	--	--	--	**49.1**
Di-n-butyl phthalate	SW8270E			1400	1400		13.9 U	--	--	--	--	14.8 U	--	--	--	--	23.4 U	--	--	--	26.8 U
Di-n-octyl phthalate	SW8270E			6200	6200		13.9 U	--	--	--	--	14.8 U	--	--	--	--	23.4 U	--	--	--	26.8 U
Diethyl phthalate	SW8270ESIM			200	1200		18.7 U	--	--	--	--	19.1 U	--	--	--	--	23.4 U	--	--	--	**40.1**
Dimethyl phthalate	SW8270ESIM			71	160		**2.5 J**	--	--	--	--	4.8 U	--	--	--	--	5.9 U	--	--	--	6.7 U
Hexachlorobenzene	SW8270ESIM			22	70		4.7 U	--	--	--	--	4.8 U	--	--	--	--	5.9 U	--	--	--	6.7 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120		4.7 U	--	--	--	--	4.8 U	--	--	--	--	5.9 U	--	--	--	6.7 U
n-Nitrosodiphenylamine	SW8270ESIM			28	40		18.7 U	--	--	--	--	19.1 U	--	--	--	--	5.9 U	--	--	--	6.7 U
Pentachlorophenol	SW8270ESIM	360	690	360	690		**63.0 J**	--	--	--	--	**60.1 J**	--	--	--	--	23.4 UJ	--	--	--	26.8 UJ
Phenol	SW8270ESIM	420	1200	420	1200		6.8 U	--	--	--	--	4.8 U	--	--	--	--	5.9 UJ	--	--	--	**152 J**
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																				
2-Methylnaphthalene	SW8270E	38	64				--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 U
Acenaphthene	SW8270E	16	57				--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 U
Acenaphthylene	SW8270E	66	66				--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 U
Anthracene	SW8270E	220	1200				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**2.67 J**
Benzo(a)anthracene	SW8270E	110	270				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.66**
Benzo(a)pyrene	SW8270E	99	210				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.96**
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	--	--	--	--	--	--	--	--	--	--	--	**10.2**
Benzo(g,h,i)perylene	SW8270E	31	78				--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 U
Carbazole	SW8270E						--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 U
Chrysene	SW8270E	110	460				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**8.79**
Dibenzo(a,h)anthracene	SW8270ESIM	12	33				--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.82 UJ
Dibenzofuran	SW8270E	15	58				--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 U
Fluoranthene	SW8270E	160	1200				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**6.10**
Fluorene	SW8270E	23	79				--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 U
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88				--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 U
Naphthalene	SW8270E	99	170				--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.27 UJ
Phenanthrene	SW8270E	100	480				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**3.49**
Pyrene	SW8270E	1000	1400				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**9.59**
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**10.2**
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**43.3 J**
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	--	--	--	--	--	--	--	--	--	--	--	--	**6.16 J**

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC25	TG-SC25	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC28
						Sample ID	TG-SC25-08-10-250328	TG-SC25-10-11.8-250328	TG-SC26-00-02-250331	TG-SC26-02-04-250331	TG-SC26-04-06-250331	TG-SC26-06-08-250331	TG-SC26-08-10-250331	TG-SC26-10-11-250331	TG-SC27-00-02-250512	TG-SC27-02-04-250512	TG-SC27-04-06-250512	TG-SC27-06-08-250512	TG-SC27-08-10-250512	TG-SC27-10-12-250512	TG-SC28-00-02-250512
						Sample Date	2025-03-28	2025-03-28	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12
						Depth Interval	8 - 10 ft	10 - 11.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E			670	670		**8.8 J**	--	--	--	--	14.8 U	--	--	--	--	23.4 U	--	--	--	26.8 U
Acenaphthene	SW8270E			500	500		13.9 U	--	--	--	--	14.8 U	--	--	--	--	23.4 U	--	--	--	26.8 U
Acenaphthylene	SW8270E			1300	1300		**11.6 J**	--	--	--	--	14.8 U	--	--	--	--	23.4 U	--	--	--	26.8 U
Anthracene	SW8270E			960	960		**39.5**	--	--	--	--	14.8 U	--	--	--	--	**18.0 J**	--	--	--	**21.9 J**
Benzo(a)anthracene	SW8270E			1300	1600		**126**	--	--	--	--	**9.0 J**	--	--	--	--	**85.8**	--	--	--	**38.2**
Benzo(a)pyrene	SW8270E			1600	1600		**127 J**	--	--	--	--	**11.0 J**	--	--	--	--	**81.2**	--	--	--	**32.5**
Benzo(b,j,k)fluoranthenes	SW8270E						**195 J**	--	--	--	--	**25.4 J**	--	--	--	--	**213**	--	--	--	**83.3**
Benzo(g,h,i)perylene	SW8270E			670	720		**69.3 J**	--	--	--	--	14.8 UJ	--	--	--	--	**45.1**	--	--	--	26.8 U
Carbazole	SW8270E						13.9 U	--	--	--	--	14.8 U	--	--	--	--	23.4 U	--	--	--	26.8 U
Chrysene	SW8270E			1400	2800		**124**	--	--	--	--	**10.8 J**	--	--	--	--	**112**	--	--	--	**72.1**
Dibenzo(a,h)anthracene	SW8270ESIM			230	230		**19.4**	--	--	--	--	4.8 U	--	--	--	--	**12.9 J**	--	--	--	6.7 UJ
Dibenzofuran	SW8270E			540	540		13.9 U	--	--	--	--	14.8 U	--	--	--	--	23.4 U	--	--	--	26.8 U
Fluoranthene	SW8270E			1700	2500		**225**	--	--	--	--	**16.2**	--	--	--	--	**177**	--	--	--	**50.0**
Fluorene	SW8270E			540	540		13.9 U	--	--	--	--	14.8 U	--	--	--	--	23.4 U	--	--	--	26.8 U
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		**61.7 J**	--	--	--	--	14.8 UJ	--	--	--	--	**38.0**	--	--	--	26.8 U
Naphthalene	SW8270E			2100	2100		**19.5**	--	--	--	--	14.8 U	--	--	--	--	23.4 UJ	--	--	--	26.8 UJ
Phenanthrene	SW8270E			1500	1500		**94.8**	--	--	--	--	**12.3 J**	--	--	--	--	**87.4**	--	--	--	**28.6**
Pyrene	SW8270E			2600	3300		**236**	--	--	--	--	**23.5**	--	--	--	--	**196**	--	--	--	**78.6**
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		**195 J**	--	--	--	--	**25.4 J**	--	--	--	--	**213**	--	--	--	**83.3**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						**168 J**	--	--	--	--	**14.5 J**	--	--	--	--	**117 J**	--	--	--	**45.4 J**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						**168 J**	--	--	--	--	**15.5 J**	--	--	--	--	**117 J**	--	--	--	**47.0 J**
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		**1180 J**	--	--	--	--	**96 J**	--	--	--	--	**961 J**	--	--	--	**355 J**
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		**165 J**	--	--	--	--	**12.3 J**	--	--	--	--	**105 J**	--	--	--	**50.5 J**
Pesticides (mg/kg-OC)																				
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 U
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 U
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 U
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 UJ
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 U
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 U
Aldrin	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.055 U
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.055 U
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.055 U
Dieldrin	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 U
Endrin ketone	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 U
Heptachlor	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.055 U
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.055 U
Nonachlor, cis-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 U
Nonachlor, trans-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 U
Oxychlordane	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 U

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC25	TG-SC25	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC28
						Sample ID	TG-SC25-08-10-250328	TG-SC25-10-11.8-250328	TG-SC26-00-02-250331	TG-SC26-02-04-250331	TG-SC26-04-06-250331	TG-SC26-06-08-250331	TG-SC26-08-10-250331	TG-SC26-10-11-250331	TG-SC27-00-02-250512	TG-SC27-02-04-250512	TG-SC27-04-06-250512	TG-SC27-06-08-250512	TG-SC27-08-10-250512	TG-SC27-10-12-250512	TG-SC28-00-02-250512
						Sample Date	2025-03-28	2025-03-28	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12
						Depth Interval	8 - 10 ft	10 - 11.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (µg/kg)																					
2,4'-DDD (o,p'-DDD)	SW8081B						0.96 UJ	--	--	--	--	0.99 UJ	--	--	--	--	0.99 U	--	--	--	0.90 U
2,4'-DDE (o,p'-DDE)	SW8081B						0.96 U	--	--	--	--	0.99 U	--	--	--	--	0.99 U	--	--	--	0.90 U
2,4'-DDT (o,p'-DDT)	SW8081B						0.96 U	--	--	--	--	0.99 U	--	--	--	--	0.99 U	--	--	--	0.90 U
4,4'-DDD (p,p'-DDD)	SW8081B						**1.37**	--	--	--	--	0.99 U	--	--	--	--	0.99 UJ	--	--	--	0.90 UJ
4,4'-DDE (p,p'-DDE)	SW8081B						0.96 U	--	--	--	--	0.99 U	--	--	--	--	0.99 U	--	--	--	0.90 U
4,4'-DDT (p,p'-DDT)	SW8081B						0.96 U	--	--	--	--	0.99 U	--	--	--	--	0.99 U	--	--	--	0.90 U
Aldrin	SW8081B						0.48 U	--	--	--	--	0.49 U	--	--	--	--	0.49 U	--	--	--	0.45 U
Chlordane, alpha- (Chlordane, cis-)	SW8081B						0.48 U	--	--	--	--	0.49 U	--	--	--	--	0.49 U	--	--	--	0.45 U
Chlordane, beta- (Chlordane, trans-)	SW8081B						0.48 U	--	--	--	--	0.49 U	--	--	--	--	0.49 UJ	--	--	--	0.45 U
Dieldrin	SW8081B						0.96 U	--	--	--	--	0.99 U	--	--	--	--	0.99 U	--	--	--	0.90 U
Endrin ketone	SW8081B						0.96 U	--	--	--	--	0.99 U	--	--	--	--	0.99 U	--	--	--	0.90 U
Heptachlor	SW8081B						0.48 U	--	--	--	--	0.49 U	--	--	--	--	0.49 U	--	--	--	0.45 U
Hexachlorocyclohexane (BHC), beta-	SW8081B						0.48 U	--	--	--	--	0.49 U	--	--	--	--	**0.33 J**	--	--	--	0.45 U
Nonachlor, cis-	SW8081B						0.96 UJ	--	--	--	--	0.99 UJ	--	--	--	--	0.99 U	--	--	--	0.90 U
Nonachlor, trans-	SW8081B						0.96 U	--	--	--	--	0.99 U	--	--	--	--	0.99 U	--	--	--	0.90 U
Oxychlordane	SW8081B						0.96 UJ	--	--	--	--	0.99 UJ	--	--	--	--	0.99 U	--	--	--	0.90 U
Total DDx (U = 0 max limit)	Calculated						**1.37 J**	--	--	--	--	0.99 UJ	--	--	--	--	0.99 UJ	--	--	--	0.90 UJ
Dioxin Furans (ng/kg)																					
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**30300 J**	**43.5**	--	--	--	**6840 J**	15.1 U	--	--	--	**19100 J**	**137000**	**1170**	--	**2550**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						**1920**	**1.38 J**	--	--	--	**266**	**0.584 J**	--	--	--	**183**	**4290**	**180**	--	**58.9**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**2310**	**2.52**	--	--	--	**538**	**1.11 J**	--	--	--	**1320**	**8300**	**128**	--	**214**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						**643 J**	0.535 U	--	--	--	**136 J**	**0.266 J**	--	--	--	**164**	**1440 J**	**60.9**	--	**38.0**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						**51.6 J**	0.272 U	--	--	--	**11.5 J**	0.198 U	--	--	--	**11.5**	**123**	**5.07**	--	**2.52**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**13.5**	0.188 U	--	--	--	**3.10**	0.200 U	--	--	--	**9.54**	**31.6**	**1.26 J**	--	**1.32**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**58.4**	0.146 U	--	--	--	**17.9**	0.205 U	--	--	--	**23.8**	**187**	**5.49**	--	**5.60**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**84.3 J**	0.188 U	--	--	--	**23.2 J**	0.194 U	--	--	--	**60.4**	**264**	**5.37**	--	**8.47**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**20.6**	0.167 U	--	--	--	**6.31**	0.217 U	--	--	--	**8.58**	**59.2**	**2.88**	--	**1.50**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**33.4**	0.203 U	--	--	--	**7.91**	0.211 U	--	--	--	**27.9**	**85.2**	**2.53**	--	**3.00**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						**22.7**	0.218 U	--	--	--	**7.48**	0.299 U	--	--	--	**8.52**	**49.2**	**0.623 J**	--	**1.58**
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**10.9**	0.167 U	--	--	--	**2.67**	0.140 U	--	--	--	**8.01**	**24.2**	**1.11 J**	--	**1.20**
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**7.62**	0.169 U	--	--	--	**2.48**	0.0961 U	--	--	--	**4.95**	**34.3**	**1.27 J**	--	**1.57**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**30.7**	0.184 U	--	--	--	**8.83**	0.248 U	--	--	--	**11.7**	**63.6**	**3.48**	--	**2.00**
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**9.04 J**	**0.196 J**	--	--	--	**2.96 J**	0.0796 U	--	--	--	**5.84**	**70.2**	**2.60**	--	**0.927 J**
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**1.61**	0.0660 U	--	--	--	**0.393 J**	0.0652 U	--	--	--	**0.889 J**	**3.95**	**0.314 J**	--	0.181 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						**4.84 J**	0.0665 U	--	--	--	**1.86 J**	0.0742 U	--	--	--	**6.07 J**	**22.0**	**1.30**	--	**1.18**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						**82.0 J**	**0.0975 J**	--	--	--	**20.7 J**	**0.0139 J**	--	--	--	**47.2 J**	**270 J**	**6.9 J**	--	**7.32 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						**82.0 J**	**0.289 J**	--	--	--	**20.7 J**	**0.216 J**	--	--	--	**47.2 J**	**270 J**	**6.9 J**	--	**7.41 J**
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**4160**	**5.87**	--	--	--	**997**	**2.31 J**	--	--	--	**2700**	**15500**	**250**	--	**576**
Total Heptachlorodibenzofuran (HpCDF)	E1613B						**3040 J**	**1.16 J**	--	--	--	**552 J**	**0.855 J**	--	--	--	**547**	**7120**	**246**	--	**129**
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**491 J**	**0.723 J**	--	--	--	**126 J**	**0.169 J**	--	--	--	**386**	**1720**	**46.8**	--	**72.5**
Total Hexachlorodibenzofuran (HxCDF)	E1613B						**1160**	**0.562 J**	--	--	--	**299**	**0.344 J**	--	--	--	**379**	**3810 J**	**96.2**	--	**66.1**
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**52.7**	0.167 U	--	--	--	**12.1**	0.140 U	--	--	--	**45.4**	**269**	**23.0 J**	--	**6.48**
Total Pentachlorodibenzofuran (PeCDF)	E1613B						**171 J**	**0.196 J**	--	--	--	**40.4 J**	0.0961 U	--	--	--	**89.9**	**884**	**40.7**	--	**12.7**
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**42.5**	0.0660 U	--	--	--	**7.16**	0.0652 U	--	--	--	**49.9**	**260**	**15.6 J**	--	**5.95**
Total Tetrachlorodibenzofuran (TCDF)	E1613B						**57.2**	0.0665 U	--	--	--	**12.3**	0.0742 U	--	--	--	**40.5**	**241**	**23.6 J**	--	**4.13**

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC25	TG-SC25	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC26	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC27	TG-SC28
						Sample ID	TG-SC25-08-10-250328	TG-SC25-10-11.8-250328	TG-SC26-00-02-250331	TG-SC26-02-04-250331	TG-SC26-04-06-250331	TG-SC26-06-08-250331	TG-SC26-08-10-250331	TG-SC26-10-11-250331	TG-SC27-00-02-250512	TG-SC27-02-04-250512	TG-SC27-04-06-250512	TG-SC27-06-08-250512	TG-SC27-08-10-250512	TG-SC27-10-12-250512	TG-SC28-00-02-250512
						Sample Date	2025-03-28	2025-03-28	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-03-31	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12
						Depth Interval	8 - 10 ft	10 - 11.8 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 11 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)																					
Aroclor 1016	SW8082A						--	--	--	--	--	--	--	--	--	--	--	0.51 U	--	--	0.45 U
Aroclor 1221	SW8082A						--	--	--	--	--	--	--	--	--	--	--	0.51 U	--	--	0.45 U
Aroclor 1232	SW8082A						--	--	--	--	--	--	--	--	--	--	--	0.51 U	--	--	0.45 U
Aroclor 1242	SW8082A						--	--	--	--	--	--	--	--	--	--	--	0.51 U	--	--	0.45 U
Aroclor 1248	SW8082A						--	--	--	--	--	--	--	--	--	--	--	**4.04 J**	--	--	**0.98**
Aroclor 1254	SW8082A						--	--	--	--	--	--	--	--	--	--	--	**3.14**	--	--	**1.55**
Aroclor 1260	SW8082A						--	--	--	--	--	--	--	--	--	--	--	**1.2**	--	--	**0.49**
Aroclor 1262	SW8082A						--	--	--	--	--	--	--	--	--	--	--	0.51 U	--	--	0.45 U
Aroclor 1268	SW8082A						--	--	--	--	--	--	--	--	--	--	--	0.51 U	--	--	0.45 U
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	--	--	--	--	--	--	--	--	--	--	**8.4 J**	--	--	**3.0**
PCB Aroclors (µg/kg)																					
Aroclor 1016	SW8082A						19.0 U	3.2 U	--	--	--	18.5 U	--	--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U
Aroclor 1221	SW8082A						19.0 U	3.2 U	--	--	--	18.5 U	--	--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U
Aroclor 1232	SW8082A						19.0 U	3.2 U	--	--	--	18.5 U	--	--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U
Aroclor 1242	SW8082A						19.0 U	3.2 U	--	--	--	18.5 U	--	--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U
Aroclor 1248	SW8082A						**85.3**	3.2 U	--	--	--	18.5 U	--	--	--	--	**209**	**28.7 J**	3.4 U	--	**8.0**
Aroclor 1254	SW8082A						**54.4**	3.2 U	--	--	--	18.5 U	--	--	--	--	**273**	**22.3**	3.4 U	--	**12.7**
Aroclor 1260	SW8082A						19.0 U	3.2 U	--	--	--	18.5 U	--	--	--	--	**46.8**	**8.3**	3.4 U	--	**4.0**
Aroclor 1262	SW8082A						19.0 U	3.2 U	--	--	--	18.5 U	--	--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U
Aroclor 1268	SW8082A						19.0 U	3.2 U	--	--	--	18.5 U	--	--	--	--	3.8 U	3.6 U	3.4 U	--	3.7 U
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		**140**	3.2 U	--	--	--	18.5 U	--	--	--	--	**529**	**59 J**	3.4 U	--	**25**

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC30	TG-SC30	TG-SC30	TG-SC30
						Sample ID	TG-SC28-02-04-250512	TG-SC28-04-06-250512	TG-SC28-06-08-250512	TG-SC28-08-10-250512	TG-SC28-10-12-250512	TG-SC29-00-02-250826	TG-SC29-02-04-250826	TG-SC29-04-06-250826	TG-SC29-06-08-250826	TG-SC29-08-10-250826	TG-SC29-10-12-250826	TG-SC30-00-02-250826	TG-SC30-02-04-250826	TG-SC30-04-06-250826	TG-SC30-06-08-250826
						Sample Date	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	D2216						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	SM2540G						**63.40 J**	**70.64 J**	**78.05 J**	**85.67 J**	**78.98 J**	**68.06**	**73.20**	**69.89**	**73.90**	**76.98**	**74.36**	**72.07**	**76.07**	**86.99**	**82.01**
Total volatile solids	PSEP-TVS						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)																					
Antimony	SW6020						0.31 UJ	**0.47 J**	0.25 UJ	0.22 UJ	0.25 UJ	0.29 UJ	0.26 UJ	0.27 UJ	0.26 UJ	0.25 UJ	0.26 UJ	0.26 UJ	0.25 UJ	0.21 UJ	0.24 UJ
Arsenic	SW6020	57	93	57	93		**12.7**	**14.6**	**4.07**	**1.41**	**1.02**	**13.9**	**4.28**	**7.67**	**3.72**	**2.38**	**1.67**	**5.42**	**3.66**	**3.31**	**4.02**
Cadmium	SW6020	5.1	6.7	5.1	6.7		**0.25**	**0.26**	**0.09 J**	0.11 U	0.13 U	**0.22**	**0.12 J**	**0.25**	**0.07 J**	0.13 U	0.13 U	**0.10 J**	**0.09 J**	0.10 U	0.12 U
Chromium	SW6020	260	270	260	270		**18.8**	**13.5**	**9.84**	**8.93**	**8.14**	**16.5**	**12.0**	**19.1**	**13.1**	**10.2**	**10.2**	**13.3**	**10.9**	**8.83**	**7.96**
Copper	SW6020	390	390	390	390		**61.0 J**	**52.2 J**	**17.9 J**	**9.77 J**	**8.44 J**	**45.9**	**18.2**	**42.9**	**19.7**	**13.0**	**10.3**	**27.2**	**16.4**	**8.89**	**8.67**
Lead	SW6020	450	530	450	530		**62.5**	**30.6**	**4.91**	**1.07**	**0.93**	**26.9**	**17.1**	**38.2**	**7.99**	**2.53**	**1.86**	**7.35**	**4.45**	**1.07**	**1.08**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.109**	**0.0685**	**0.0509**	**0.00683 J**	**0.00585 J**	**0.0822**	**0.0360**	**0.194**	**0.0537**	**0.0163 J**	**0.0113 J**	**0.0688**	**0.0246 J**	**0.00647 J**	**0.0101 J**
Selenium	SW6020						1.58 U	1.36 U	1.25 U	1.09 U	1.23 U	**1.40 J**	**1.29 J**	**1.23 J**	**1.02 J**	**0.70 J**	**1.10 J**	**1.12 J**	**1.20 J**	**0.74 J**	**0.95 J**
Silver	SW6020	6.1	6.1	6.1	6.1		**0.32**	**0.18 J**	0.25 U	0.22 U	0.25 U	**0.19 J**	0.26 UJ	**0.39 J**	0.26 UJ	0.25 UJ	0.26 UJ	0.26 UJ	0.25 UJ	0.21 UJ	0.24 UJ
Zinc	SW6020	410	960	410	960		**94.9**	**98.3**	**24.6**	**18.0**	**16.3**	**79.8**	**45.1**	**90.9**	**34.1**	**21.6**	**20.2**	**42.3**	**27.4**	**16.8**	**15.1**
Organometals (mg/kg-OC)																					
Tributyltin (ion)	SW8270ESIM						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Organometals (µg/kg)																					
Tributyltin (ion)	SW8270ESIM						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)																					
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM	4.9	64				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270E	220	1700				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270E	58	4500				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270ESIM	61	110				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270ESIM	53	53				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270ESIM	0.38	2.3				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM	11	11				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270ESIM						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC30	TG-SC30	TG-SC30	TG-SC30
						Sample ID	TG-SC28-02-04-250512	TG-SC28-04-06-250512	TG-SC28-06-08-250512	TG-SC28-08-10-250512	TG-SC28-10-12-250512	TG-SC29-00-02-250826	TG-SC29-02-04-250826	TG-SC29-04-06-250826	TG-SC29-06-08-250826	TG-SC29-08-10-250826	TG-SC29-10-12-250826	TG-SC30-00-02-250826	TG-SC30-02-04-250826	TG-SC30-04-06-250826	TG-SC30-06-08-250826
						Sample Date	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM			31	51		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270ESIM			35	50		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270ESIM			110	110		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270ESIM	650	650	650	650		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270ESIM	57	73	57	73		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270ESIM			63	900		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270E			1400	1400		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270E			6200	6200		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270ESIM			200	1200		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270ESIM			71	160		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270ESIM			22	70		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270ESIM			28	40		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270ESIM	360	690	360	690		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270ESIM	420	1200	420	1200		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																				
2-Methylnaphthalene	SW8270E	38	64				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270E	16	57				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270E	66	66				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270E	220	1200				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270E	110	270				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270E	99	210				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270E	31	78				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270E						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270E	110	460				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM	12	33				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270E	15	58				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270E	160	1200				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270E	23	79				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270E	99	170				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270E	100	480				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270E	1000	1400				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC30	TG-SC30	TG-SC30	TG-SC30
						Sample ID	TG-SC28-02-04-250512	TG-SC28-04-06-250512	TG-SC28-06-08-250512	TG-SC28-08-10-250512	TG-SC28-10-12-250512	TG-SC29-00-02-250826	TG-SC29-02-04-250826	TG-SC29-04-06-250826	TG-SC29-06-08-250826	TG-SC29-08-10-250826	TG-SC29-10-12-250826	TG-SC30-00-02-250826	TG-SC30-02-04-250826	TG-SC30-04-06-250826	TG-SC30-06-08-250826
						Sample Date	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E			670	670		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270E			500	500		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270E			1300	1300		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270E			960	960		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270E			1300	1600		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270E			1600	1600		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270E			670	720		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270E						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270E			1400	2800		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270ESIM			230	230		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270E			540	540		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270E			1700	2500		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270E			540	540		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270E			2100	2100		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270E			1500	1500		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270E			2600	3300		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pesticides (mg/kg-OC)																				
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonachlor, cis-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonachlor, trans-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxychlordane	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC30	TG-SC30	TG-SC30	TG-SC30
						Sample ID	TG-SC28-02-04-250512	TG-SC28-04-06-250512	TG-SC28-06-08-250512	TG-SC28-08-10-250512	TG-SC28-10-12-250512	TG-SC29-00-02-250826	TG-SC29-02-04-250826	TG-SC29-04-06-250826	TG-SC29-06-08-250826	TG-SC29-08-10-250826	TG-SC29-10-12-250826	TG-SC30-00-02-250826	TG-SC30-02-04-250826	TG-SC30-04-06-250826	TG-SC30-06-08-250826
						Sample Date	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (µg/kg)																				
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aldrin	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dieldrin	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Endrin ketone	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Heptachlor	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonachlor, cis-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nonachlor, trans-	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Oxychlordane	SW8081B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total DDx (U = 0 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dioxin Furans (ng/kg)																				
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC28	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC29	TG-SC30	TG-SC30	TG-SC30	TG-SC30
						Sample ID	TG-SC28-02-04-250512	TG-SC28-04-06-250512	TG-SC28-06-08-250512	TG-SC28-08-10-250512	TG-SC28-10-12-250512	TG-SC29-00-02-250826	TG-SC29-02-04-250826	TG-SC29-04-06-250826	TG-SC29-06-08-250826	TG-SC29-08-10-250826	TG-SC29-10-12-250826	TG-SC30-00-02-250826	TG-SC30-02-04-250826	TG-SC30-04-06-250826	TG-SC30-06-08-250826
						Sample Date	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-05-12	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)																				
Aroclor 1016	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																				
Aroclor 1016	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1262	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC30	TG-SC30	TG-SC30	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SG06	TG-SG12	TG-SG25	TG-SG27	TG-SG29	TG-SG30
						Sample ID	TG-SC130-06-08-250826	TG-SC30-08-10-250826	TG-SC30-10-12-250826	TG-SC31-00-02-250826	TG-SC31-02-04-250826	TG-SC31-04-06-250826	TG-SC31-06-08-250826	TG-SC31-08-10-250826	TG-SC31-10-10.7-250826	TG-SG06-250826	TG-SG12-250826	TG-SG25-250826	TG-SG27-250826	TG-SG29-250826	TG-SG30-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.7 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Conventional Parameters (pct)																				
Total organic carbon	SW9060AM						--	--	--	--	--	**0.58 J**	**5.30 J**	--	--	**0.55 J**	**0.68 J**	**0.61 J**	**0.82 J**	**0.98 J**	**0.66 J**
Total solids	D2216						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total solids	SM2540G						**81.11**	**88.55**	**78.76**	**65.05**	**69.85**	**73.64**	**53.60**	**50.36**	**60.82**	**70.66**	**62.32**	**63.86**	**58.94**	**60.11**	**65.36**
Total volatile solids	PSEP-TVS						--	--	--	--	--	**3.05**	**13.30**	--	--	**2.77**	**3.58**	**3.32**	**4.13**	**3.85**	**3.15**
Metals (mg/kg)																				
Antimony	SW6020						0.25 UJ	0.21 UJ	0.24 UJ	0.30 UJ	**0.65 J**	0.27 UJ	0.38 UJ	0.39 UJ	0.31 UJ	**3.06 J**	**0.37 J**	0.29 UJ	0.33 UJ	0.31 UJ	0.28 UJ
Arsenic	SW6020	57	93	57	93		**4.25**	**1.75**	**1.41**	**10.7**	**51.6**	**13.9**	**8.59**	**9.41**	**4.78**	**127 J**	**26.5 J**	**10.0 J**	**22.9 J**	**7.18 J**	**5.14 J**
Cadmium	SW6020	5.1	6.7	5.1	6.7		0.12 U	0.10 U	0.12 U	**0.19**	**0.24**	**0.08 J**	0.19 U	**0.17 J**	**0.09 J**	**0.31 J**	**0.17 J**	**0.40 J**	**0.19 J**	**0.15 J**	**0.12 J**
Chromium	SW6020	260	270	260	270		**9.36**	**9.35**	**9.64**	**12.5**	**15.7**	**11.9**	**13.4**	**14.0**	**16.4**	**19.1**	**25.0**	**26.4**	**19.3**	**15.2**	**13.4**
Copper	SW6020	390	390	390	390		**9.29**	**9.55**	**9.00**	**46.2**	**109**	**46.1**	**33.8**	**35.8**	**38.8**	**133**	**207**	**728**	**81.0**	**50.3**	**30.1**
Lead	SW6020	450	530	450	530		**1.24**	**1.05**	**0.99**	**15.0**	**61.9**	**16.7**	**3.59**	**3.70**	**3.86**	**129 J**	**29.4 J**	**29.7 J**	**26.5 J**	**12.5 J**	**8.62 J**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.00847 J**	**0.00896 J**	**0.00630 J**	**0.0644**	**0.0676**	**0.0369**	**0.0238 J**	**0.0361**	**0.0300**	**0.0572**	**0.0804**	**0.0485**	**0.0547**	**0.0390**	**0.0423**
Selenium	SW6020						1.23 U	**0.63 J**	**0.88 J**	**1.01 J**	**0.89 J**	**0.89 J**	**1.79 J**	**2.26**	**1.79**	1.30 U	**0.79 J**	**1.40 J**	1.64 U	**0.79 J**	1.40 U
Silver	SW6020	6.1	6.1	6.1	6.1		0.25 UJ	0.21 UJ	0.24 UJ	0.30 UJ	**0.21 J**	0.27 UJ	0.38 UJ	0.39 UJ	0.31 UJ	0.65 UJ	**0.19 J**	**0.59 J**	**0.18 J**	0.31 UJ	0.28 UJ
Zinc	SW6020	410	960	410	960		**18.1**	**16.6**	**15.2**	**68.2**	**169**	**58.7**	**22.3**	**32.3**	**33.4**	**384 J**	**162 J**	**2180 J**	**165 J**	**60.3 J**	**51.7 J**
Organometals (mg/kg-OC)																				
Tributyltin (ion)	SW8270ESIM						--	--	--	--	--	**1.61 J**	--	--	--	**16.9 J**	**35.7**	**1.23**	0.410 U	**0.229 J**	**0.259 J**
Organometals (µg/kg)																				
Tributyltin (ion)	SW8270ESIM						--	--	--	--	--	**9.36 J**	3.72 U	--	--	**92.8 J**	**243**	**7.53**	3.36 U	**2.24 J**	**1.71 J**
Semivolatile Organics (mg/kg-OC)																				
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				--	--	--	--	--	4.28 U	--	--	--	4.38 U	0.69 U	0.80 U	0.54 U	0.48 U	0.76 U
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				--	--	--	--	--	4.28 U	--	--	--	4.38 U	0.69 U	0.80 U	0.54 U	0.48 U	**0.53 J**
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				--	--	--	--	--	4.28 U	--	--	--	4.38 U	0.69 U	0.80 U	0.54 U	**0.31 J**	**0.68 J**
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				--	--	--	--	--	42.8 U	--	--	--	43.8 U	6.99 U	7.97 U	5.34 U	4.83 U	7.50 U
Butylbenzyl phthalate	SW8270ESIM	4.9	64				--	--	--	--	--	4.28 U	--	--	--	4.38 U	**0.46 J**	**1.0**	**0.85**	**0.27 J**	**0.42 J**
Di-n-butyl phthalate	SW8270E	220	1700				--	--	--	--	--	17.1 U	--	--	--	17.5 U	2.79 U	3.20 U	2.13 U	1.93 U	3.00 U
Di-n-octyl phthalate	SW8270E	58	4500				--	--	--	--	--	17.1 UJ	--	--	--	17.5 U	2.79 U	3.20 U	2.13 U	1.93 U	3.00 U
Diethyl phthalate	SW8270ESIM	61	110				--	--	--	--	--	17.1 U	--	--	--	17.5 U	2.79 U	3.20 U	2.13 U	1.93 U	3.00 U
Dimethyl phthalate	SW8270ESIM	53	53				--	--	--	--	--	4.28 U	--	--	--	4.38 U	**0.43 J**	**0.82**	0.54 U	**0.26 J**	0.76 U
Hexachlorobenzene	SW8270ESIM	0.38	2.3				--	--	--	--	--	4.28 U	--	--	--	4.38 U	0.69 U	0.80 U	0.54 U	0.48 U	0.76 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				--	--	--	--	--	4.28 U	--	--	--	4.38 U	0.69 U	0.80 U	0.54 U	0.48 U	0.76 U
n-Nitrosodiphenylamine	SW8270ESIM	11	11				--	--	--	--	--	4.28 U	--	--	--	4.38 U	0.69 U	0.80 U	0.54 U	0.48 U	0.76 U
Pentachlorophenol	SW8270ESIM						--	--	--	--	--	17.1 UJ	--	--	--	17.5 UJ	2.79 UJ	3.20 UJ	2.13 UJ	1.93 UJ	3.00 UJ

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC30	TG-SC30	TG-SC30	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SG06	TG-SG12	TG-SG25	TG-SG27	TG-SG29	TG-SG30
						Sample ID	TG-SC130-06-08-250826	TG-SC30-08-10-250826	TG-SC30-10-12-250826	TG-SC31-00-02-250826	TG-SC31-02-04-250826	TG-SC31-04-06-250826	TG-SC31-06-08-250826	TG-SC31-08-10-250826	TG-SC31-10-10.7-250826	TG-SG06-250826	TG-SG12-250826	TG-SG25-250826	TG-SG27-250826	TG-SG29-250826	TG-SG30-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.7 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)																				
1,2,4-Trichlorobenzene	SW8270ESIM			31	51		--	--	--	--	--	24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	4.7 U	5.0 U
1,2-Dichlorobenzene	SW8270ESIM			35	50		--	--	--	--	--	24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	4.7 U	**3.5 J**
1,4-Dichlorobenzene	SW8270ESIM			110	110		--	--	--	--	--	24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	**3.0 J**	**4.5 J**
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29		--	--	--	--	--	99.3 U	19.5 U	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63		--	--	--	--	--	24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	**4.7 J**	**5.0**
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670		--	--	--	--	--	**15.9 J**	**3.4 J**	--	--	**16.6 J**	**37.1**	**5.4**	**48.2**	**9.9**	**21.2**
Benzoic acid	SW8270ESIM	650	650	650	650		--	--	--	--	--	496 UJ	97.3 UJ	--	--	481 UJ	95.0 UJ	97.3 UJ	87.6 UJ	94.6 UJ	99.1 UJ
Benzyl alcohol	SW8270ESIM	57	73	57	73		--	--	--	--	--	99.3 U	19.5 U	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900		--	--	--	--	--	248 U	48.6 U	--	--	241 U	47.5 U	48.6 U	43.8 U	47.3 U	49.5 U
Butylbenzyl phthalate	SW8270ESIM			63	900		--	--	--	--	--	24.8 U	4.9 U	--	--	24.1 U	**3.1 J**	**6.2**	**7.0**	**2.6 J**	**2.8 J**
Di-n-butyl phthalate	SW8270E			1400	1400		--	--	--	--	--	99.3 U	19.5 U	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U
Di-n-octyl phthalate	SW8270E			6200	6200		--	--	--	--	--	99.3 UJ	19.5 UJ	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U
Diethyl phthalate	SW8270ESIM			200	1200		--	--	--	--	--	99.3 U	19.5 U	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U
Dimethyl phthalate	SW8270ESIM			71	160		--	--	--	--	--	24.8 U	4.9 U	--	--	24.1 U	**2.9 J**	**5.0**	4.4 U	**2.5 J**	5.0 U
Hexachlorobenzene	SW8270ESIM			22	70		--	--	--	--	--	24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	4.7 U	5.0 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120		--	--	--	--	--	24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	4.7 U	5.0 U
n-Nitrosodiphenylamine	SW8270ESIM			28	40		--	--	--	--	--	24.8 U	4.9 U	--	--	24.1 U	4.7 U	4.9 U	4.4 U	4.7 U	5.0 U
Pentachlorophenol	SW8270ESIM	360	690	360	690		--	--	--	--	--	99.3 UJ	19.5 UJ	--	--	96.3 UJ	19.0 UJ	19.5 UJ	17.5 UJ	18.9 UJ	19.8 UJ
Phenol	SW8270ESIM	420	1200	420	1200		--	--	--	--	--	**18.5 J**	**4.6 J**	--	--	**22.6 J**	4.7 U	4.9 U	4.4 U	4.7 U	5.0 U
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																				
2-Methylnaphthalene	SW8270E	38	64				--	--	--	--	--	17.1 U	--	--	--	17.5 U	2.79 U	**2.82 J**	**1.27 J**	1.93 U	**1.61 J**
Acenaphthene	SW8270E	16	57				--	--	--	--	--	17.1 U	--	--	--	**9.65 J**	**2.56 J**	**4.61**	2.13 U	1.93 U	3.00 U
Acenaphthylene	SW8270E	66	66				--	--	--	--	--	**12.0 J**	--	--	--	17.5 U	2.79 U	3.20 U	2.13 U	1.93 U	3.00 U
Anthracene	SW8270E	220	1200				--	--	--	--	--	**20.3**	--	--	--	**42.7**	**9.99**	**4.92**	**3.35**	**2.59**	**2.65 J**
Benzo(a)anthracene	SW8270E	110	270				--	--	--	--	--	**99.8**	--	--	--	**280**	**30.3**	**11.7**	**6.87**	**6.78**	**6.98**
Benzo(a)pyrene	SW8270E	99	210				--	--	--	--	--	**110**	--	--	--	**146**	**28**	**11.6**	**9.23**	**5.82**	**7.03**
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	--	--	**195**	--	--	--	**391**	**56.9**	**28.7**	**20.6**	**14.5**	**17.7**
Benzo(g,h,i)perylene	SW8270E	31	78				--	--	--	--	--	**87.1**	--	--	--	**54.0 J**	**14.6 J**	**6.10 J**	**3.60 J**	**2.60 J**	**3.59 J**
Carbazole	SW8270E						--	--	--	--	--	**20.9**	--	--	--	**19.5**	**2.59 J**	**1.80 J**	2.13 U	1.93 U	3.00 U
Chrysene	SW8270E	110	460				--	--	--	--	--	**112**	--	--	--	**407**	**41.0**	**20.7**	**14.5**	**15.7**	**16.1**
Dibenzo(a,h)anthracene	SW8270ESIM	12	33				--	--	--	--	--	**14.5**	--	--	--	**15.0**	**4.12**	**1.64**	**1.0**	**0.67**	**0.86**
Dibenzofuran	SW8270E	15	58				--	--	--	--	--	17.1 U	--	--	--	17.5 U	2.79 U	**3.33**	2.13 U	1.93 U	3.00 U
Fluoranthene	SW8270E	160	1200				--	--	--	--	--	**226**	--	--	--	**2070**	**87.9**	**28.4**	**12.1**	**13.8**	**22.3**
Fluorene	SW8270E	23	79				--	--	--	--	--	17.1 U	--	--	--	17.5 U	**3.35**	**3.98**	2.13 U	1.93 U	3.00 U
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88				--	--	--	--	--	**69.5**	--	--	--	**51 J**	**13.3 J**	**5.72 J**	**3.39 J**	**2.50 J**	**3.24 J**
Naphthalene	SW8270E	99	170				--	--	--	--	--	17.1 U	--	--	--	17.5 U	**1.96 J**	**6.26**	**1.54 J**	**1.43 J**	**1.92 J**
Phenanthrene	SW8270E	100	480				--	--	--	--	--	**97**	--	--	--	**54.7**	**38.1**	**15.5**	**5.71**	**5.21**	**6.64**
Pyrene	SW8270E	1000	1400				--	--	--	--	--	**228**	--	--	--	**1210**	**71.5**	**30.8**	**16.2**	**13.2**	**20.3**
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	--	--	--	**195**	--	--	--	**391**	**56.9**	**28.7**	**20.6**	**14.5**	**17.7**
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	--	--	--	**1100**	--	--	--	**4600 J**	**350 J**	**145 J**	**88 J**	**76 J**	**98 J**
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	--	--	--	**130 J**	--	--	--	**107 J**	**56 J**	**35.3**	**10.6 J**	**9.23 J**	**11.2 J**

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC30	TG-SC30	TG-SC30	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SG06	TG-SG12	TG-SG25	TG-SG27	TG-SG29	TG-SG30
						Sample ID	TG-SC130-06-08-250826	TG-SC30-08-10-250826	TG-SC30-10-12-250826	TG-SC31-00-02-250826	TG-SC31-02-04-250826	TG-SC31-04-06-250826	TG-SC31-06-08-250826	TG-SC31-08-10-250826	TG-SC31-10-10.7-250826	TG-SG06-250826	TG-SG12-250826	TG-SG25-250826	TG-SG27-250826	TG-SG29-250826	TG-SG30-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.7 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																				
2-Methylnaphthalene	SW8270E			670	670		--	--	--	--	--	99.3 U	19.5 U	--	--	96.3 U	19.0 U	**17.2 J**	**10.4 J**	18.9 U	**10.6 J**
Acenaphthene	SW8270E			500	500		--	--	--	--	--	99.3 U	19.5 U	--	--	**53.1 J**	**17.4 J**	**28.1**	17.5 U	18.9 U	19.8 U
Acenaphthylene	SW8270E			1300	1300		--	--	--	--	--	**69.5 J**	19.5 U	--	--	96.3 U	19.0 U	19.5 U	17.5 U	18.9 U	19.8 U
Anthracene	SW8270E			960	960		--	--	--	--	--	**118**	19.5 U	--	--	**235**	**67.9**	**30.0**	**27.5**	**25.4**	**17.5 J**
Benzo(a)anthracene	SW8270E			1300	1600		--	--	--	--	--	**579**	19.5 U	--	--	**1540**	**206**	**71.6**	**56.3**	**66.4**	**46.1**
Benzo(a)pyrene	SW8270E			1600	1600		--	--	--	--	--	**640**	19.5 U	--	--	**801**	**190**	**70.5**	**75.7**	**57.0**	**46.4**
Benzo(b,j,k)fluoranthenes	SW8270E						--	--	--	--	--	**1130**	38.9 U	--	--	**2150**	**387**	**175**	**169**	**142**	**117**
Benzo(g,h,i)perylene	SW8270E			670	720		--	--	--	--	--	**505**	19.5 UJ	--	--	**297 J**	**99.0 J**	**37.2 J**	**29.5 J**	**25.5 J**	**23.7 J**
Carbazole	SW8270E						--	--	--	--	--	**121**	19.5 U	--	--	**107**	**17.6 J**	**11.0 J**	17.5 U	18.9 U	19.8 U
Chrysene	SW8270E			1400	2800		--	--	--	--	--	**649**	19.5 U	--	--	**2240**	**279**	**126**	**119**	**154**	**106**
Dibenzo(a,h)anthracene	SW8270ESIM			230	230		--	--	--	--	--	**84.0**	4.9 U	--	--	**82.6**	**28.0**	**10.0**	**8.3**	**6.6**	**5.7**
Dibenzofuran	SW8270E			540	540		--	--	--	--	--	99.3 U	19.5 U	--	--	96.3 U	19.0 U	**20.3**	17.5 U	18.9 U	19.8 U
Fluoranthene	SW8270E			1700	2500		--	--	--	--	--	**1310**	19.5 U	--	--	**11400**	**598**	**173**	**99.1**	**135**	**147**
Fluorene	SW8270E			540	540		--	--	--	--	--	99.3 U	19.5 U	--	--	96.3 U	**22.8**	**24.3**	17.5 U	18.9 U	19.8 U
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		--	--	--	--	--	**403**	19.5 UJ	--	--	**280 J**	**90.4 J**	**34.9 J**	**27.8 J**	**24.5 J**	**21.4 J**
Naphthalene	SW8270E			2100	2100		--	--	--	--	--	99.3 U	19.5 U	--	--	96.3 U	**13.3 J**	**38.2**	**12.6 J**	**14.0 J**	**12.7 J**
Phenanthrene	SW8270E			1500	1500		--	--	--	--	--	**560**	19.5 U	--	--	**301**	**259**	**94.6**	**46.8**	**51.1**	**43.8**
Pyrene	SW8270E			2600	3300		--	--	--	--	--	**1320**	19.5 U	--	--	**6670**	**486**	**188**	**133**	**129**	**134**
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		--	--	--	--	--	**1130**	38.9 U	--	--	**2150**	**387**	**175**	**169**	**142**	**117**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	--	--	**866**	19.5 UJ	--	--	**1230 J**	**264 J**	**101 J**	**103 J**	**82.5 J**	**66.5 J**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	--	--	**866**	19.5 UJ	--	--	**1230 J**	**264 J**	**101 J**	**103 J**	**82.5 J**	**66.5 J**
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		--	--	--	--	--	**6600**	38.9 UJ	--	--	**25000 J**	**2400 J**	**886 J**	**720 J**	**740 J**	**650 J**
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		--	--	--	--	--	**750 J**	19.5 U	--	--	**589 J**	**380 J**	**215**	**86.9 J**	**90.5 J**	**74.0 J**
Pesticides (mg/kg-OC)																				
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	--	--	0.224 U	--	--	--	0.182 UJ	0.14 UJ	0.14 UJ	0.11 UJ	0.10 UJ	0.13 UJ
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	--	--	0.224 U	--	--	--	0.182 U	0.14 U	0.14 U	0.11 U	0.10 U	0.13 U
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	--	--	0.224 U	--	--	--	0.182 UJ	0.14 UJ	0.14 UJ	0.11 UJ	0.10 UJ	0.13 UJ
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	--	--	--	0.224 U	--	--	--	0.182 U	0.14 U	0.14 U	0.11 U	0.10 U	0.13 U
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	--	--	--	**0.16 J**	--	--	--	0.182 UJ	0.14 UJ	0.14 UJ	0.11 UJ	0.10 UJ	0.13 UJ
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	--	--	--	0.224 U	--	--	--	0.182 UJ	0.14 UJ	0.14 UJ	0.11 UJ	0.10 UJ	0.13 UJ
Aldrin	SW8081B						--	--	--	--	--	0.11 UJ	--	--	--	0.091 UJ	0.069 U	0.069 U	0.056 U	0.050 U	0.067 U
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	--	--	0.11 UJ	--	--	--	0.091 UJ	0.069 UJ	0.069 UJ	0.056 UJ	0.050 UJ	0.067 UJ
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	--	--	0.11 UJ	--	--	--	0.091 UJ	0.069 UJ	0.069 UJ	0.056 UJ	0.050 UJ	0.067 UJ
Dieldrin	SW8081B						--	--	--	--	--	0.224 U	--	--	--	0.182 UJ	0.14 UJ	0.14 UJ	0.11 UJ	0.10 UJ	0.13 UJ
Endrin ketone	SW8081B						--	--	--	--	--	0.224 U	--	--	--	0.182 UJ	0.14 UJ	0.14 UJ	0.11 UJ	0.10 UJ	0.13 UJ
Heptachlor	SW8081B						--	--	--	--	--	0.11 U	--	--	--	0.091 U	0.069 U	0.069 U	0.056 U	0.050 U	0.067 U
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	--	--	0.11 UJ	--	--	--	0.091 UJ	0.069 UJ	0.069 UJ	0.056 UJ	0.050 UJ	0.067 UJ
Nonachlor, cis-	SW8081B						--	--	--	--	--	0.224 U	--	--	--	0.182 U	0.14 U	0.14 U	**0.098 J**	0.10 U	**0.12 J**
Nonachlor, trans-	SW8081B						--	--	--	--	--	0.224 U	--	--	--	0.182 UJ	0.14 UJ	0.14 UJ	0.11 UJ	0.10 UJ	0.13 UJ
Oxychlordane	SW8081B						--	--	--	--	--	0.224 U	--	--	--	0.182 U	0.14 U	0.14 U	0.11 U	0.10 U	0.13 U

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC30	TG-SC30	TG-SC30	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SG06	TG-SG12	TG-SG25	TG-SG27	TG-SG29	TG-SG30
						Sample ID	TG-SC130-06-08-250826	TG-SC30-08-10-250826	TG-SC30-10-12-250826	TG-SC31-00-02-250826	TG-SC31-02-04-250826	TG-SC31-04-06-250826	TG-SC31-06-08-250826	TG-SC31-08-10-250826	TG-SC31-10-10.7-250826	TG-SG06-250826	TG-SG12-250826	TG-SG25-250826	TG-SG27-250826	TG-SG29-250826	TG-SG30-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.7 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (µg/kg)																					
2,4'-DDD (o,p'-DDD)	SW8081B						--	--	--	--	--	1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ
2,4'-DDE (o,p'-DDE)	SW8081B						--	--	--	--	--	1.30 U	1.99 U	--	--	1.00 U	0.94 U	0.84 U	0.93 U	0.98 U	0.88 U
2,4'-DDT (o,p'-DDT)	SW8081B						--	--	--	--	--	1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ
4,4'-DDD (p,p'-DDD)	SW8081B						--	--	--	--	--	1.30 U	1.99 U	--	--	1.00 U	0.94 U	0.84 U	0.93 U	0.98 U	0.88 U
4,4'-DDE (p,p'-DDE)	SW8081B						--	--	--	--	--	**0.91 J**	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ
4,4'-DDT (p,p'-DDT)	SW8081B						--	--	--	--	--	1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ
Aldrin	SW8081B						--	--	--	--	--	0.65 UJ	1.00 U	--	--	0.50 UJ	0.47 U	0.42 U	0.46 U	0.49 U	0.44 U
Chlordane, alpha- (Chlordane, cis-)	SW8081B						--	--	--	--	--	0.65 UJ	1.00 UJ	--	--	0.50 UJ	0.47 UJ	0.42 UJ	0.46 UJ	0.49 UJ	0.44 UJ
Chlordane, beta- (Chlordane, trans-)	SW8081B						--	--	--	--	--	0.65 UJ	1.00 UJ	--	--	0.50 UJ	0.47 UJ	0.42 UJ	0.46 UJ	0.49 UJ	0.44 UJ
Dieldrin	SW8081B						--	--	--	--	--	1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ
Endrin ketone	SW8081B						--	--	--	--	--	1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ
Heptachlor	SW8081B						--	--	--	--	--	0.65 U	1.00 U	--	--	0.50 U	0.47 U	0.42 U	0.46 U	0.49 U	0.44 U
Hexachlorocyclohexane (BHC), beta-	SW8081B						--	--	--	--	--	0.65 UJ	1.00 UJ	--	--	0.50 UJ	0.47 UJ	0.42 UJ	0.46 UJ	0.49 UJ	0.44 UJ
Nonachlor, cis-	SW8081B						--	--	--	--	--	1.30 U	1.99 U	--	--	1.00 U	0.94 U	0.84 U	**0.80 J**	0.98 U	**0.78 J**
Nonachlor, trans-	SW8081B						--	--	--	--	--	1.30 U	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ
Oxychlordane	SW8081B						--	--	--	--	--	1.30 U	1.99 U	--	--	1.00 U	0.94 U	0.84 U	0.93 U	0.98 U	0.88 U
Total DDx (U = 0 max limit)	Calculated						--	--	--	--	--	**0.91 J**	1.99 U	--	--	1.00 UJ	0.94 UJ	0.84 UJ	0.93 UJ	0.98 UJ	0.88 UJ
Dioxin Furans (ng/kg)																					
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						--	--	--	--	--	**2520**	8.68 U	--	--	**1930**	**1340**	**1520**	**2490**	**2040**	**1910**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						--	--	--	--	--	**70.4**	**0.321 J**	--	--	**54.7**	**68.7**	**60.7**	**119**	**81.6**	**73.2**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	--	--	**286**	0.802 U	--	--	**168**	**142**	**145**	**228**	**204**	**163**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	**34.8**	**0.121 J**	--	--	**20.3**	**21.8**	**22.5**	**45.1**	**34.2**	**28.4**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	**2.85**	0.134 U	--	--	**1.75 J**	**2.46 J**	**2.38 J**	**4.31**	**3.20**	**2.37 J**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	**2.56**	0.215 U	--	--	**1.17 J**	**1.30 J**	**1.24 J**	**1.77 J**	**2.04 J**	**1.64 J**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	**3.78**	0.107 U	--	--	**3.02**	**3.99**	**3.97**	**7.95**	**6.57**	**5.44**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	**14.1**	0.220 U	--	--	**5.16**	**6.36**	**5.69**	**8.93**	**10.2**	**8.40**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	**2.15 J**	0.119 U	--	--	**1.25 J**	**1.50 J**	**1.44 J**	**2.91**	**2.42 J**	**2.06 J**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	**7.15**	0.239 U	--	--	**2.77**	**3.08**	**2.53**	**4.09**	**5.47**	**3.81**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	**0.813 J**	0.162 U	--	--	**0.696 J**	**0.784 J**	**0.750 J**	**1.92 J**	**0.889 J**	**1.71 J**
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	--	--	**2.30 J**	0.152 U	--	--	**0.707 J**	**0.935 J**	**1.21 J**	**1.14 J**	**1.32 J**	**1.30 J**
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	**1.47 J**	**0.0510 J**	--	--	**1.08 J**	**1.76 J**	**1.75 J**	**4.28**	**3.06**	**2.27 J**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	**1.48 J**	0.136 U	--	--	**0.959 J**	**1.07 J**	**0.970 J**	**1.27 J**	**1.45 J**	**0.905 J**
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	**2.65**	0.0888 U	--	--	**1.08 J**	**1.73 J**	**1.57 J**	**2.99**	**2.82**	**3.06**
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	--	--	**0.285 J**	**0.0430 J**	--	--	0.0802 U	0.183 UJ	0.114 UJ	0.235 UJ	0.228 UJ	**0.273 J**
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	--	--	**1.31 J**	0.0809 U	--	--	**1.07**	**1.62**	**1.39**	**2.60**	**2.31**	**2.07**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						--	--	--	--	--	**10.8 J**	**0.0458 J**	--	--	**5.17 J**	**5.56 J**	**5.70 J**	**8.87 J**	**8.44 J**	**7.70 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						--	--	--	--	--	**10.8 J**	**0.205 J**	--	--	**5.21 J**	**5.65 J**	**5.76 J**	**8.98 J**	**8.56 J**	**7.70 J**
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						--	--	--	--	--	**788**	**1.74 J**	--	--	**833**	**535**	**603**	**721**	**636**	**459**
Total Heptachlorodibenzofuran (HpCDF)	E1613B						--	--	--	--	--	**126 J**	**0.342 J**	--	--	**75.8 J**	**91.5**	**91.6**	**198**	**131**	**126 J**
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						--	--	--	--	--	**132**	**0.354 J**	--	--	**62.6**	**67.4**	**63.3**	**76.6**	**94.7 J**	**73.9**
Total Hexachlorodibenzofuran (HxCDF)	E1613B						--	--	--	--	--	**83.8 J**	**0.201 J**	--	--	**41.4**	**49.5 J**	**46.8 J**	**106 J**	**80.2 J**	**83.5**
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						--	--	--	--	--	**22.8 J**	0.152 U	--	--	**7.33 J**	**11.8 J**	**13.0 J**	**16.1 J**	**17.9 J**	**18.0 J**
Total Pentachlorodibenzofuran (PeCDF)	E1613B						--	--	--	--	--	**41.9 J**	**0.0510 J**	--	--	**13.1 J**	**19.5 J**	**16.9 J**	**32.6 J**	**29.3**	**28.7 J**
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						--	--	--	--	--	**12.1 J**	**0.0430 J**	--	--	**4.15 J**	**6.55 J**	**6.26 J**	**9.13 J**	**10.3 J**	**17.9 J**
Total Tetrachlorodibenzofuran (TCDF)	E1613B						--	--	--	--	--	**21.3 J**	**1.06 J**	--	--	**10.4 J**	**13.0 J**	**11.3 J**	**16.0 J**	**18.0 J**	**18.4 J**

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SC30	TG-SC30	TG-SC30	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SC31	TG-SG06	TG-SG12	TG-SG25	TG-SG27	TG-SG29	TG-SG30
						Sample ID	TG-SC130-06-08-250826	TG-SC30-08-10-250826	TG-SC30-10-12-250826	TG-SC31-00-02-250826	TG-SC31-02-04-250826	TG-SC31-04-06-250826	TG-SC31-06-08-250826	TG-SC31-08-10-250826	TG-SC31-10-10.7-250826	TG-SG06-250826	TG-SG12-250826	TG-SG25-250826	TG-SG27-250826	TG-SG29-250826	TG-SG30-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	6 - 8 ft	8 - 10 ft	10 - 12 ft	0 - 2 ft	2 - 4 ft	4 - 6 ft	6 - 8 ft	8 - 10 ft	10 - 10.7 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)																					
Aroclor 1016	SW8082A						--	--	--	--	--	0.69 U	--	--	--	7.24 U	0.54 U	0.56 U	0.45 U	0.40 U	0.53 U
Aroclor 1221	SW8082A						--	--	--	--	--	0.69 U	--	--	--	7.24 U	0.54 U	0.56 U	0.45 U	0.40 U	0.53 U
Aroclor 1232	SW8082A						--	--	--	--	--	0.69 U	--	--	--	7.24 U	0.54 U	0.56 U	0.45 U	0.40 U	0.53 U
Aroclor 1242	SW8082A						--	--	--	--	--	0.69 U	--	--	--	7.24 U	0.54 U	0.56 U	0.45 U	0.40 U	0.53 U
Aroclor 1248	SW8082A						--	--	--	--	--	0.69 U	--	--	--	7.24 U	**2.85**	**0.69**	**0.88**	0.40 U	**1.70**
Aroclor 1254	SW8082A						--	--	--	--	--	**1.98**	--	--	--	**47.1**	**4.35**	**0.98 J**	**1.34 J**	**3.96**	**2.29**
Aroclor 1260	SW8082A						--	--	--	--	--	0.69 U	--	--	--	**14.2 J**	**1.0**	0.56 U	0.45 U	**0.95**	**0.97**
Aroclor 1262	SW8082A						--	--	--	--	--	0.69 U	--	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	--	--	--	--	0.69 U	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	--	--	--	--	**1.98**	--	--	--	**61.3 J**	**8.2**	**2 J**	**2.2 J**	**4.9**	**5.0**
PCB Aroclors (µg/kg)																					
Aroclor 1016	SW8082A						--	--	--	--	--	4.0 U	3.9 U	--	--	39.8 U	3.7 U	3.4 U	3.7 U	3.9 U	3.5 U
Aroclor 1221	SW8082A						--	--	--	--	--	4.0 U	3.9 U	--	--	39.8 U	3.7 U	3.4 U	3.7 U	3.9 U	3.5 U
Aroclor 1232	SW8082A						--	--	--	--	--	4.0 U	3.9 U	--	--	39.8 U	3.7 U	3.4 U	3.7 U	3.9 U	3.5 U
Aroclor 1242	SW8082A						--	--	--	--	--	4.0 U	3.9 U	--	--	39.8 U	3.7 U	3.4 U	3.7 U	3.9 U	3.5 U
Aroclor 1248	SW8082A						--	--	--	--	--	4.0 U	3.9 U	--	--	39.8 U	**19.4**	**4.2**	**7.2**	3.9 U	**11.2**
Aroclor 1254	SW8082A						--	--	--	--	--	**11.5**	3.9 U	--	--	**259**	**29.6**	**6.0 J**	**11.0 J**	**38.8**	**15.1**
Aroclor 1260	SW8082A						--	--	--	--	--	4.0 U	3.9 U	--	--	**78.0 J**	**6.8**	3.4 U	3.7 U	**9.3**	**6.4**
Aroclor 1262	SW8082A						--	--	--	--	--	4.0 U	3.9 U	--	--	--	--	--	--	--	--
Aroclor 1268	SW8082A						--	--	--	--	--	4.0 U	3.9 U	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		--	--	--	--	--	**11.5**	3.9 U	--	--	**337 J**	**56**	**10 J**	**18 J**	**48**	**33**

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SG31	TG-SG31	TG-SG32
						Sample ID	TG-SG31-250826	TG-SG131-250826	TG-SG32-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	N	FD	N
						Matrix	SE	SE	SE
Conventional Parameters (pct)									
Total organic carbon	SW9060AM						**1.41 J**	**2.08 J**	**0.33 J**
Total solids	D2216						--	--	--
Total solids	SM2540G						**66.32**	**66.86**	**71.08**
Total volatile solids	PSEP-TVS						**3.25**	**3.16**	**2.27**
Metals (mg/kg)									
Antimony	SW6020						0.28 UJ	0.30 UJ	0.27 UJ
Arsenic	SW6020	57	93	57	93		**9.98 J**	**11.6 J**	**9.04 J**
Cadmium	SW6020	5.1	6.7	5.1	6.7		**0.18 J**	**0.20 J**	**0.19 J**
Chromium	SW6020	260	270	260	270		**16.3**	**14.1**	**21.6**
Copper	SW6020	390	390	390	390		**87.9**	**104**	**90.8**
Lead	SW6020	450	530	450	530		**14.3 J**	**58.9 J**	**26.0 J**
Mercury	SW7471B	0.41	0.59	0.41	0.59		**0.0388**	**0.0323**	**0.0235 J**
Selenium	SW6020						1.41 U	1.48 U	1.33 U
Silver	SW6020	6.1	6.1	6.1	6.1		0.28 UJ	0.30 UJ	0.27 UJ
Zinc	SW6020	410	960	410	960		**77.5 J**	**73.8 J**	**65.8 J**
Organometals (mg/kg-OC)									
Tributyltin (ion)	SW8270ESIM						**10.7**	**23.2**	--
Organometals (µg/kg)									
Tributyltin (ion)	SW8270ESIM						**151**	**482**	**31.8**
Semivolatile Organics (mg/kg-OC)									
1,2,4-Trichlorobenzene	SW8270ESIM	0.81	1.8				0.35 U	0.21 U	--
1,2-Dichlorobenzene	SW8270ESIM	2.3	2.3				**0.22 J**	**0.18 J**	--
1,4-Dichlorobenzene	SW8270ESIM	3.1	9				**0.28 J**	**0.22**	--
Bis(2-ethylhexyl)phthalate	SW8270E	47	78				**7.94**	**8.13**	--
Butylbenzyl phthalate	SW8270ESIM	4.9	64				**0.39**	**0.23**	--
Di-n-butyl phthalate	SW8270E	220	1700				1.42 U	0.846 U	--
Di-n-octyl phthalate	SW8270E	58	4500				1.42 U	0.846 U	--
Diethyl phthalate	SW8270ESIM	61	110				1.42 U	0.846 U	--
Dimethyl phthalate	SW8270ESIM	53	53				**1.82**	0.21 U	--
Hexachlorobenzene	SW8270ESIM	0.38	2.3				0.35 U	0.21 U	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM	3.9	6.2				0.35 U	0.21 U	--
n-Nitrosodiphenylamine	SW8270ESIM	11	11				0.35 U	0.21 U	--
Pentachlorophenol	SW8270ESIM						1.42 UJ	0.846 UJ	--

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

					Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
					Location ID	TG-SG31	TG-SG31	TG-SG32
					Sample ID	TG-SG31-250826	TG-SG131-250826	TG-SG32-250826
					Sample Date	2025-08-26	2025-08-26	2025-08-26
					Depth Interval	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
					Sample Type Code	N	FD	N
					Matrix	SE	SE	SE
Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL			
Semivolatile Organics (µg/kg)								
1,2,4-Trichlorobenzene	SW8270ESIM			31	51	5.0 U	4.4 U	5.0 U
1,2-Dichlorobenzene	SW8270ESIM			35	50	**3.1 J**	**3.8 J**	5.0 U
1,4-Dichlorobenzene	SW8270ESIM			110	110	**4.0 J**	**4.6**	5.0 U
2,4-Dimethylphenol	SW8270ESIM	29	29	29	29	20.0 U	17.6 U	20.0 U
2-Methylphenol (o-Cresol)	SW8270ESIM	63	63	63	63	**3.2 J**	**5.9**	**2.6 J**
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670	**19.3**	**15.6**	**11.8**
Benzoic acid	SW8270ESIM	650	650	650	650	100 UJ	88.0 UJ	100 UJ
Benzyl alcohol	SW8270ESIM	57	73	57	73	20.0 U	17.6 U	20.0 U
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900	**112**	**169**	**238**
Butylbenzyl phthalate	SW8270ESIM			63	900	**5.5**	**4.7**	**36.8**
Di-n-butyl phthalate	SW8270E			1400	1400	20.0 U	17.6 U	20.0 U
Di-n-octyl phthalate	SW8270E			6200	6200	20.0 U	17.6 U	20.0 U
Diethyl phthalate	SW8270ESIM			200	1200	20.0 U	17.6 U	20.0 U
Dimethyl phthalate	SW8270ESIM			71	160	**25.7**	4.4 U	5.0 U
Hexachlorobenzene	SW8270ESIM			22	70	5.0 U	4.4 U	5.0 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270ESIM			11	120	5.0 U	4.4 U	5.0 U
n-Nitrosodiphenylamine	SW8270ESIM			28	40	5.0 U	4.4 U	5.0 U
Pentachlorophenol	SW8270ESIM	360	690	360	690	20.0 UJ	17.6 UJ	20.0 UJ
Phenol	SW8270ESIM	420	1200	420	1200	5.0 U	4.4 U	5.0 U
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)								
2-Methylnaphthalene	SW8270E	38	64			1.42 U	**0.514 J**	--
Acenaphthene	SW8270E	16	57			**0.794 J**	**0.822 J**	--
Acenaphthylene	SW8270E	66	66			1.42 U	0.846 U	--
Anthracene	SW8270E	220	1200			**2.28**	**2.05**	--
Benzo(a)anthracene	SW8270E	110	270			**6.48**	**5.24**	--
Benzo(a)pyrene	SW8270E	99	210			**6.85**	**5.87**	--
Benzo(b,j,k)fluoranthenes	SW8270E					**17.1**	**12.7**	--
Benzo(g,h,i)perylene	SW8270E	31	78			**3.15 J**	**2.81 J**	--
Carbazole	SW8270E					**0.730 J**	**0.519 J**	--
Chrysene	SW8270E	110	460			**12.0**	**7.74**	--
Dibenzo(a,h)anthracene	SW8270ESIM	12	33			**0.809**	**0.635**	--
Dibenzofuran	SW8270E	15	58			1.42 U	0.846 U	--
Fluoranthene	SW8270E	160	1200			**20.0**	**8.99**	--
Fluorene	SW8270E	23	79			1.42 U	0.846 U	--
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88			**2.91 J**	**2.65 J**	--
Naphthalene	SW8270E	99	170			1.42 U	**0.505 J**	--
Phenanthrene	SW8270E	100	480			**8.23**	**3.67**	--
Pyrene	SW8270E	1000	1400			**17.9**	**9.23**	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450			**17.1**	**12.7**	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300			**87.1 J**	**55.9 J**	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780			**11.3 J**	**7.05 J**	--

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

					Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
					Location ID	TG-SG31	TG-SG31	TG-SG32
					Sample ID	TG-SG31-250826	TG-SG131-250826	TG-SG32-250826
					Sample Date	2025-08-26	2025-08-26	2025-08-26
					Depth Interval	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
					Sample Type Code	N	FD	N
					Matrix	SE	SE	SE
Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL			
Polycyclic Aromatic Hydrocarbons (µg/kg)								
2-Methylnaphthalene	SW8270E			670	670	20.0 U	**10.7 J**	20.0 U
Acenaphthene	SW8270E			500	500	**11.2 J**	**17.1 J**	**17.8 J**
Acenaphthylene	SW8270E			1300	1300	20.0 U	17.6 U	20.0 U
Anthracene	SW8270E			960	960	**32.2**	**42.6**	**37.8**
Benzo(a)anthracene	SW8270E			1300	1600	**91.3**	**109**	**134**
Benzo(a)pyrene	SW8270E			1600	1600	**96.6**	**122**	**126**
Benzo(b,j,k)fluoranthenes	SW8270E					**241**	**264**	**306**
Benzo(g,h,i)perylene	SW8270E			670	720	**44.4 J**	**58.5 J**	**65.0 J**
Carbazole	SW8270E					**10.3 J**	**10.8 J**	**23.9**
Chrysene	SW8270E			1400	2800	**169**	**161**	**212**
Dibenzo(a,h)anthracene	SW8270ESIM			230	230	**11.4**	**13.2**	**13.4**
Dibenzofuran	SW8270E			540	540	20.0 U	17.6 U	20.0 U
Fluoranthene	SW8270E			1700	2500	**282**	**187**	**401**
Fluorene	SW8270E			540	540	20.0 U	17.6 U	20.0 U
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690	**41.0 J**	**55.2 J**	**57.2 J**
Naphthalene	SW8270E			2100	2100	20.0 U	**10.5 J**	**12.0 J**
Phenanthrene	SW8270E			1500	1500	**116**	**76.4**	**192**
Pyrene	SW8270E			2600	3300	**252**	**192**	**351**
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600	**241**	**264**	**306**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					**137 J**	**168 J**	**179 J**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					**137 J**	**168 J**	**179 J**
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000	**1230 J**	**1160 J**	**1670 J**
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200	**159 J**	**147 J**	**260 J**
Pesticides (mg/kg-OC)								
2,4'-DDD (o,p'-DDD)	SW8081B					0.065 UJ	0.044 UJ	--
2,4'-DDE (o,p'-DDE)	SW8081B					0.065 U	0.044 U	--
2,4'-DDT (o,p'-DDT)	SW8081B					0.065 UJ	0.044 UJ	--
4,4'-DDD (p,p'-DDD)	SW8081B					0.065 U	0.044 U	--
4,4'-DDE (p,p'-DDE)	SW8081B					0.065 UJ	0.044 UJ	--
4,4'-DDT (p,p'-DDT)	SW8081B					0.065 UJ	0.044 UJ	--
Aldrin	SW8081B					0.032 U	0.022 U	--
Chlordane, alpha- (Chlordane, cis-)	SW8081B					0.032 UJ	0.022 UJ	--
Chlordane, beta- (Chlordane, trans-)	SW8081B					0.032 UJ	0.022 UJ	--
Dieldrin	SW8081B					0.065 UJ	0.044 UJ	--
Endrin ketone	SW8081B					0.065 UJ	0.044 UJ	--
Heptachlor	SW8081B					0.032 U	0.022 U	--
Hexachlorocyclohexane (BHC), beta-	SW8081B					0.032 UJ	0.022 UJ	--
Nonachlor, cis-	SW8081B					0.065 U	0.044 U	--
Nonachlor, trans-	SW8081B					0.065 UJ	0.044 UJ	--
Oxychlordane	SW8081B					0.065 U	0.044 U	--

Table 5-2a

Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SG31	TG-SG31	TG-SG32
						Sample ID	TG-SG31-250826	TG-SG131-250826	TG-SG32-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	N	FD	N
						Matrix	SE	SE	SE
Pesticides (µg/kg)									
2,4'-DDD (o,p'-DDD)	SW8081B						0.91 UJ	0.92 UJ	0.90 UJ
2,4'-DDE (o,p'-DDE)	SW8081B						0.91 U	0.92 U	0.90 U
2,4'-DDT (o,p'-DDT)	SW8081B						0.91 UJ	0.92 UJ	0.90 UJ
4,4'-DDD (p,p'-DDD)	SW8081B						0.91 U	0.92 U	0.90 U
4,4'-DDE (p,p'-DDE)	SW8081B						0.91 UJ	0.92 UJ	0.90 UJ
4,4'-DDT (p,p'-DDT)	SW8081B						0.91 UJ	0.92 UJ	0.90 UJ
Aldrin	SW8081B						0.45 U	0.46 U	0.45 U
Chlordane, alpha- (Chlordane, cis-)	SW8081B						0.45 UJ	0.46 UJ	0.45 UJ
Chlordane, beta- (Chlordane, trans-)	SW8081B						0.45 UJ	0.46 UJ	0.45 UJ
Dieldrin	SW8081B						0.91 UJ	0.92 UJ	0.90 UJ
Endrin ketone	SW8081B						0.91 UJ	0.92 UJ	0.90 UJ
Heptachlor	SW8081B						0.45 U	0.46 U	0.45 U
Hexachlorocyclohexane (BHC), beta-	SW8081B						0.45 UJ	0.46 UJ	0.45 UJ
Nonachlor, cis-	SW8081B						0.91 U	0.92 U	0.90 U
Nonachlor, trans-	SW8081B						0.91 UJ	0.92 UJ	0.90 UJ
Oxychlordane	SW8081B						0.91 U	0.92 U	0.90 U
Total DDx (U = 0 max limit)	Calculated						0.91 UJ	0.92 UJ	0.90 UJ
Dioxin Furans (ng/kg)									
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**5250**	**1200**	**3240**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						**68.0**	**60.0**	**95.4**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**201**	**125**	**315**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						**27.6**	**19.8**	**23.0**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						**2.36 J**	**2.05 J**	**1.82 J**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**1.22 J**	**1.01 J**	**1.51 J**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**5.16**	**3.43**	**2.57**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**7.69**	**4.92**	**5.52**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**2.04 J**	**1.35 J**	**0.942 J**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**3.42**	**2.53**	**2.33 J**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.568 J**	**0.620 J**	**0.609 J**
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**0.963 J**	**0.698 J**	**0.451 J**
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**2.40 J**	**1.62 J**	**0.969 J**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**1.39 J**	**1.09 J**	**0.427 J**
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**1.65 J**	**1.08 J**	**0.823 J**
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						0.173 UJ	0.168 UJ	0.125 UJ
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						**1.39**	**1.47**	**0.890**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						**7.72 J**	**4.6 J**	**6.61 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						**7.81 J**	**4.6 J**	**6.67 J**
Total Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**734**	**465**	**2540**
Total Heptachlorodibenzofuran (HpCDF)	E1613B						**99.3**	**77.5**	**104**
Total Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**73.8 J**	**55.5 J**	**159**
Total Hexachlorodibenzofuran (HxCDF)	E1613B						**57.2 J**	**41.8 J**	**36.1 J**
Total Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**10.3 J**	**12.8 J**	**7.27 J**
Total Pentachlorodibenzofuran (PeCDF)	E1613B						**19.3 J**	**16.3 J**	**11.1 J**
Total Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						**7.60 J**	**7.65 J**	**2.58 J**
Total Tetrachlorodibenzofuran (TCDF)	E1613B						**10.6 J**	**10.9 J**	**6.70 J**

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
						Location ID	TG-SG31	TG-SG31	TG-SG32
						Sample ID	TG-SG31-250826	TG-SG131-250826	TG-SG32-250826
						Sample Date	2025-08-26	2025-08-26	2025-08-26
						Depth Interval	0 - 0.3 ft	0 - 0.3 ft	0 - 0.3 ft
						Sample Type Code	N	FD	N
						Matrix	SE	SE	SE
PCB Aroclors (mg/kg-OC)									
Aroclor 1016	SW8082A						0.26 U	0.18 U	--
Aroclor 1221	SW8082A						0.26 U	0.18 U	--
Aroclor 1232	SW8082A						0.26 U	0.18 U	--
Aroclor 1242	SW8082A						0.26 U	0.18 U	--
Aroclor 1248	SW8082A						**0.66**	**0.31**	--
Aroclor 1254	SW8082A						**0.922**	**0.40**	--
Aroclor 1260	SW8082A						**0.33**	**0.21**	--
Aroclor 1262	SW8082A						--	--	--
Aroclor 1268	SW8082A						--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				**1.9**	**0.92**	--
PCB Aroclors (µg/kg)									
Aroclor 1016	SW8082A						3.6 U	3.7 U	3.6 U
Aroclor 1221	SW8082A						3.6 U	3.7 U	3.6 U
Aroclor 1232	SW8082A						3.6 U	3.7 U	3.6 U
Aroclor 1242	SW8082A						3.6 U	3.7 U	3.6 U
Aroclor 1248	SW8082A						**9.3**	**6.5**	**8.1**
Aroclor 1254	SW8082A						**13.0**	**8.4**	**13.6**
Aroclor 1260	SW8082A						**4.6**	**4.3**	**5.8**
Aroclor 1262	SW8082A						--	--	--
Aroclor 1268	SW8082A						--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		**27**	**19**	**28**

Table 5-2a
Sediment Analytical Results Compared to SMS Criteria - Tru-Grit

Notes:
TOC in range (0.5% to 3.5%):
Detected concentration is greater than SMS Marine SCO SCUM screening level.
Detected concentration is greater than SMS Marine CSL SCUM screening level.
TOC out of range:
Detected concentration is greater than AET Marine SCO SCUM screening level.
Detected concentration is greater than AET Marine CSL SCUM screening level.

Non-detect concentration is above one or more identified screening levels.
Bold: Detected result
Organic carbon normalized results are not reported if TOC concentration is outside of 0.5% to 3.5%.
µg/kg: microgram per kilogram
AET: apparent effects threshold
CSL: cleanup screening level
cPAH: carcinogenic polycyclic aromatic hydrocarbon
FD: field duplicate
ft: foot
HPAH: high-molecular-weight polycyclic aromatic hydrocarbon
J: estimated value
LPAH: low-molecular-weight polycyclic aromatic hydrocarbon
mg/kg: milligram per kilogram
N: normal
ng/kg: nanogram per kilogram
OC: organic carbon
PCB: polychlorinated biphenyl
pct: percent
R: rejected
SCO: sediment cleanup objective
SCUM: Sediment Cleanup User's Manual
SE: sediment
SMS: Sediment Management Standards
TEQ: toxic equivalency quotient
TOC: total organic carbon
U: compound analyzed for but not detected above detection limit
UJ: compound analyzed for but not detected above estimated detection limit

Table 5-2b
Sediment Core Summary Statistics Compared to SMS Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Number of Samples In or Out of TOC Range[c]	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	SMS/AET SCOs[c]	Number of Detections > SMS/AET SCOs	Number of Non-Detects > SMS/AET SCOs	Maximum Exceedance Ratio[d]
Conventional Parameters												
Total organic carbon	30	43	43	--	5.3	0.05	0.606	pct	--	0	0	--
Total solids	37	144	159	--	90.91	47.18	74.7	pct	--	0	0	--
Total volatile solids	29	34	34	--	13.3	0.92	2.84	pct	--	0	0	--
Metals												
Antimony	37	144	46	--	160	0.16	6.75	mg/kg	--	0	0	--
Arsenic	37	144	144	--	1,620	0.92	41.6	mg/kg	57	15	0	28
Cadmium	37	144	109	--	1.48	0.04	0.22	mg/kg	5.1	0	0	0.29
Chromium	37	144	144	--	488	7.85	18.9	mg/kg	260	1	0	1.9
Copper	37	144	144	--	1,260	8.21	102	mg/kg	390	8	0	3.2
Lead	37	144	144	--	1,290	0.93	45.4	mg/kg	450	3	0	2.9
Mercury	37	144	119	--	0.344	0.00585	0.0627	mg/kg	0.41	0	0	0.84
Selenium	37	144	101	--	2.26	0.26	0.852	mg/kg	--	0	0	--
Silver	37	144	88	--	0.92	0.03	0.221	mg/kg	6.1	0	0	0.15
Zinc	37	144	144	--	2,970	15.1	174	mg/kg	410	16	0	7.2
Organometals												
Tributyltin (ion)	29	34	11	--	39.4	1.71	10.1	ug/kg	--	0	0	--
Semivolatile Organics												
1,2,4-Trichlorobenzene	29	34	0	In range: 16	--	--	--	mg/kg-OC	0.81	0	6	--
				Out of range: 18	--	--	--	ug/kg	31	0	0	--
1,2-Dichlorobenzene	29	34	0	In range: 16	--	--	--	mg/kg-OC	2.3	0	1	--
				Out of range: 18	--	--	--	ug/kg	35	0	0	--
1,4-Dichlorobenzene	29	34	1	In range: 16	--	--	--	mg/kg-OC	3.1	0	1	--
				Out of range: 18	4.9	4.9	4.9	ug/kg	110	0	0	0.045
2,4-Dimethylphenol	29	34	0	--	--	--	--	ug/kg	29	0	1	--
2-Methylphenol (o-Cresol)	29	34	0	--	--	--	--	ug/kg	63	0	0	--
4-Methylphenol (p-Cresol)	29	34	8	--	88.9	3.1	20.5	ug/kg	670	0	0	0.13
Benzoic acid	29	34	6	--	124	58.3	107	ug/kg	650	0	0	0.19
Benzyl alcohol	29	34	0	--	--	--	--	ug/kg	57	0	1	--
Bis(2-ethylhexyl)phthalate	29	34	6	In range: 16	12.2	7.42	9.81	mg/kg-OC	47	0	0	0.26
				Out of range: 18	88	28.6	61.1	ug/kg	1,300	0	0	0.068
Butylbenzyl phthalate	29	34	13	In range: 16	5.99	0.42	1.54	mg/kg-OC	4.9	1	0	1.2
				Out of range: 18	43.8	5.6	15.2	ug/kg	63	0	0	0.7
Di-n-butyl phthalate	29	34	0	In range: 16	--	--	--	mg/kg-OC	220	0	0	--
				Out of range: 18	--	--	--	ug/kg	1,400	0	0	--
Di-n-octyl phthalate	29	34	1	In range: 16	--	--	--	mg/kg-OC	58	0	0	--
				Out of range: 18	365	365	365	ug/kg	6,200	0	0	0.059
Diethyl phthalate	29	34	10	In range: 16	11.2	1.79	5.25	mg/kg-OC	61	0	0	0.18
				Out of range: 18	25.7	10.2	17	ug/kg	200	0	0	0.13
Dimethyl phthalate	29	34	2	In range: 16	0.29	0.29	0.29	mg/kg-OC	53	0	0	0.0055
				Out of range: 18	2.5	2.5	2.5	ug/kg	71	0	0	0.035
Hexachlorobenzene	29	34	0	In range: 16	--	--	--	mg/kg-OC	0.38	0	14	--
				Out of range: 18	--	--	--	ug/kg	22	0	0	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	29	34	0	In range: 16	--	--	--	mg/kg-OC	3.9	0	1	--
				Out of range: 18	--	--	--	ug/kg	11	0	0	--
n-Nitrosodiphenylamine	29	34	0	In range: 16	--	--	--	mg/kg-OC	11	0	0	--
				Out of range: 18	--	--	--	ug/kg	28	0	0	--
Pentachlorophenol	29	34	6	--	63	40.5	52.3	ug/kg	360	0	0	0.18
Phenol	29	34	3	--	152	4.6	58.4	ug/kg	420	0	0	0.36

Table 5-2b
Sediment Core Summary Statistics Compared to SMS Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Number of Samples In or Out of TOC Range[c]	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	SMS/AET SCOs[c]	Number of Detections > SMS/AET SCOs	Number of Non-Detects > SMS/AET SCOs	Maximum Exceedance Ratio[d]
Polycyclic Aromatic Hydrocarbons												
1-Methylnaphthalene	1	2	0	--	--	--	--	ug/kg	--	0	0	--
2-Methylnaphthalene	29	34	4	In range: 16	1.96	1.96	1.96	mg/kg-OC	38	0	0	0.052
				Out of range: 18	21.9	7	12.6	ug/kg	670	0	0	0.033
Acenaphthene	29	34	2	In range: 16	6.39	2.6	4.5	mg/kg-OC	16	0	1	0.4
				Out of range: 18	--	--	--	ug/kg	500	0	0	--
Acenaphthylene	29	34	3	In range: 16	12	1.54	6.77	mg/kg-OC	66	0	0	0.18
				Out of range: 18	11.6	11.6	11.6	ug/kg	1,300	0	0	0.0089
Anthracene	29	34	12	In range: 16	20.3	1.11	5.91	mg/kg-OC	220	0	0	0.092
				Out of range: 18	39.5	8.5	18.2	ug/kg	960	0	0	0.041
Benzo(a)anthracene	29	34	16	In range: 16	99.8	1.78	20.7	mg/kg-OC	110	0	0	0.91
				Out of range: 18	126	9	48.1	ug/kg	1,300	0	0	0.097
Benzo(a)pyrene	29	34	18	In range: 16	110	2.08	24	mg/kg-OC	99	1	0	1.1
				Out of range: 18	1,060	6.7	150	ug/kg	1,600	0	0	0.66
Benzo(b,j,k)fluoranthenes	29	34	16	--	1,130	17.3	198	ug/kg	--	0	0	--
Benzo(g,h,i)perylene	29	34	15	In range: 16	87.1	5.82	23	mg/kg-OC	31	1	0	2.8
				Out of range: 18	108	45.1	85.9	ug/kg	670	0	0	0.16
Carbazole	29	34	4	--	121	9.5	47.1	ug/kg	--	0	0	--
Chrysene	29	34	20	In range: 16	112	1.76	22	mg/kg-OC	110	1	0	1
				Out of range: 18	124	6.9	49.4	ug/kg	1,400	0	0	0.089
Dibenzo(a,h)anthracene	29	34	21	In range: 16	14.5	0.917	3.31	mg/kg-OC	12	1	0	1.2
				Out of range: 18	19.4	3.7	13.5	ug/kg	230	0	0	0.084
Dibenzofuran	29	34	1	In range: 16	4.04	4.04	4.04	mg/kg-OC	15	0	1	0.27
				Out of range: 18	--	--	--	ug/kg	540	0	0	--
Fluoranthene	29	34	22	In range: 16	226	1.31	30.7	mg/kg-OC	160	1	0	1.4
				Out of range: 18	225	10.7	78.8	ug/kg	1,700	0	0	0.13
Fluorene	29	34	1	In range: 16	6.3	6.3	6.3	mg/kg-OC	23	0	0	0.27
				Out of range: 18	--	--	--	ug/kg	540	0	0	--
Indeno(1,2,3-c,d)pyrene	29	34	7	In range: 16	69.5	5.52	23.3	mg/kg-OC	34	1	0	2
				Out of range: 18	61.7	21	40.2	ug/kg	600	0	0	0.1
Naphthalene	29	34	7	In range: 16	3.83	1.93	3.06	mg/kg-OC	99	0	0	0.039
				Out of range: 18	25.8	7.6	17.1	ug/kg	2,100	0	0	0.012
Phenanthrene	29	34	18	In range: 16	97	0.849	18.9	mg/kg-OC	100	0	0	0.97
				Out of range: 18	94.8	12.2	42.8	ug/kg	1,500	0	0	0.063
Pyrene	29	34	23	In range: 16	228	1.36	35	mg/kg-OC	1,000	0	0	0.23
				Out of range: 18	236	12.3	93.1	ug/kg	2,600	0	0	0.091
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	29	34	16	In range: 16	195	7.91	50.9	mg/kg-OC	230	0	0	0.85
				Out of range: 18	213	17.3	99.3	ug/kg	3,200	0	0	0.067
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	29	34	26	--	1,060	1.22	127	ug/kg	--	0	0	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	29	34	26	--	1,060	9.84	131	ug/kg	--	0	0	--
Total HPAH (SMS) (U = 0 max limit)	29	34	27	In range: 16	1,100	0.917	144	mg/kg-OC	960	1	0	1.1
				Out of range: 18	1,180	12.3	449	ug/kg	12,000	0	0	0.098
Total LPAH (SMS) (U = 0 max limit)	29	34	18	In range: 16	130	0.849	27.8	mg/kg-OC	370	0	0	0.35
				Out of range: 18	165	12.3	61.7	ug/kg	5,200	0	0	0.032

Table 5-2b
Sediment Core Summary Statistics Compared to SMS Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Number of Samples In or Out of TOC Range[c]	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	SMS/AET SCOs[c]	Number of Detections > SMS/AET SCOs	Number of Non-Detects > SMS/AET SCOs	Maximum Exceedance Ratio[d]
Pesticides												
2,4'-DDD (o,p'-DDD)	29	34	0	--	--	--	--	ug/kg	--	0	0	--
2,4'-DDE (o,p'-DDE)	29	34	0	--	--	--	--	ug/kg	--	0	0	--
2,4'-DDT (o,p'-DDT)	29	34	0	--	--	--	--	ug/kg	--	0	0	--
4,4'-DDD (p,p'-DDD)	29	34	7	--	1.8	0.6	1.11	ug/kg	--	0	0	--
4,4'-DDE (p,p'-DDE)	29	34	3	--	2.02	0.91	1.45	ug/kg	--	0	0	--
4,4'-DDT (p,p'-DDT)	29	34	3	--	3.38	0.91	1.82	ug/kg	--	0	0	--
Aldrin	29	34	0	--	--	--	--	ug/kg	--	0	0	--
Chlordane, alpha- (Chlordane, cis-)	29	34	0	--	--	--	--	ug/kg	--	0	0	--
Chlordane, beta- (Chlordane, trans-)	29	34	1	--	0.99	0.99	0.99	ug/kg	--	0	0	--
Dieldrin	29	34	0	--	--	--	--	ug/kg	--	0	0	--
Endrin ketone	29	34	2	--	1.81	0.95	1.38	ug/kg	--	0	0	--
Heptachlor	29	34	0	--	--	--	--	ug/kg	--	0	0	--
Hexachlorocyclohexane (BHC), beta-	29	34	1	--	0.33	0.33	0.33	ug/kg	--	0	0	--
Nonachlor, cis-	29	34	0	--	--	--	--	ug/kg	--	0	0	--
Nonachlor, trans-	29	34	0	--	--	--	--	ug/kg	--	0	0	--
Oxychlordane	29	34	0	--	--	--	--	ug/kg	--	0	0	--
Total DDx (U = 0 max limit)	29	34	9	--	4	0.88	1.95	ug/kg	--	0	0	--
Dioxin Furans												
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	30	48	45	--	137,000	1.54	7,970	ng/kg	--	0	0	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	30	48	45	--	4,290	0.321	339	ng/kg	--	0	0	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	30	48	45	--	8,300	0.471	572	ng/kg	--	0	0	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	30	48	45	--	1,440	0.121	118	ng/kg	--	0	0	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	30	48	34	--	123	0.259	12.5	ng/kg	--	0	0	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	30	48	30	--	31.6	0.424	4.67	ng/kg	--	0	0	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	30	48	37	--	187	0.185	15.8	ng/kg	--	0	0	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	30	48	35	--	264	0.171	26.2	ng/kg	--	0	0	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	30	48	32	--	59.2	0.29	6.53	ng/kg	--	0	0	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	30	48	34	--	85.2	0.322	10.7	ng/kg	--	0	0	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	30	48	28	--	49.2	0.32	5.97	ng/kg	--	0	0	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	30	48	29	--	24.2	0.165	3.71	ng/kg	--	0	0	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	30	48	32	--	34.3	0.051	3.81	ng/kg	--	0	0	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	30	48	32	--	63.6	0.17	7.56	ng/kg	--	0	0	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	30	48	33	--	70.2	0.196	5.41	ng/kg	--	0	0	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	30	48	20	--	3.95	0.043	0.775	ng/kg	--	0	0	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	30	48	36	--	73.5	0.304	6.36	ng/kg	--	0	0	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	30	48	46	--	15,500	0.921	1,120	ng/kg	--	0	0	--
Total Heptachlorodibenzofuran (HpCDF)	30	48	45	--	7,120	0.342	540	ng/kg	--	0	0	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	30	48	41	--	1,720	0.165	156	ng/kg	--	0	0	--
Total Hexachlorodibenzofuran (HxCDF)	30	48	43	--	3,810	0.201	261	ng/kg	--	0	0	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	30	48	36	--	269	0.112	23.3	ng/kg	--	0	0	--
Total Pentachlorodibenzofuran (PeCDF)	30	48	41	--	884	0.051	64.6	ng/kg	--	0	0	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	30	48	38	--	260	0.043	19.7	ng/kg	--	0	0	--
Total Tetrachlorodibenzofuran (TCDF)	30	48	37	--	241	0.451	30.6	ng/kg	--	0	0	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	30	48	48	--	270	0.000462	18.6	ng/kg	--	0	0	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	30	48	48	--	270	0.184	18.8	ng/kg	--	0	0	--

Table 5-2b
Sediment Core Summary Statistics Compared to SMS Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Number of Samples In or Out of TOC Range[c]	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	SMS/AET SCOs[c]	Number of Detections > SMS/AET SCOs	Number of Non-Detects > SMS/AET SCOs	Maximum Exceedance Ratio[d]
PCB Aroclors												
Aroclor 1016	29	37	0	--	--	--	--	ug/kg	--	0	0	--
Aroclor 1221	29	37	0	--	--	--	--	ug/kg	--	0	0	--
Aroclor 1232	29	37	0	--	--	--	--	ug/kg	--	0	0	--
Aroclor 1242	29	37	0	--	--	--	--	ug/kg	--	0	0	--
Aroclor 1248	29	37	7	--	209	8	68.5	ug/kg	--	0	0	--
Aroclor 1254	29	37	14	--	273	11.5	53.6	ug/kg	--	0	0	--
Aroclor 1260	29	37	9	--	46.8	4	22.5	ug/kg	--	0	0	--
Aroclor 1262	28	36	0	--	--	--	--	ug/kg	--	0	0	--
Aroclor 1268	28	36	0	--	--	--	--	ug/kg	--	0	0	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	29	37	14	In range: 17	23	1.98	11.3	mg/kg-OC	12	2	0	1.9
				Out of range: 20	529	19	117	ug/kg	130	2	0	4.1

Notes:

a. Totals are calculated either as the sum of all detected results (U = 0) or the sum of all detected results plus half the value of any non-detect result (U = ½). If all results are non-detect, the highest limit value is reported as the sum.

b. Field duplicates included

c. For chemicals and chemical totals with a dry-weight and OC-normalized SCO, samples with OC between 0.5% to 3.5% are screened against the OC-normalized SMS SCO, while samples outside this range are screened against the dry-weight AET SCO.

d. Maximum exceedance ratios are rounded to show two significant figures.

ug/kg: micrograms per kilogram
AET: apparent effects threshold
cPAH: carcinogenic polycyclic aromatic hydrocarbon
HPAH: high-molecular-weight polycyclic aromatic hydrocarbon
LPAH: low-molecular-weight polycyclic aromatic hydrocarbon
mg/kg: milligrams per kilogram
ng/kg: nanograms per kilogram
OC: organic carbon
PCB: polychlorinated biphenyl
pct: percent
SCO: sediment cleanup objective
SMS: Sediment Management Standard
TEQ: toxic equivalency quotient
TOC: total organic carbon

Table 5-2c
Sediment Grab Summary Statistics Compared to SMS Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Number of Samples In or Out of TOC Range[c]	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	SMS/AET SCOs[c]	Number of Detections > SMS/AET SCOs	Number of Non-Detects > SMS/AET SCOs	Maximum Exceedance Ratio[d]
Conventional Parameters												
Total organic carbon	8	9	9	--	2.08	0.33	0.902	pct	--	0	0	--
Total solids	8	9	9	--	71.08	58.94	65.1	pct	--	0	0	--
Total volatile solids	8	9	9	--	4.13	2.27	3.28	pct	--	0	0	--
Metals												
Antimony	8	9	2	--	3.06	0.37	1.72	mg/kg	--	0	0	--
Arsenic	8	9	9	--	127	5.14	25.5	mg/kg	57	1	0	2.2
Cadmium	8	9	9	--	0.4	0.12	0.212	mg/kg	5.1	0	0	0.078
Chromium	8	9	9	--	26.4	13.4	18.9	mg/kg	260	0	0	0.1
Copper	8	9	9	--	728	30.1	168	mg/kg	390	1	0	1.9
Lead	8	9	9	--	129	8.62	37.2	mg/kg	450	0	0	0.29
Mercury	8	9	9	--	0.0804	0.0235	0.0463	mg/kg	0.41	0	0	0.2
Selenium	8	9	3	--	1.4	0.79	0.993	mg/kg	--	0	0	--
Silver	8	9	3	--	0.59	0.18	0.32	mg/kg	6.1	0	0	0.097
Zinc	8	9	9	--	2,180	51.7	358	mg/kg	410	1	0	5.3
Organometals												
Tributyltin (ion)	8	9	8	--	482	1.71	127	ug/kg	--	0	0	--
Semivolatile Organics												
1,2,4-Trichlorobenzene	8	9	0	In range: 8	--	--	--	mg/kg-OC	0.81	0	1	--
				Out of range: 1	--	--	--	ug/kg	31	0	0	--
1,2-Dichlorobenzene	8	9	3	In range: 8	0.53	0.18	0.31	mg/kg-OC	2.3	0	1	0.23
				Out of range: 1	--	--	--	ug/kg	35	0	0	--
1,4-Dichlorobenzene	8	9	4	In range: 8	0.68	0.22	0.373	mg/kg-OC	3.1	0	1	0.22
				Out of range: 1	--	--	--	ug/kg	110	0	0	--
2,4-Dimethylphenol	8	9	0	--	--	--	--	ug/kg	29	0	1	--
2-Methylphenol (o-Cresol)	8	9	5	--	5.9	2.6	4.28	ug/kg	63	0	0	0.094
4-Methylphenol (p-Cresol)	8	9	9	--	48.2	5.4	20.6	ug/kg	670	0	0	0.072
Benzoic acid	8	9	0	--	--	--	--	ug/kg	650	0	0	--
Benzyl alcohol	8	9	0	--	--	--	--	ug/kg	57	0	1	--
Bis(2-ethylhexyl)phthalate	8	9	3	In range: 8	8.13	7.94	8.04	mg/kg-OC	47	0	0	0.17
				Out of range: 1	238	238	238	ug/kg	1,300	0	0	0.18
Butylbenzyl phthalate	8	9	8	In range: 8	1	0.23	0.517	mg/kg-OC	4.9	0	0	0.2
				Out of range: 1	36.8	36.8	36.8	ug/kg	63	0	0	0.58
Di-n-butyl phthalate	8	9	0	In range: 8	--	--	--	mg/kg-OC	220	0	0	--
				Out of range: 1	--	--	--	ug/kg	1,400	0	0	--
Di-n-octyl phthalate	8	9	0	In range: 8	--	--	--	mg/kg-OC	58	0	0	--
				Out of range: 1	--	--	--	ug/kg	6,200	0	0	--
Diethyl phthalate	8	9	0	In range: 8	--	--	--	mg/kg-OC	61	0	0	--
				Out of range: 1	--	--	--	ug/kg	200	0	0	--
Dimethyl phthalate	8	9	4	In range: 8	1.82	0.26	0.833	mg/kg-OC	53	0	0	0.034
				Out of range: 1	--	--	--	ug/kg	71	0	0	--
Hexachlorobenzene	8	9	0	In range: 8	--	--	--	mg/kg-OC	0.38	0	6	--
				Out of range: 1	--	--	--	ug/kg	22	0	0	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	8	9	0	In range: 8	--	--	--	mg/kg-OC	3.9	0	1	--
				Out of range: 1	--	--	--	ug/kg	11	0	0	--
n-Nitrosodiphenylamine	8	9	0	In range: 8	--	--	--	mg/kg-OC	11	0	0	--
				Out of range: 1	--	--	--	ug/kg	28	0	0	--
Pentachlorophenol	8	9	0	--	--	--	--	ug/kg	360	0	0	--
Phenol	8	9	1	--	22.6	22.6	22.6	ug/kg	420	0	0	0.054

Table 5-2c
Sediment Grab Summary Statistics Compared to SMS Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Number of Samples In or Out of TOC Range[c]	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	SMS/AET SCOs[c]	Number of Detections > SMS/AET SCOs	Number of Non-Detects > SMS/AET SCOs	Maximum Exceedance Ratio[d]
Polycyclic Aromatic Hydrocarbons												
1-Methylnaphthalene	8	9	0	--	--	--	--	ug/kg	--	0	0	--
2-Methylnaphthalene	8	9	4	In range: 8	2.82	0.514	1.55	mg/kg-OC	38	0	0	0.074
				Out of range: 1	--	--	--	ug/kg	670	0	0	--
Acenaphthene	8	9	6	In range: 8	9.65	0.794	3.69	mg/kg-OC	16	0	0	0.6
				Out of range: 1	17.8	17.8	17.8	ug/kg	500	0	0	0.036
Acenaphthylene	8	9	0	In range: 8	--	--	--	mg/kg-OC	66	0	0	--
				Out of range: 1	--	--	--	ug/kg	1,300	0	0	--
Anthracene	8	9	9	In range: 8	42.7	2.05	8.82	mg/kg-OC	220	0	0	0.19
				Out of range: 1	37.8	37.8	37.8	ug/kg	960	0	0	0.039
Benzo(a)anthracene	8	9	9	In range: 8	280	5.24	44.3	mg/kg-OC	110	1	0	2.5
				Out of range: 1	134	134	134	ug/kg	1,300	0	0	0.1
Benzo(a)pyrene	8	9	9	In range: 8	146	5.82	27.6	mg/kg-OC	99	1	0	1.5
				Out of range: 1	126	126	126	ug/kg	1,600	0	0	0.079
Benzo(b,j,k)fluoranthenes	8	9	9	--	2,150	117	439	ug/kg	--	0	0	--
Benzo(g,h,i)perylene	8	9	9	In range: 8	54	2.6	11.3	mg/kg-OC	31	1	0	1.7
				Out of range: 1	65	65	65	ug/kg	670	0	0	0.097
Carbazole	8	9	6	--	107	10.3	30.1	ug/kg	--	0	0	--
Chrysene	8	9	9	In range: 8	407	7.74	66.8	mg/kg-OC	110	1	0	3.7
				Out of range: 1	212	212	212	ug/kg	1,400	0	0	0.15
Dibenzo(a,h)anthracene	8	9	9	In range: 8	15	0.635	3.09	mg/kg-OC	12	1	0	1.3
				Out of range: 1	13.4	13.4	13.4	ug/kg	230	0	0	0.058
Dibenzofuran	8	9	1	In range: 8	3.33	3.33	3.33	mg/kg-OC	15	0	1	0.22
				Out of range: 1	--	--	--	ug/kg	540	0	0	--
Fluoranthene	8	9	9	In range: 8	2,070	8.99	283	mg/kg-OC	160	1	0	13
				Out of range: 1	401	401	401	ug/kg	1,700	0	0	0.24
Fluorene	8	9	2	In range: 8	3.98	3.35	3.67	mg/kg-OC	23	0	0	0.17
				Out of range: 1	--	--	--	ug/kg	540	0	0	--
Indeno(1,2,3-c,d)pyrene	8	9	9	In range: 8	51	2.5	10.6	mg/kg-OC	34	1	0	1.5
				Out of range: 1	57.2	57.2	57.2	ug/kg	600	0	0	0.095
Naphthalene	8	9	7	In range: 8	6.26	0.505	2.27	mg/kg-OC	99	0	0	0.063
				Out of range: 1	12	12	12	ug/kg	2,100	0	0	0.0057
Phenanthrene	8	9	9	In range: 8	54.7	3.67	17.2	mg/kg-OC	100	0	0	0.55
				Out of range: 1	192	192	192	ug/kg	1,500	0	0	0.13
Pyrene	8	9	9	In range: 8	1,210	9.23	174	mg/kg-OC	1,000	1	0	1.2
				Out of range: 1	351	351	351	ug/kg	2,600	0	0	0.14
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	8	9	9	In range: 8	391	12.7	69.9	mg/kg-OC	230	1	0	1.7
				Out of range: 1	306	306	306	ug/kg	3,200	0	0	0.096
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	8	9	9	--	1,230	66.5	259	ug/kg	--	0	0	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	8	9	9	--	1,230	66.5	259	ug/kg	--	0	0	--
Total HPAH (SMS) (U = 0 max limit)	8	9	9	In range: 8	4,600	55.9	688	mg/kg-OC	960	1	0	4.8
				Out of range: 1	1,670	1,670	1,670	ug/kg	12,000	0	0	0.14
Total LPAH (SMS) (U = 0 max limit)	8	9	9	In range: 8	107	7.05	31	mg/kg-OC	370	0	0	0.29
				Out of range: 1	260	260	260	ug/kg	5,200	0	0	0.05

Table 5-2c
Sediment Grab Summary Statistics Compared to SMS Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Number of Samples In or Out of TOC Range[c]	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	SMS/AET SCOs[c]	Number of Detections > SMS/AET SCOs	Number of Non-Detects > SMS/AET SCOs	Maximum Exceedance Ratio[d]
Pesticides												
2,4'-DDD (o,p'-DDD)	8	9	0	--	--	--	--	ug/kg	--	0	0	--
2,4'-DDE (o,p'-DDE)	8	9	0	--	--	--	--	ug/kg	--	0	0	--
2,4'-DDT (o,p'-DDT)	8	9	0	--	--	--	--	ug/kg	--	0	0	--
4,4'-DDD (p,p'-DDD)	8	9	0	--	--	--	--	ug/kg	--	0	0	--
4,4'-DDE (p,p'-DDE)	8	9	0	--	--	--	--	ug/kg	--	0	0	--
4,4'-DDT (p,p'-DDT)	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Aldrin	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Chlordane, alpha- (Chlordane, cis-)	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Chlordane, beta- (Chlordane, trans-)	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Dieldrin	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Endrin ketone	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Heptachlor	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Hexachlorocyclohexane (BHC), beta-	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Nonachlor, cis-	8	9	2	--	0.8	0.78	0.79	ug/kg	--	0	0	--
Nonachlor, trans-	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Oxychlordane	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Total DDx (U = 0 max limit)	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Dioxin Furans												
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	8	9	9	--	5,250	1,200	2,320	ng/kg	--	0	0	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	8	9	9	--	119	54.7	75.7	ng/kg	--	0	0	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	8	9	9	--	315	125	188	ng/kg	--	0	0	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	8	9	9	--	45.1	19.8	27	ng/kg	--	0	0	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	8	9	9	--	4.31	1.75	2.52	ng/kg	--	0	0	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	8	9	9	--	2.04	1.01	1.43	ng/kg	--	0	0	--
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	8	9	9	--	7.95	2.57	4.68	ng/kg	--	0	0	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	8	9	9	--	10.2	4.92	6.99	ng/kg	--	0	0	--
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	8	9	9	--	2.91	0.942	1.77	ng/kg	--	0	0	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	8	9	9	--	5.47	2.33	3.34	ng/kg	--	0	0	--
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	8	9	9	--	1.92	0.568	0.95	ng/kg	--	0	0	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	8	9	9	--	1.32	0.451	0.969	ng/kg	--	0	0	--
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	8	9	9	--	4.28	0.969	2.13	ng/kg	--	0	0	--
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	8	9	9	--	1.45	0.427	1.06	ng/kg	--	0	0	--
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	8	9	9	--	3.06	0.823	1.87	ng/kg	--	0	0	--
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	8	9	1	--	0.273	0.273	0.273	ng/kg	--	0	0	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	8	9	9	--	2.6	0.89	1.65	ng/kg	--	0	0	--
Total Heptachlorodibenzo-p-dioxin (HpCDD)	8	9	9	--	2,540	459	836	ng/kg	--	0	0	--
Total Heptachlorodibenzofuran (HpCDF)	8	9	9	--	198	75.8	111	ng/kg	--	0	0	--
Total Hexachlorodibenzo-p-dioxin (HxCDD)	8	9	9	--	159	55.5	80.8	ng/kg	--	0	0	--
Total Hexachlorodibenzofuran (HxCDF)	8	9	9	--	106	36.1	60.3	ng/kg	--	0	0	--
Total Pentachlorodibenzo-p-dioxin (PeCDD)	8	9	9	--	18	7.27	12.7	ng/kg	--	0	0	--
Total Pentachlorodibenzofuran (PeCDF)	8	9	9	--	32.6	11.1	20.8	ng/kg	--	0	0	--
Total Tetrachlorodibenzo-p-dioxin (TCDD)	8	9	9	--	17.9	2.58	8.01	ng/kg	--	0	0	--
Total Tetrachlorodibenzofuran (TCDF)	8	9	9	--	18.4	6.7	12.8	ng/kg	--	0	0	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	8	9	9	--	8.87	4.6	6.71	ng/kg	--	0	0	--
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	8	9	9	--	8.98	4.6	6.77	ng/kg	--	0	0	--

Table 5-2c
Sediment Grab Summary Statistics Compared to SMS Criteria - Tru-Grit

Analyte[a]	Number of Locations	Number of Samples[b]	Number of Detections	Number of Samples In or Out of TOC Range[c]	Maximum Detected Result	Minimum Detected Result	Average Detected Concentration	Units	SMS/AET SCOs[c]	Number of Detections > SMS/AET SCOs	Number of Non-Detects > SMS/AET SCOs	Maximum Exceedance Ratio[d]
PCB Aroclors												
Aroclor 1016	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Aroclor 1221	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Aroclor 1232	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Aroclor 1242	8	9	0	--	--	--	--	ug/kg	--	0	0	--
Aroclor 1248	8	9	7	--	19.4	4.2	9.41	ug/kg	--	0	0	--
Aroclor 1254	8	9	9	--	259	6	43.8	ug/kg	--	0	0	--
Aroclor 1260	8	9	7	--	78	4.3	16.5	ug/kg	--	0	0	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	8	9	9	In range: 8	61.3	0.92	10.8	mg/kg-OC	12	1	0	5.1
				Out of range: 1	28	28	28	ug/kg	130	0	0	0.22

Notes:

a. Totals are calculated either as the sum of all detected results (U = 0) or the sum of all detected results plus half the value of any non-detect result (U = ½). If all results are non-detect, the highest limit value is reported as the sum.

b. Field duplicates included

c. For chemicals and chemical totals with a dry-weight and OC-normalized SCO, samples with OC between 0.5% to 3.5% are screened against the OC-normalized SMS SCO, while samples outside this range are screened against the dry-weight AET SCO.

d. Maximum exceedance ratios are rounded to show two significant figures.

ug/kg: micrograms per kilogram

AET: apparent effects threshold

cPAH: carcinogenic polycyclic aromatic hydrocarbon

HPAH: high-molecular-weight polycyclic aromatic hydrocarbon

LPAH: low-molecular-weight polycyclic aromatic hydrocarbon

mg/kg: milligrams per kilogram

ng/kg: nanograms per kilogram

OC: organic carbon

PCB: polychlorinated biphenyl

pct: percent

SCO: sediment cleanup objective

SMS: Sediment Management Standard

TEQ: toxic equivalency quotient

TOC: total organic carbon

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-BSC-1	LANDAU-14-BSC-1	LANDAU-14-BSG-1	LANDAU-14-BSG-2	LANDAU-14-G-5	LANDAU-14-G-5	LANDAU-14-SC-05	LANDAU-14-SC-05	LANDAU-14-SC-07	LANDAU-14-SC-07	LANDAU-14-SC-08
						Sample ID	LANDAU-14-BSC-1-1-2-20140121	LANDAU-14-BSC-1-2-3-20140121	LANDAU-14-BSG-1-20140114	LANDAU-14-BSG-2-20140115	LANDAU-14-G-5-2-3-20140121	LANDAU-14-G-5-4-5-20140121	LANDAU-14-SC-05-1-2-20140121	LANDAU-14-SC-05-2-3-20140121	LANDAU-14-SC-07-1-2-20140121	LANDAU-14-SC-07-2-3-20140121	LANDAU-14-SC-08-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-14	2014-01-15	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	0 - 10 cm	0 - 10 cm	2 - 3 ft	4 - 5 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)																	
Total organic carbon	SW9060						--	--	--	--	--	--	--	--	--	--	--
Total solids	E160.3						--	--	**67**	--	--	--	--	--	--	--	--
Grain Size (pct)																	
Clay	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Cobbles	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Gravel	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Particle/Grain Size, Phi Scale <-1	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 00.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 02.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 03.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 04.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 06.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 10.0	D422						--	--	--	--	--	--	--	--	--	--	--
Sand	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Silt	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)																	
Arsenic	SW6020 / SW6020A	57	507.1		700		**3.3**	**4**	**4.7**	**1.5**	**8.4**	**68**	**5**	**4.9**	**52**	**27**	**3.7**
Cadmium	SW6020 / SW6020A	5.1			14		--	--	--	--	--	--	--	--	--	--	--
Chromium	SW6020 / SW6020A	260					--	--	--	--	--	--	--	--	--	--	--
Copper	SW6020 / SW6020A	390			1300		**19**	**16**	**31**	**15**	**2600**	**580**	**24**	**17**	**160**	**98**	**22**
Lead	SW6020 / SW6020A	450	975		1200		--	--	--	--	--	--	--	--	--	--	--
Mercury	SW7471A	0.41	1.5		2.3		--	--	--	--	--	--	--	--	--	--	--
Nickel	SW6020 / SW6020A						--	--	--	--	--	--	--	--	--	--	--
Silver	SW6020 / SW6020A	6.1			8.4		--	--	--	--	--	--	--	--	--	--	--
Zinc	SW6020 / SW6020A	410			3800		**29**	**30**	**56**	**19**	**8900**	**1100**	**44**	**28**	**380**	**290**	**42**

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

					Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
					Location ID	LANDAU-14-BSC-1	LANDAU-14-BSC-1	LANDAU-14-BSG-1	LANDAU-14-BSG-2	LANDAU-14-G-5	LANDAU-14-G-5	LANDAU-14-SC-05	LANDAU-14-SC-05	LANDAU-14-SC-07	LANDAU-14-SC-07	LANDAU-14-SC-08
					Sample ID	LANDAU-14-BSC-1-1-2-20140121	LANDAU-14-BSC-1-2-3-20140121	LANDAU-14-BSG-1-20140114	LANDAU-14-BSG-2-20140115	LANDAU-14-G-5-2-3-20140121	LANDAU-14-G-5-4-5-20140121	LANDAU-14-SC-05-1-2-20140121	LANDAU-14-SC-05-2-3-20140121	LANDAU-14-SC-07-1-2-20140121	LANDAU-14-SC-07-2-3-20140121	LANDAU-14-SC-08-1-2-20140121
					Sample Date	2014-01-21	2014-01-21	2014-01-14	2014-01-15	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21
					Depth Interval	1 - 2 ft	2 - 3 ft	0 - 10 cm	0 - 10 cm	2 - 3 ft	4 - 5 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	FD
					Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Chemical	**Method**	**DMMP SL**	**DMMP BT**	**DMMP BT TBT**	**DMMP ML**											
Semivolatile Organics (µg/kg)																
1,2,4-Trichlorobenzene	SW8270C / SW8270D	31			64	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D	35			110	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D	110			120	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270C / SW8270D	29			210	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63			77	--	--	--	--	--	--	--	--	--	--	--
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D	670			3600	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270C / SW8270D	650			760	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270C / SW8270D	57			870	--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	1300			8300	--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D	63			970	--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D					--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D	1400			5100	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D	6200			6200	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D	540			1700	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D	200			1200	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D	71			1400	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D	22	168		230	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	11			270	--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D	28			130	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D	400	504		690	--	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270C / SW8270D	420			1200	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270D					--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (µg/kg)																
2-Methylnaphthalene	SW8270C / SW8270D	670			1900	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D	500			2000	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D	560			1300	--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D	960			13000	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D	1300			5100	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D	1600			3600	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D	670			3200	--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D	1400			21000	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D	230			1900	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D	1700	4600		30000	--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D	540			3600	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	600			4400	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D	2100			2400	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D	1500			21000	--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D	2600	11980		16000	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270C					--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					--	--	--	--	--	--	--	--	--	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000	--	--	--	--	--	--	--	--	--	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000	--	--	--	--	--	--	--	--	--	--	--

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-BSC-1	LANDAU-14-BSC-1	LANDAU-14-BSG-1	LANDAU-14-BSG-2	LANDAU-14-G-5	LANDAU-14-G-5	LANDAU-14-SC-05	LANDAU-14-SC-05	LANDAU-14-SC-07	LANDAU-14-SC-07	LANDAU-14-SC-08
						Sample ID	LANDAU-14-BSC-1-1-2-20140121	LANDAU-14-BSC-1-2-3-20140121	LANDAU-14-BSG-1-20140114	LANDAU-14-BSG-2-20140115	LANDAU-14-G-5-2-3-20140121	LANDAU-14-G-5-4-5-20140121	LANDAU-14-SC-05-1-2-20140121	LANDAU-14-SC-05-2-3-20140121	LANDAU-14-SC-07-1-2-20140121	LANDAU-14-SC-07-2-3-20140121	LANDAU-14-SC-08-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-14	2014-01-15	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	0 - 10 cm	0 - 10 cm	2 - 3 ft	4 - 5 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
PCB Aroclors (mg/kg-OC)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	--	--	--	--	--	--	--	--	--	--

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-08	LANDAU-14-SC-08	LANDAU-14-SC-09	LANDAU-14-SC-09	LANDAU-14-SC-10	LANDAU-14-SC-10	LANDAU-14-SC-12	LANDAU-14-SC-12	LANDAU-14-SC-13	LANDAU-14-SC-13	LANDAU-14-SC-14
						Sample ID	LANDAU-14-SC-08-1-2-20140121	LANDAU-14-SC-08-2-3-20140121	LANDAU-14-SC-09-1-2-20140121	LANDAU-14-SC-09-2-3-20140121	LANDAU-14-SC-10-2-3-20140116	LANDAU-14-SC-10-3-4-20140116	LANDAU-14-SC-12-1-2-20140116	LANDAU-14-SC-12-2-3-20140116	LANDAU-14-SC-13-3-4-20140121	LANDAU-14-SC-13-5-6-20140121	LANDAU-14-SC-14-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-16	2014-01-16	2014-01-16	2014-01-16	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	5 - 6 ft	1 - 2 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)																	
Total organic carbon	SW9060						--	--	--	--	--	--	--	--	--	--	--
Total solids	E160.3						--	--	--	--	--	--	--	--	--	--	--
Grain Size (pct)																	
Clay	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Cobbles	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Gravel	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Particle/Grain Size, Phi Scale <-1	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 00.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 02.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 03.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 04.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 06.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 10.0	D422						--	--	--	--	--	--	--	--	--	--	--
Sand	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Silt	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)																	
Arsenic	SW6020 / SW6020A	57	507.1		700		**4.4**	**7.6 5.2**	**8.2**	**4**	**31**	**3.8**	**120**	**49**	**1500**	**56**	**310**
Cadmium	SW6020 / SW6020A	5.1			14		--	--	--	--	--	--	--	--	--	--	--
Chromium	SW6020 / SW6020A	260					--	--	--	--	--	--	--	--	--	--	--
Copper	SW6020 / SW6020A	390			1300		**23**	**29 29**	**39**	**27**	**120**	**27**	**210**	**47**	**740**	**48**	**810**
Lead	SW6020 / SW6020A	450	975		1200		--	--	--	--	--	--	--	--	--	--	--
Mercury	SW7471A	0.41	1.5		2.3		--	--	--	--	--	--	--	--	--	--	--
Nickel	SW6020 / SW6020A						--	--	--	--	--	--	--	--	--	--	--
Silver	SW6020 / SW6020A	6.1			8.4		--	--	--	--	--	--	--	--	--	--	--
Zinc	SW6020 / SW6020A	410			3800		**39**	**37 33**	**46**	**31**	**190**	**36**	**450**	**66**	**3900**	**160**	**1000**

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-08	LANDAU-14-SC-08	LANDAU-14-SC-09	LANDAU-14-SC-09	LANDAU-14-SC-10	LANDAU-14-SC-10	LANDAU-14-SC-12	LANDAU-14-SC-12	LANDAU-14-SC-13	LANDAU-14-SC-13	LANDAU-14-SC-14
						Sample ID	LANDAU-14-SC-08-1-2-20140121	LANDAU-14-SC-08-2-3-20140121	LANDAU-14-SC-09-1-2-20140121	LANDAU-14-SC-09-2-3-20140121	LANDAU-14-SC-10-2-3-20140116	LANDAU-14-SC-10-3-4-20140116	LANDAU-14-SC-12-1-2-20140116	LANDAU-14-SC-12-2-3-20140116	LANDAU-14-SC-13-3-4-20140121	LANDAU-14-SC-13-5-6-20140121	LANDAU-14-SC-14-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-16	2014-01-16	2014-01-16	2014-01-16	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	5 - 6 ft	1 - 2 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Semivolatile Organics (µg/kg)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D	31			64		--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D	35			110		--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D	110			120		--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270C / SW8270D	29			210		--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63			77		--	--	--	--	--	--	--	--	--	--	--
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D	670			3600		--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270C / SW8270D	650			760		--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270C / SW8270D	57			870		--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	1300			8300		--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D	63			970		--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D	1400			5100		--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D	6200			6200		--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D	540			1700		--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D	200			1200		--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D	71			1400		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D	22	168		230		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	11			270		--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D	28			130		--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D	400	504		690		--	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270C / SW8270D	420			1200		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (µg/kg)																	
2-Methylnaphthalene	SW8270C / SW8270D	670			1900		--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D	500			2000		--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D	560			1300		--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D	960			13000		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D	1300			5100		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D	1600			3600		--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D	670			3200		--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D	1400			21000		--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D	230			1900		--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D	1700	4600		30000		--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D	540			3600		--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	600			4400		--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D	2100			2400		--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D	1500			21000		--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D	2600	11980		16000		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270C						--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		--	--	--	--	--	--	--	--	--	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		--	--	--	--	--	--	--	--	--	--	--

Table 5-3
Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-08	LANDAU-14-SC-08	LANDAU-14-SC-09	LANDAU-14-SC-09	LANDAU-14-SC-10	LANDAU-14-SC-10	LANDAU-14-SC-12	LANDAU-14-SC-12	LANDAU-14-SC-13	LANDAU-14-SC-13	LANDAU-14-SC-14
						Sample ID	LANDAU-14-SC-08-1-2-20140121	LANDAU-14-SC-08-2-3-20140121	LANDAU-14-SC-09-1-2-20140121	LANDAU-14-SC-09-2-3-20140121	LANDAU-14-SC-10-2-3-20140116	LANDAU-14-SC-10-3-4-20140116	LANDAU-14-SC-12-1-2-20140116	LANDAU-14-SC-12-2-3-20140116	LANDAU-14-SC-13-3-4-20140121	LANDAU-14-SC-13-5-6-20140121	LANDAU-14-SC-14-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-16	2014-01-16	2014-01-16	2014-01-16	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	5 - 6 ft	1 - 2 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
PCB Aroclors (mg/kg-OC)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	--	--	--	--	--	--	--	--	--	--

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-14	LANDAU-14-SC-16	LANDAU-14-SC-16	LANDAU-14-SC-17	LANDAU-14-SC-17	LANDAU-14-SG-01	LANDAU-14-SG-02	LANDAU-14-SG-03	LANDAU-14-SG-04	LANDAU-14-SG-05	LANDAU-14-SG-06
						Sample ID	LANDAU-14-SC-14-2-3-20140121	LANDAU-14-SC-16-1-2-20140121	LANDAU-14-SC-16-2-3-20140121	LANDAU-14-SC-17-2-3-20140121	LANDAU-14-SC-17-3-4-20140121	LANDAU-14-SG-01-20140114	LANDAU-14-SG-02-20140114	LANDAU-14-SG-03-20140114	LANDAU-14-SG-04-20140114	LANDAU-14-SG-05-20140114	LANDAU-14-SG-06-20140114
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-14	2014-01-14	2014-01-14	2014-01-14	2014-01-14	2014-01-14
						Depth Interval	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)																	
Total organic carbon	SW9060						--	--	--	--	--	--	--	--	--	--	--
Total solids	E160.3						--	--	--	--	--	--	--	--	--	**75**	**75**
Grain Size (pct)																	
Clay	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Cobbles	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Gravel	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Particle/Grain Size, Phi Scale <-1	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 00.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 02.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 03.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 04.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 06.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 10.0	D422						--	--	--	--	--	--	--	--	--	--	--
Sand	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Silt	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)																	
Arsenic	SW6020 / SW6020A	57	507.1		700		**200**	**79**	**99**	**1100**	**110**	**6.7**	**2**	**7.3**	**66**	**6.2**	**2.4**
Cadmium	SW6020 / SW6020A	5.1			14		--	--	--	--	--	--	--	--	--	--	--
Chromium	SW6020 / SW6020A	260					--	--	--	--	--	--	--	--	--	--	--
Copper	SW6020 / SW6020A	390			1300		**780**	**260**	**330**	**2000**	**490**	**52**	**12**	**12**	**160**	**36**	**20**
Lead	SW6020 / SW6020A	450	975		1200		--	--	--	--	--	--	--	--	--	--	--
Mercury	SW7471A	0.41	1.5		2.3		--	--	--	--	--	--	--	--	--	--	--
Nickel	SW6020 / SW6020A						--	--	--	--	--	--	--	--	--	--	--
Silver	SW6020 / SW6020A	6.1			8.4		--	--	--	--	--	--	--	--	--	--	--
Zinc	SW6020 / SW6020A	410			3800		**700**	**500**	**380**	**3000**	**610**	**85**	**48**	**36**	**380**	**120**	**32**

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-14	LANDAU-14-SC-16	LANDAU-14-SC-16	LANDAU-14-SC-17	LANDAU-14-SC-17	LANDAU-14-SG-01	LANDAU-14-SG-02	LANDAU-14-SG-03	LANDAU-14-SG-04	LANDAU-14-SG-05	LANDAU-14-SG-06
						Sample ID	LANDAU-14-SC-14-2-3-20140121	LANDAU-14-SC-16-1-2-20140121	LANDAU-14-SC-16-2-3-20140121	LANDAU-14-SC-17-2-3-20140121	LANDAU-14-SC-17-3-4-20140121	LANDAU-14-SG-01-20140114	LANDAU-14-SG-02-20140114	LANDAU-14-SG-03-20140114	LANDAU-14-SG-04-20140114	LANDAU-14-SG-05-20140114	LANDAU-14-SG-06-20140114
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-14	2014-01-14	2014-01-14	2014-01-14	2014-01-14	2014-01-14
						Depth Interval	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Semivolatile Organics (µg/kg)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D	31			64		--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D	35			110		--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D	110			120		--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270C / SW8270D	29			210		--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63			77		--	--	--	--	--	--	--	--	--	--	--
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D	670			3600		--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270C / SW8270D	650			760		--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270C / SW8270D	57			870		--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	1300			8300		--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D	63			970		--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D	1400			5100		--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D	6200			6200		--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D	540			1700		--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D	200			1200		--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D	71			1400		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D	22	168		230		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	11			270		--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D	28			130		--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D	400	504		690		--	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270C / SW8270D	420			1200		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (µg/kg)																	
2-Methylnaphthalene	SW8270C / SW8270D	670			1900		--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D	500			2000		--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D	560			1300		--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D	960			13000		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D	1300			5100		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D	1600			3600		--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D	670			3200		--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D	1400			21000		--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D	230			1900		--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D	1700	4600		30000		--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D	540			3600		--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	600			4400		--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D	2100			2400		--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D	1500			21000		--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D	2600	11980		16000		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270C						--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		--	--	--	--	--	--	--	--	--	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		--	--	--	--	--	--	--	--	--	--	--

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-14	LANDAU-14-SC-16	LANDAU-14-SC-16	LANDAU-14-SC-17	LANDAU-14-SC-17	LANDAU-14-SG-01	LANDAU-14-SG-02	LANDAU-14-SG-03	LANDAU-14-SG-04	LANDAU-14-SG-05	LANDAU-14-SG-06
						Sample ID	LANDAU-14-SC-14-2-3-20140121	LANDAU-14-SC-16-1-2-20140121	LANDAU-14-SC-16-2-3-20140121	LANDAU-14-SC-17-2-3-20140121	LANDAU-14-SC-17-3-4-20140121	LANDAU-14-SG-01-20140114	LANDAU-14-SG-02-20140114	LANDAU-14-SG-03-20140114	LANDAU-14-SG-04-20140114	LANDAU-14-SG-05-20140114	LANDAU-14-SG-06-20140114
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-14	2014-01-14	2014-01-14	2014-01-14	2014-01-14	2014-01-14
						Depth Interval	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
PCB Aroclors (mg/kg-OC)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	--	--	--	--	--	--	--	--	--	--

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-07	LANDAU-14-SG-08	LANDAU-14-SG-09	LANDAU-14-SG-10	LANDAU-14-SG-11	LANDAU-14-SG-12	LANDAU-14-SG-13	LANDAU-14-SG-14	LANDAU-14-SG-15	LANDAU-14-SG-16	LANDAU-14-SG-17
						Sample ID	LANDAU-14-SG-07-20140114	LANDAU-14-SG-08-20140114	LANDAU-14-SG-09-20140114	LANDAU-14-SG-10-20140115	LANDAU-14-SG-11-20140114	LANDAU-14-SG-12-20140114	LANDAU-14-SG-13-20140115	LANDAU-14-SG-14-20140115	LANDAU-14-SG-15-20140115	LANDAU-14-SG-16-20140114	LANDAU-14-SG-17-20140114
						Sample Date	2014-01-14	2014-01-14	2014-01-14	2014-01-15	2014-01-14	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)																	
Total organic carbon	SW9060						--	--	--	**0.46**	--	--	**1.9**	--	--	--	--
Total solids	E160.3						**76**	**77**	**77**	--	**62**	**63**	--	--	--	**64**	**67**
Grain Size (pct)																	
Clay	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Cobbles	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Gravel	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Particle/Grain Size, Phi Scale <-1	D422						--	--	--	**0.9**	--	--	**0.7**	--	--	--	--
Phi 00.0	D422						--	--	--	**1.7**	--	--	**1.3**	--	--	--	--
Phi 02.0	D422						--	--	--	**19.2**	--	--	**2.3**	--	--	--	--
Phi 03.0	D422						--	--	--	**68.5**	--	--	**16.6**	--	--	--	--
Phi 04.0	D422						--	--	--	**0.04**	--	--	**2**	--	--	--	--
Phi 06.0	D422						--	--	--	**2.7**	--	--	**51.6**	--	--	--	--
Phi 10.0	D422						--	--	--	**7**	--	--	**27.5**	--	--	--	--
Sand	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Silt	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)																	
Arsenic	SW6020 / SW6020A	57	507.1		700		**21**	**4.5**	**17**	**7.8**	**16**	**38**	**13**	**6.6**	**38**	**11**	**31**
Cadmium	SW6020 / SW6020A	5.1			14		--	--	--	**0.14 J**	--	--	**1**	--	--	--	--
Chromium	SW6020 / SW6020A	260					--	--	--	**13**	--	--	**20**	--	--	--	--
Copper	SW6020 / SW6020A	390			1300		**76**	**24**	**58**	**35**	**45**	**180**	**58**	**200**	**250**	**360**	**550**
Lead	SW6020 / SW6020A	450	975		1200		--	--	--	**16**	--	--	**27**	--	--	--	--
Mercury	SW7471A	0.41	1.5		2.3		--	--	--	**0.026**	--	--	**0.078**	--	--	--	--
Nickel	SW6020 / SW6020A						--	--	--	**7.1**	--	--	**13**	--	--	--	--
Silver	SW6020 / SW6020A	6.1			8.4		--	--	--	**0.053 J**	--	--	**0.13 J**	--	--	--	--
Zinc	SW6020 / SW6020A	410			3800		**130**	**42**	**110**	**78**	**84**	**450**	**170**	**650**	**630**	**1200**	**1700**

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-07	LANDAU-14-SG-08	LANDAU-14-SG-09	LANDAU-14-SG-10	LANDAU-14-SG-11	LANDAU-14-SG-12	LANDAU-14-SG-13	LANDAU-14-SG-14	LANDAU-14-SG-15	LANDAU-14-SG-16	LANDAU-14-SG-17
						Sample ID	LANDAU-14-SG-07-20140114	LANDAU-14-SG-08-20140114	LANDAU-14-SG-09-20140114	LANDAU-14-SG-10-20140115	LANDAU-14-SG-11-20140114	LANDAU-14-SG-12-20140114	LANDAU-14-SG-13-20140115	LANDAU-14-SG-14-20140115	LANDAU-14-SG-15-20140115	LANDAU-14-SG-16-20140114	LANDAU-14-SG-17-20140114
						Sample Date	2014-01-14	2014-01-14	2014-01-14	2014-01-15	2014-01-14	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Semivolatile Organics (µg/kg)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D	31			64		--	--	--	16 U	--	--	65 U	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D	35			110		--	--	--	18 U	--	--	71 U	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D	110			120		--	--	--	16 U	--	--	65 U	--	--	--	--
2,4-Dimethylphenol	SW8270C / SW8270D	29			210		--	--	--	32 U	--	--	130 U	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63			77		--	--	--	32 U	--	--	130 U	--	--	--	--
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D	670			3600		--	--	--	64 U	--	--	260 U	--	--	--	--
Benzoic acid	SW8270C / SW8270D	650			760		--	--	--	800 U	--	--	3200 U	--	--	--	--
Benzyl alcohol	SW8270C / SW8270D	57			870		--	--	--	32 U	--	--	130 U	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	1300			8300		--	--	--	**41 J**	--	--	**120 J**	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D	63			970		--	--	--	**18 J**	--	--	260 U	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D	1400			5100		--	--	--	160 U	--	--	650 U	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D	6200			6200		--	--	--	160 U	--	--	**22 J**	--	--	--	--
Dibenzofuran	SW8270C / SW8270D	540			1700		--	--	--	**5.5 J**	--	--	**14 J**	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D	200			1200		--	--	--	64 U	--	--	260 U	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D	71			1400		--	--	--	32 U	--	--	130 U	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D	22	168		230		--	--	--	16 U	--	--	65 U	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	11			270		--	--	--	16 U	--	--	65 U	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D	28			130		--	--	--	16 U	--	--	65 U	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D	400	504		690		--	--	--	**33 J**	--	--	**120 J**	--	--	--	--
Phenol	SW8270C / SW8270D	420			1200		--	--	--	**5.1 J**	--	--	130 U	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (µg/kg)																	
2-Methylnaphthalene	SW8270C / SW8270D	670			1900		--	--	--	**2.8 J**	--	--	**10 J**	--	--	--	--
Acenaphthene	SW8270C / SW8270D	500			2000		--	--	--	**8**	--	--	**19 J**	--	--	--	--
Acenaphthylene	SW8270C / SW8270D	560			1300		--	--	--	**7.3**	--	--	**19 J**	--	--	--	--
Anthracene	SW8270C / SW8270D	960			13000		--	--	--	**32**	--	--	**100**	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D	1300			5100		--	--	--	**99**	--	--	**240**	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D	1600			3600		--	--	--	**90**	--	--	**230**	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D	670			3200		--	--	--	**43**	--	--	**87**	--	--	--	--
Chrysene	SW8270C / SW8270D	1400			21000		--	--	--	**180**	--	--	**400**	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D	230			1900		--	--	--	**16**	--	--	**32 J**	--	--	--	--
Fluoranthene	SW8270C / SW8270D	1700	4600		30000		--	--	--	**210**	--	--	**550**	--	--	--	--
Fluorene	SW8270C / SW8270D	540			3600		--	--	--	**12**	--	--	**28**	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	600			4400		--	--	--	**58**	--	--	**120**	--	--	--	--
Naphthalene	SW8270C / SW8270D	2100			2400		--	--	--	**4.1 J**	--	--	26 U	--	--	--	--
Phenanthrene	SW8270C / SW8270D	1500			21000		--	--	--	**97**	--	--	**140**	--	--	--	--
Pyrene	SW8270C / SW8270D	2600	11980		16000		--	--	--	**250**	--	--	**540**	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		--	--	--	**190**	--	--	**500**	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270C						--	--	--	**190**	--	--	**500**	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	**130**	--	--	**320 J**	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	**130**	--	--	**320 J**	--	--	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		--	--	--	**1100**	--	--	**2700 J**	--	--	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		--	--	--	**160 J**	--	--	**310 J**	--	--	--	--

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-07	LANDAU-14-SG-08	LANDAU-14-SG-09	LANDAU-14-SG-10	LANDAU-14-SG-11	LANDAU-14-SG-12	LANDAU-14-SG-13	LANDAU-14-SG-14	LANDAU-14-SG-15	LANDAU-14-SG-16	LANDAU-14-SG-17
						Sample ID	LANDAU-14-SG-07-20140114	LANDAU-14-SG-08-20140114	LANDAU-14-SG-09-20140114	LANDAU-14-SG-10-20140115	LANDAU-14-SG-11-20140114	LANDAU-14-SG-12-20140114	LANDAU-14-SG-13-20140115	LANDAU-14-SG-14-20140115	LANDAU-14-SG-15-20140115	LANDAU-14-SG-16-20140114	LANDAU-14-SG-17-20140114
						Sample Date	2014-01-14	2014-01-14	2014-01-14	2014-01-15	2014-01-14	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
PCB Aroclors (mg/kg-OC)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	2.8 U	--	--	0.89 U	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	3.3 U	--	--	1.0 U	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	3.3 U	--	--	1.0 U	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	2.8 U	--	--	0.89 U	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	2.8 U	--	--	0.89 U	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	2.8 U	--	--	0.89 U	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	2.8 U	--	--	**0.79 J**	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	3.3 U	--	--	**0.79 J**	--	--	--	--
PCB Aroclors (µg/kg)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	13 U	--	--	17 U	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	15 U	--	--	19 U	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	15 U	--	--	19 U	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	13 U	--	--	17 U	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	13 U	--	--	17 U	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	13 U	--	--	17 U	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	13 U	--	--	**15 J**	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	--	--	15 U	--	--	**15 J**	--	--	--	--

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM
						Location ID	LANDAU-14-SG-18	LANDAU-14-SG-19	LANDAU-14-SG-20	LANDAU-14-SG-20	LANDAU-14-SG-21	LANDAU-14-SG-22	LANDAU-14-SG-23	LANDAU-14-SG-24	LANDAU-14-SG-25	LANDAU-14-SG-26	LANDAU-14-SG-27
						Sample ID	LANDAU-14-SG-18-20140115	LANDAU-14-SG-19-20140114	LANDAU-14-SG-20-20140115	LANDAU-14-SG-20-20140115	LANDAU-14-SG-21-20140115	LANDAU-14-SG-22-20140114	LANDAU-14-SG-23-20140114	LANDAU-14-SG-24-20140114	LANDAU-14-SG-25-20140116	LANDAU-14-SG-26-20140116	LANDAU-14-SG-27-20140116
						Sample Date	2014-01-15	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14	2014-01-14	2014-01-16	2014-01-16	2014-01-16
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)																	
Total organic carbon	SW9060						--	--	--	--	--	--	--	--	--	--	--
Total solids	E160.3						--	**59**	--	--	--	**61**	--	--	--	--	--
Grain Size (pct)																	
Clay	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Cobbles	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Gravel	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Particle/Grain Size, Phi Scale <-1	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 00.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 02.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 03.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 04.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 06.0	D422						--	--	--	--	--	--	--	--	--	--	--
Phi 10.0	D422						--	--	--	--	--	--	--	--	--	--	--
Sand	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Silt	PLUMB1981						--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)																	
Arsenic	SW6020 / SW6020A	57	507.1		700		**45**	**7.4**	**5.1**	**5.6**	**6.4**	**8.2**	**140**	**1.5**	**7.3**	**4**	**8.1**
Cadmium	SW6020 / SW6020A	5.1			14		--	--	--	--	--	--	--	--	--	--	--
Chromium	SW6020 / SW6020A	260					--	--	--	--	--	--	--	--	--	--	--
Copper	SW6020 / SW6020A	390			1300		**100**	**46**	**29**	**34**	**33**	**34**	**420**	**11**	**36**	**23**	**28**
Lead	SW6020 / SW6020A	450	975		1200		--	--	--	--	--	--	--	--	--	--	--
Mercury	SW7471A	0.41	1.5		2.3		--	--	--	--	--	--	--	--	--	--	--
Nickel	SW6020 / SW6020A						--	--	--	--	--	--	--	--	--	--	--
Silver	SW6020 / SW6020A	6.1			8.4		--	--	--	--	--	--	--	--	--	--	--
Zinc	SW6020 / SW6020A	410			3800		**170**	**74**	**46**	**79**	**56**	**52**	**1200**	**24**	**51**	**32**	**42**

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM	TruGrit_Landau_E IM
						Location ID	LANDAU-14-SG-18	LANDAU-14-SG-19	LANDAU-14-SG-20	LANDAU-14-SG-20	LANDAU-14-SG-21	LANDAU-14-SG-22	LANDAU-14-SG-23	LANDAU-14-SG-24	LANDAU-14-SG-25	LANDAU-14-SG-26	LANDAU-14-SG-27
						Sample ID	LANDAU-14-SG-18-20140115	LANDAU-14-SG-19-20140114	LANDAU-14-SG-20-20140115	LANDAU-14-SG-20-20140115	LANDAU-14-SG-21-20140115	LANDAU-14-SG-22-20140114	LANDAU-14-SG-23-20140114	LANDAU-14-SG-24-20140114	LANDAU-14-SG-25-20140116	LANDAU-14-SG-26-20140116	LANDAU-14-SG-27-20140116
						Sample Date	2014-01-15	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14	2014-01-14	2014-01-16	2014-01-16	2014-01-16
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Semivolatile Organics (µg/kg)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D	31			64		--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D	35			110		--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D	110			120		--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270C / SW8270D	29			210		--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63			77		--	--	--	--	--	--	--	--	--	--	--
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D	670			3600		--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270C / SW8270D	650			760		--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270C / SW8270D	57			870		--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	1300			8300		--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D	63			970		--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D	1400			5100		--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D	6200			6200		--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D	540			1700		--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D	200			1200		--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D	71			1400		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D	22	168		230		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	11			270		--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D	28			130		--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D	400	504		690		--	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270C / SW8270D	420			1200		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (µg/kg)																	
2-Methylnaphthalene	SW8270C / SW8270D	670			1900		--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D	500			2000		--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D	560			1300		--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D	960			13000		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D	1300			5100		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D	1600			3600		--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D	670			3200		--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D	1400			21000		--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D	230			1900		--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D	1700	4600		30000		--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D	540			3600		--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	600			4400		--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D	2100			2400		--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D	1500			21000		--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D	2600	11980		16000		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270C						--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		--	--	--	--	--	--	--	--	--	--	--
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		--	--	--	--	--	--	--	--	--	--	--

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-18	LANDAU-14-SG-19	LANDAU-14-SG-20	LANDAU-14-SG-20	LANDAU-14-SG-21	LANDAU-14-SG-22	LANDAU-14-SG-23	LANDAU-14-SG-24	LANDAU-14-SG-25	LANDAU-14-SG-26	LANDAU-14-SG-27
						Sample ID	LANDAU-14-SG-18-20140115	LANDAU-14-SG-19-20140114	LANDAU-14-SG-20-20140115	LANDAU-14-SG-20-20140115	LANDAU-14-SG-21-20140115	LANDAU-14-SG-22-20140114	LANDAU-14-SG-23-20140114	LANDAU-14-SG-24-20140114	LANDAU-14-SG-25-20140116	LANDAU-14-SG-26-20140116	LANDAU-14-SG-27-20140116
						Sample Date	2014-01-15	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14	2014-01-14	2014-01-16	2014-01-16	2014-01-16
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
PCB Aroclors (mg/kg-OC)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38				--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100		--	--	--	--	--	--	--	--	--	--	--

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-28	LANDAU-18-G-5	LANDAU-18-SG-14	LANDAU-18-SG-16	LANDAU-18-SG-17	LANDAU-18-SG-17
						Sample ID	LANDAU-14-SG-28-20140116	LANDAU-18-G-5-20180125	LANDAU-18-SG-14-20180125	LANDAU-18-SG-16-20180125	LANDAU-18-SG-17-20180125	LANDAU-18-SG-17-20180125
						Sample Date	2014-01-16	2018-01-25	2018-01-25	2018-01-25	2018-01-25	2018-01-25
						Depth Interval	0 - 10 cm	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft
						Sample Type Code	N	N	N	N	FD	N
						Matrix	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)												
Total organic carbon	SW9060						--	**2.7**	**0.88**	**0.75**	**0.76**	**0.77**
Total solids	E160.3						--	**61.2**	**68.3**	**65.8**	**65.2**	**63.9**
Grain Size (pct)												
Clay	PLUMB1981						--	**11**	**9.6**	**13**	--	**13**
Cobbles	PLUMB1981						--	**0**	**0**	**0**	--	**0**
Gravel	PLUMB1981						--	**24**	**2.1**	**0.8**	--	**0.4**
Particle/Grain Size, Phi Scale <-1	D422						--	--	--	--	--	--
Phi 00.0	D422						--	--	--	--	--	--
Phi 02.0	D422						--	--	--	--	--	--
Phi 03.0	D422						--	--	--	--	--	--
Phi 04.0	D422						--	--	--	--	--	--
Phi 06.0	D422						--	--	--	--	--	--
Phi 10.0	D422						--	--	--	--	--	--
Sand	PLUMB1981						--	**27**	**51**	**35**	--	**33**
Silt	PLUMB1981						--	**39**	**37**	**51**	--	**54**
Metals (mg/kg)												
Arsenic	SW6020 / SW6020A	57	507.1		700		**5.3**	**11**	**8.5**	**14**	**70**	**81**
Cadmium	SW6020 / SW6020A	5.1			14		--	**0.33**	0.23 U	0.24 U	**0.24**	**0.23**
Chromium	SW6020 / SW6020A	260					--	**38**	**17**	**18**	**23**	**25**
Copper	SW6020 / SW6020A	390			1300		**36**	**120**	**43 J**	**75**	**110**	**97**
Lead	SW6020 / SW6020A	450	975		1200		--	**16**	**13**	**16**	**59**	**55**
Mercury	SW7471A	0.41	1.5		2.3		--	**0.048**	**0.045**	**0.05**	**0.11**	**0.12**
Nickel	SW6020 / SW6020A						--	**11**	**11**	**11**	**16**	**15**
Silver	SW6020 / SW6020A	6.1			8.4		--	**0.18**	0.11 U	**0.13**	**0.2**	**0.21**
Zinc	SW6020 / SW6020A	410			3800		**49**	**390**	**77**	**150**	**250**	**240**

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-28	LANDAU-18-G-5	LANDAU-18-SG-14	LANDAU-18-SG-16	LANDAU-18-SG-17	LANDAU-18-SG-17
						Sample ID	LANDAU-14-SG-28-20140116	LANDAU-18-G-5-20180125	LANDAU-18-SG-14-20180125	LANDAU-18-SG-16-20180125	LANDAU-18-SG-17-20180125	LANDAU-18-SG-17-20180125
						Sample Date	2014-01-16	2018-01-25	2018-01-25	2018-01-25	2018-01-25	2018-01-25
						Depth Interval	0 - 10 cm	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft
						Sample Type Code	N	N	N	N	FD	N
						Matrix	DS	DS	DS	DS	DS	DS
Semivolatile Organics (µg/kg)												
1,2,4-Trichlorobenzene	SW8270C / SW8270D	31			64		--	8.0 U	7.2 U	7.3 U	7.4 U	7.5 U
1,2-Dichlorobenzene	SW8270C / SW8270D	35			110		--	8.0 UJ	7.2 U	7.3 U	7.4 U	7.5 U
1,4-Dichlorobenzene	SW8270C / SW8270D	110			120		--	8.0 UJ	7.2 U	7.3 U	7.4 U	7.5 U
2,4-Dimethylphenol	SW8270C / SW8270D	29			210		--	16 UJ	14 UJ	15 UJ	15 UJ	15 UJ
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63			77		--	24 U	22 U	22 U	22 U	23 U
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D	670			3600		--	32 U	29 U	29 U	30 U	30 U
Benzoic acid	SW8270C / SW8270D	650			760		--	400 U	360 U	360 U	370 U	380 U
Benzyl alcohol	SW8270C / SW8270D	57			870		--	640 UJ	580 UJ	580 UJ	590 UJ	600 UJ
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	1300			8300		--	96 U	87 U	88 U	89 U	90 U
Butylbenzyl phthalate	SW8270C / SW8270D	63			970		--	32 U	29 U	29 U	30 U	30 U
Carbazole	SW8270D						--	24 U	22 U	22 U	22 U	23 U
Di-n-butyl phthalate	SW8270C / SW8270D	1400			5100		--	80 U	72 U	73 U	74 U	75 U
Di-n-octyl phthalate	SW8270C / SW8270D	6200			6200		--	**160**	140 U	150 U	150 U	150 U
Dibenzofuran	SW8270C / SW8270D	540			1700		--	24 U	22 U	22 U	22 U	23 U
Diethyl phthalate	SW8270C / SW8270D	200			1200		--	88 U	79 U	80 U	82 U	83 U
Dimethyl phthalate	SW8270C / SW8270D	71			1400		--	24 U	22 U	22 U	22 U	23 U
Hexachlorobenzene	SW8270C / SW8270D	22	168		230		--	8.0 U	7.2 U	7.3 U	7.4 U	7.5 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	11			270		--	8.0 U	7.2 U	7.3 U	7.4 U	7.5 U
n-Nitrosodiphenylamine	SW8270C / SW8270D	28			130		--	9.6 U	8.7 U	8.8 U	8.9 U	9.0 U
Pentachlorophenol	SW8270C / SW8270D	400	504		690		--	64 U	58 U	58 U	59 U	60 U
Phenol	SW8270C / SW8270D	420			1200		--	24 U	22 U	22 U	22 U	23 U
Total Benzofluoranthenes (lab reported total)	SW8270D						--	**370 J**	**160**	**100**	**120**	**100**
Polycyclic Aromatic Hydrocarbons (µg/kg)												
2-Methylnaphthalene	SW8270C / SW8270D	670			1900		--	8.0 U	7.2 U	7.3 U	7.4 U	7.5 U
Acenaphthene	SW8270C / SW8270D	500			2000		--	**16**	**5.9**	**3.6**	**4**	**4.2**
Acenaphthylene	SW8270C / SW8270D	560			1300		--	**14**	**5.4**	**4.2**	**4.5**	**4.1**
Anthracene	SW8270C / SW8270D	960			13000		--	**46 J**	**22**	**15**	**37 J**	**15 J**
Benzo(a)anthracene	SW8270C / SW8270D	1300			5100		--	**270 J**	**62**	**41**	**49**	**39**
Benzo(a)pyrene	SW8270C / SW8270D	1600			3600		--	**150 J**	**67**	**42**	**50**	**40**
Benzo(g,h,i)perylene	SW8270C / SW8270D	670			3200		--	**41 J**	**19**	**10**	**13**	**9**
Chrysene	SW8270C / SW8270D	1400			21000		--	**400 J**	**110**	**83**	**76**	**55**
Dibenzo(a,h)anthracene	SW8270C / SW8270D	230			1900		--	**14 J**	7.2 U	7.3 U	7.4 U	7.5 U
Fluoranthene	SW8270C / SW8270D	1700	4600		30000		--	**650 J**	**150**	**140**	**110**	**96**
Fluorene	SW8270C / SW8270D	540			3600		--	**20**	**7.9**	**5.1**	**19 J**	**5.5 J**
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	600			4400		--	**51 J**	**22**	**13**	**16**	**13**
Naphthalene	SW8270C / SW8270D	2100			2400		--	**6.4 J**	**5.9**	**5.9**	**6.5**	**4.6**
Phenanthrene	SW8270C / SW8270D	1500			21000		--	**85 J**	**44**	**38**	**54 J**	**28 J**
Pyrene	SW8270C / SW8270D	2600	11980		16000		--	**490 J**	**180**	**130**	**120**	**91**
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200			9900		--	**370 J**	**160**	**100**	**120**	**100**
Total Benzofluoranthenes (lab reported total)	SW8270C						--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	**220 J**	**93**	**58**	**69**	**56**
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	**220 J**	**93**	**59**	**70**	**56**
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000			69000		--	**2400 J**	**770**	**560**	**550**	**440**
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200			29000		--	**190 J**	**91**	**72**	**130 J**	**61 J**

Table 5-3

Sediment Analytical Results Compared to DMMP Criteria - Landau

Chemical	Method	DMMP SL	DMMP BT	DMMP BT TBT	DMMP ML	Task	Location ID	Sample ID	Sample Date	Depth Interval	Sample Type Code	Matrix
						TruGrit_Landau_EIM	LANDAU-14-SG-28	LANDAU-14-SG-28-20140116	2014-01-16	0 - 10 cm	N	DS
						TruGrit_Landau_EIM	LANDAU-18-G-5	LANDAU-18-G-5-20180125	2018-01-25	0 - 0.33 ft	N	DS
						TruGrit_Landau_EIM	LANDAU-18-SG-14	LANDAU-18-SG-14-20180125	2018-01-25	0 - 0.33 ft	N	DS
						TruGrit_Landau_EIM	LANDAU-18-SG-16	LANDAU-18-SG-16-20180125	2018-01-25	0 - 0.33 ft	N	DS
						TruGrit_Landau_EIM	LANDAU-18-SG-17	LANDAU-18-SG-17-20180125	2018-01-25	0 - 0.33 ft	FD	DS
						TruGrit_Landau_EIM	LANDAU-18-SG-17	LANDAU-18-SG-17-20180125	2018-01-25	0 - 0.33 ft	N	DS
PCB Aroclors (mg/kg-OC)												
Aroclor 1016	SW8082 / SW8082A					--	0.059 U	0.16 U	0.20 U	0.20 U	0.19 U	
Aroclor 1221	SW8082 / SW8082A					--	0.067 U	0.18 U	0.21 U	0.21 U	0.22 U	
Aroclor 1232	SW8082 / SW8082A					--	0.067 U	0.18 U	0.21 U	0.21 U	0.22 U	
Aroclor 1242	SW8082 / SW8082A					--	0.059 U	0.16 U	0.20 U	0.20 U	0.19 U	
Aroclor 1248	SW8082 / SW8082A					--	0.067 U	0.18 U	0.21 U	0.21 U	0.22 U	
Aroclor 1254	SW8082 / SW8082A					--	**0.41**	**0.55**	**0.4**	**2.1**	**2.5**	
Aroclor 1260	SW8082 / SW8082A					--	0.059 U	0.16 U	0.20 U	0.20 U	0.19 U	
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38			--	**0.41**	**0.55**	**0.40**	**2.1**	**2.5**	
PCB Aroclors (µg/kg)												
Aroclor 1016	SW8082 / SW8082A					--	1.6 U	1.4 U	1.5 U	1.5 U	1.5 U	
Aroclor 1221	SW8082 / SW8082A					--	1.8 U	1.6 U	1.6 U	1.6 U	1.7 U	
Aroclor 1232	SW8082 / SW8082A					--	1.8 U	1.6 U	1.6 U	1.6 U	1.7 U	
Aroclor 1242	SW8082 / SW8082A					--	1.6 U	1.4 U	1.5 U	1.5 U	1.5 U	
Aroclor 1248	SW8082 / SW8082A					--	1.8 U	1.6 U	1.6 U	1.6 U	1.7 U	
Aroclor 1254	SW8082 / SW8082A					--	**11**	**4.8**	**3**	**16**	**19**	
Aroclor 1260	SW8082 / SW8082A					--	1.6 U	1.4 U	1.5 U	1.5 U	1.5 U	
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130			3100	--	**11**	**4.8**	**3.0**	**16**	**19**	

Table 5-3
Sediment Analytical Results Compared to DMMP Criteria - Landau

Notes:
Detected concentration is greater than DMMP SL screening level
Detected concentration is greater than DMMP BT screening level
Detected concentration is greater than DMMP BT TBT screening level
Detected concentration is greater than DMMP ML screening level
Non-detect concentration is above one or more identified screening levels
Bold: Detected result
µg/kg: microgram per kilogram
BT: Bioaccumulation Trigger
cm: centimeter
cPAH: carcinogenic polycyclic aromatic hydrocarbon
DMMP: Dredged Material Management Program
DS: Depositional Sediment
ft: foot
FD: field duplicate
HPAH: high-molecular-weight polycyclic aromatic hydrocarbon
J: Estimated value
LPAH: low-molecular-weight polycyclic aromatic hydrocarbon
mg/kg: milligram per kilogram
ML: Maximum Level
N: normal
ng/kg: nanogram per kilogram
OC: organic carbon
PCB: polychlorinated biphenyl
pct: percent
SL: Screening Level
TBT: tributyltin
TEQ: toxic equivalency quotient
TOC: total organic carbon
U: compound analyzed for but not detected above detection limit
UJ: compound analyzed for but not detected above estimated detection limit

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-BSC-1	LANDAU-14-BSC-1	LANDAU-14-BSG-1	LANDAU-14-BSG-2	LANDAU-14-G-5	LANDAU-14-G-5	LANDAU-14-SC-05	LANDAU-14-SC-05	LANDAU-14-SC-07	LANDAU-14-SC-07	LANDAU-14-SC-08
						Sample ID	LANDAU-14-BSC-1-1-2-20140121	LANDAU-14-BSC-1-2-3-20140121	LANDAU-14-BSG-1-20140114	LANDAU-14-BSG-2-20140115	LANDAU-14-G-5-2-3-20140121	LANDAU-14-G-5-4-5-20140121	LANDAU-14-SC-05-1-2-20140121	LANDAU-14-SC-05-2-3-20140121	LANDAU-14-SC-07-1-2-20140121	LANDAU-14-SC-07-2-3-20140121	LANDAU-14-SC-08-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-14	2014-01-15	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	0 - 10 cm	0 - 10 cm	2 - 3 ft	4 - 5 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)																	
Total organic carbon	SW9060						--	--	--	--	--	--	--	--	--	--	--
Total solids	E160.3						--	--	**67**	--	--	--	--	--	--	--	--
Metals (mg/kg)																	
Arsenic	SW6020 / SW6020A	57	93	57	93		**3.3**	**4**	**4.7**	**1.5**	**8.4**	**68**	**5**	**4.9**	**52**	**27**	**3.7**
Cadmium	SW6020 / SW6020A	5.1	6.7	5.1	6.7		--	--	--	--	--	--	--	--	--	--	--
Chromium	SW6020 / SW6020A	260	270	260	270		--	--	--	--	--	--	--	--	--	--	--
Copper	SW6020 / SW6020A	390	390	390	390		**19**	**16**	**31**	**15**	**2600**	**580**	**24**	**17**	**160**	**98**	**22**
Lead	SW6020 / SW6020A	450	530	450	530		--	--	--	--	--	--	--	--	--	--	--
Mercury	SW7471A	0.41	0.59	0.41	0.59		--	--	--	--	--	--	--	--	--	--	--
Nickel	SW6020 / SW6020A						--	--	--	--	--	--	--	--	--	--	--
Silver	SW6020 / SW6020A	6.1	6.1	6.1	6.1		--	--	--	--	--	--	--	--	--	--	--
Zinc	SW6020 / SW6020A	410	960	410	960		**29**	**30**	**56**	**19**	**8900**	**1100**	**44**	**28**	**380**	**290**	**42**
Metals, Dissolved (µg/L)																	
Copper	SW6020A						--	--	--	--	--	--	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D	0.81	1.8				--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D	2.3	2.3				--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D	3.1	9				--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	47	78				--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D	4.9	64				--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D	220	1700				--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D	58	4500				--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D	15	58				--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D	61	110				--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D	53	53				--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D	0.38	2.3				--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	3.9	6.2				--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D	11	11				--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D						--	--	--	--	--	--	--	--	--	--	--

Table 5-4
Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-BSC-1	LANDAU-14-BSC-1	LANDAU-14-BSG-1	LANDAU-14-BSG-2	LANDAU-14-G-5	LANDAU-14-G-5	LANDAU-14-SC-05	LANDAU-14-SC-05	LANDAU-14-SC-07	LANDAU-14-SC-07	LANDAU-14-SC-08
						Sample ID	LANDAU-14-BSC-1-1-2-20140121	LANDAU-14-BSC-1-2-3-20140121	LANDAU-14-BSG-1-20140114	LANDAU-14-BSG-2-20140115	LANDAU-14-G-5-2-3-20140121	LANDAU-14-G-5-4-5-20140121	LANDAU-14-SC-05-1-2-20140121	LANDAU-14-SC-05-2-3-20140121	LANDAU-14-SC-07-1-2-20140121	LANDAU-14-SC-07-2-3-20140121	LANDAU-14-SC-08-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-14	2014-01-15	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	0 - 10 cm	0 - 10 cm	2 - 3 ft	4 - 5 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Semivolatile Organics (µg/kg)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D			31	51		--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D			35	50		--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D			110	110		--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270C / SW8270D	29	29	29	29		--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63	63	63	63		--	--	--	--	--	--	--	--	--	--	--
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D						--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270C / SW8270D	650	650	650	650		--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270C / SW8270D	57	73	57	73		--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D			1300	1900		--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D			63	900		--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D			1400	1400		--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D			6200	6200		--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D			540	540		--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D			200	1200		--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D			71	160		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D			22	70		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D			11	120		--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D			28	40		--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D	360	690	360	690		--	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270C / SW8270D	420	1200	420	1200		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																	
2-Methylnaphthalene	SW8270C / SW8270D	38	64				--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D	16	57				--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D	66	66				--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D	220	1200				--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D	110	270				--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D	99	210				--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D	31	78				--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D	110	460				--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D	12	33				--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D	160	1200				--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D	23	79				--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	34	88				--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D	99	170				--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D	100	480				--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D	1000	1400				--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-BSC-1	LANDAU-14-BSC-1	LANDAU-14-BSG-1	LANDAU-14-BSG-2	LANDAU-14-G-5	LANDAU-14-G-5	LANDAU-14-SC-05	LANDAU-14-SC-05	LANDAU-14-SC-07	LANDAU-14-SC-07	LANDAU-14-SC-08
						Sample ID	LANDAU-14-BSC-1-1-2-20140121	LANDAU-14-BSC-1-2-3-20140121	LANDAU-14-BSG-1-20140114	LANDAU-14-BSG-2-20140115	LANDAU-14-G-5-2-3-20140121	LANDAU-14-G-5-4-5-20140121	LANDAU-14-SC-05-1-2-20140121	LANDAU-14-SC-05-2-3-20140121	LANDAU-14-SC-07-1-2-20140121	LANDAU-14-SC-07-2-3-20140121	LANDAU-14-SC-08-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-14	2014-01-15	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	0 - 10 cm	0 - 10 cm	2 - 3 ft	4 - 5 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	1 - 2 ft
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	FD
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Polycyclic Aromatic Hydrocarbons (µg/kg)																	
2-Methylnaphthalene	SW8270C / SW8270D			670	670		--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D			500	500		--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D			1300	1300		--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D			960	960		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D			1300	1600		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D			1600	1600		--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D			670	720		--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D			1400	2800		--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D			230	230		--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D			1700	2500		--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D			540	540		--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D			600	690		--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D			2100	2100		--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D			1500	1500		--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D			2600	3300		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270C						--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (mg/kg-OC)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-08	LANDAU-14-SC-08	LANDAU-14-SC-09	LANDAU-14-SC-09	LANDAU-14-SC-10	LANDAU-14-SC-10	LANDAU-14-SC-12	LANDAU-14-SC-12	LANDAU-14-SC-13	LANDAU-14-SC-13	LANDAU-14-SC-14
						Sample ID	LANDAU-14-SC-08-1-2-20140121	LANDAU-14-SC-08-2-3-20140121	LANDAU-14-SC-09-1-2-20140121	LANDAU-14-SC-09-2-3-20140121	LANDAU-14-SC-10-2-3-20140116	LANDAU-14-SC-10-3-4-20140116	LANDAU-14-SC-12-1-2-20140116	LANDAU-14-SC-12-2-3-20140116	LANDAU-14-SC-13-3-4-20140121	LANDAU-14-SC-13-5-6-20140121	LANDAU-14-SC-14-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-16	2014-01-16	2014-01-16	2014-01-16	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	5 - 6 ft	1 - 2 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)																	
Total organic carbon	SW9060						--	--	--	--	--	--	--	--	--	--	--
Total solids	E160.3						--	--	--	--	--	--	--	--	--	--	--
Metals (mg/kg)																	
Arsenic	SW6020 / SW6020A	57	93	57	93		**4.4**	**7.6** **5.2**	**8.2**	**4**	**31**	**3.8**	**120**	**49**	**1500**	**56**	**310**
Cadmium	SW6020 / SW6020A	5.1	6.7	5.1	6.7		--	--	--	--	--	--	--	--	--	--	--
Chromium	SW6020 / SW6020A	260	270	260	270		--	--	--	--	--	--	--	--	--	--	--
Copper	SW6020 / SW6020A	390	390	390	390		**23**	**29** **20**	**39**	**27**	**120**	**27**	**210**	**47**	**740**	**48**	**810**
Lead	SW6020 / SW6020A	450	530	450	530		--	--	--	--	--	--	--	--	--	--	--
Mercury	SW7471A	0.41	0.59	0.41	0.59		--	--	--	--	--	--	--	--	--	--	--
Nickel	SW6020 / SW6020A						--	--	--	--	--	--	--	--	--	--	--
Silver	SW6020 / SW6020A	6.1	6.1	6.1	6.1		--	--	--	--	--	--	--	--	--	--	--
Zinc	SW6020 / SW6020A	410	960	410	960		**39**	**57** **32**	**46**	**31**	**190**	**36**	**450**	**66**	**3900**	**160**	**1000**
Metals, Dissolved (µg/L)																	
Copper	SW6020A						--	--	--	--	--	--	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D	0.81	1.8				--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D	2.3	2.3				--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D	3.1	9				--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	47	78				--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D	4.9	64				--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D	220	1700				--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D	58	4500				--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D	15	58				--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D	61	110				--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D	53	53				--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D	0.38	2.3				--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	3.9	6.2				--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D	11	11				--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D						--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-08	LANDAU-14-SC-08	LANDAU-14-SC-09	LANDAU-14-SC-09	LANDAU-14-SC-10	LANDAU-14-SC-10	LANDAU-14-SC-12	LANDAU-14-SC-12	LANDAU-14-SC-13	LANDAU-14-SC-13	LANDAU-14-SC-14
						Sample ID	LANDAU-14-SC-08-1-2-20140121	LANDAU-14-SC-08-2-3-20140121	LANDAU-14-SC-09-1-2-20140121	LANDAU-14-SC-09-2-3-20140121	LANDAU-14-SC-10-2-3-20140116	LANDAU-14-SC-10-3-4-20140116	LANDAU-14-SC-12-1-2-20140116	LANDAU-14-SC-12-2-3-20140116	LANDAU-14-SC-13-3-4-20140121	LANDAU-14-SC-13-5-6-20140121	LANDAU-14-SC-14-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-16	2014-01-16	2014-01-16	2014-01-16	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	5 - 6 ft	1 - 2 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Semivolatile Organics (µg/kg)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D			31	51		--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D			35	50		--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D			110	110		--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270C / SW8270D	29	29	29	29		--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63	63	63	63		--	--	--	--	--	--	--	--	--	--	--
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D						--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270C / SW8270D	650	650	650	650		--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270C / SW8270D	57	73	57	73		--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D			1300	1900		--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D			63	900		--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D			1400	1400		--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D			6200	6200		--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D			540	540		--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D			200	1200		--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D			71	160		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D			22	70		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D			11	120		--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D			28	40		--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D	360	690	360	690		--	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270C / SW8270D	420	1200	420	1200		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																	
2-Methylnaphthalene	SW8270C / SW8270D	38	64				--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D	16	57				--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D	66	66				--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D	220	1200				--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D	110	270				--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D	99	210				--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D	31	78				--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D	110	460				--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D	12	33				--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D	160	1200				--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D	23	79				--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	34	88				--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D	99	170				--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D	100	480				--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D	1000	1400				--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-08	LANDAU-14-SC-08	LANDAU-14-SC-09	LANDAU-14-SC-09	LANDAU-14-SC-10	LANDAU-14-SC-10	LANDAU-14-SC-12	LANDAU-14-SC-12	LANDAU-14-SC-13	LANDAU-14-SC-13	LANDAU-14-SC-14
						Sample ID	LANDAU-14-SC-08-1-2-20140121	LANDAU-14-SC-08-2-3-20140121	LANDAU-14-SC-09-1-2-20140121	LANDAU-14-SC-09-2-3-20140121	LANDAU-14-SC-10-2-3-20140116	LANDAU-14-SC-10-3-4-20140116	LANDAU-14-SC-12-1-2-20140116	LANDAU-14-SC-12-2-3-20140116	LANDAU-14-SC-13-3-4-20140121	LANDAU-14-SC-13-5-6-20140121	LANDAU-14-SC-14-1-2-20140121
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-16	2014-01-16	2014-01-16	2014-01-16	2014-01-21	2014-01-21	2014-01-21
						Depth Interval	1 - 2 ft	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	1 - 2 ft	2 - 3 ft	3 - 4 ft	5 - 6 ft	1 - 2 ft
						Sample Type Code	N	FD	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Polycyclic Aromatic Hydrocarbons (µg/kg)																	
2-Methylnaphthalene	SW8270C / SW8270D			670	670		--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D			500	500		--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D			1300	1300		--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D			960	960		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D			1300	1600		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D			1600	1600		--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D			670	720		--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D			1400	2800		--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D			230	230		--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D			1700	2500		--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D			540	540		--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D			600	690		--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D			2100	2100		--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D			1500	1500		--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D			2600	3300		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270C						--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated						--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (mg/kg-OC)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65				--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																	
Aroclor 1016	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A						--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000		--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-14	LANDAU-14-SC-16	LANDAU-14-SC-16	LANDAU-14-SC-17	LANDAU-14-SC-17	LANDAU-14-SG-01	LANDAU-14-SG-02	LANDAU-14-SG-03	LANDAU-14-SG-04	LANDAU-14-SG-05	LANDAU-14-SG-06
						Sample ID	LANDAU-14-SC-14-2-3-20140121	LANDAU-14-SC-16-1-2-20140121	LANDAU-14-SC-16-2-3-20140121	LANDAU-14-SC-17-2-3-20140121	LANDAU-14-SC-17-3-4-20140121	LANDAU-14-SG-01-20140114	LANDAU-14-SG-02-20140114	LANDAU-14-SG-03-20140114	LANDAU-14-SG-04-20140114	LANDAU-14-SG-05-20140114	LANDAU-14-SG-06-20140114
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-14	2014-01-14	2014-01-14	2014-01-14	2014-01-14	2014-01-14
						Depth Interval	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)																	
Total organic carbon	SW9060						--	--	--	--	--	--	--	--	--	--	--
Total solids	E160.3						--	--	--	--	--	--	--	--	--	**75**	**75**
Metals (mg/kg)																	
Arsenic	SW6020 / SW6020A	57	93	57	93		**200**	**79**	**99**	**1100**	**110**	**6.7**	**2**	**7.3**	**66**	**6.2**	**2.4**
Cadmium	SW6020 / SW6020A	5.1	6.7	5.1	6.7		--	--	--	--	--	--	--	--	--	--	--
Chromium	SW6020 / SW6020A	260	270	260	270		--	--	--	--	--	--	--	--	--	--	--
Copper	SW6020 / SW6020A	390	390	390	390		**780**	**260**	**330**	**2000**	**490**	**52**	**12**	**12**	**160**	**36**	**20**
Lead	SW6020 / SW6020A	450	530	450	530		--	--	--	--	--	--	--	--	--	--	--
Mercury	SW7471A	0.41	0.59	0.41	0.59		--	--	--	--	--	--	--	--	--	--	--
Nickel	SW6020 / SW6020A						--	--	--	--	--	--	--	--	--	--	--
Silver	SW6020 / SW6020A	6.1	6.1	6.1	6.1		--	--	--	--	--	--	--	--	--	--	--
Zinc	SW6020 / SW6020A	410	960	410	960		**700**	**500**	**380**	**3000**	**610**	**85**	**48**	**36**	**380**	**120**	**32**
Metals, Dissolved (µg/L)																	
Copper	SW6020A						--	--	--	--	--	--	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D	0.81	1.8				--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D	2.3	2.3				--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D	3.1	9				--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	47	78				--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D	4.9	64				--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D	220	1700				--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D	58	4500				--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D	15	58				--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D	61	110				--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D	53	53				--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D	0.38	2.3				--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	3.9	6.2				--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D	11	11				--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D						--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	Location ID	Sample ID	Sample Date	Depth Interval	Sample Type Code	Matrix
						TruGrit_Landau_EIM	LANDAU-14-SC-14	LANDAU-14-SC-14-2-3-20140121	2014-01-21	2 - 3 ft	N	DS
						TruGrit_Landau_EIM	LANDAU-14-SC-16	LANDAU-14-SC-16-1-2-20140121	2014-01-21	1 - 2 ft	N	DS
						TruGrit_Landau_EIM	LANDAU-14-SC-16	LANDAU-14-SC-16-2-3-20140121	2014-01-21	2 - 3 ft	N	DS
						TruGrit_Landau_EIM	LANDAU-14-SC-17	LANDAU-14-SC-17-2-3-20140121	2014-01-21	2 - 3 ft	N	DS
						TruGrit_Landau_EIM	LANDAU-14-SC-17	LANDAU-14-SC-17-3-4-20140121	2014-01-21	3 - 4 ft	N	DS
						TruGrit_Landau_EIM	LANDAU-14-SG-01	LANDAU-14-SG-01-20140114	2014-01-14	0 - 10 cm	N	DS
						TruGrit_Landau_EIM	LANDAU-14-SG-02	LANDAU-14-SG-02-20140114	2014-01-14	0 - 10 cm	N	DS
						TruGrit_Landau_EIM	LANDAU-14-SG-03	LANDAU-14-SG-03-20140114	2014-01-14	0 - 10 cm	N	DS
						TruGrit_Landau_EIM	LANDAU-14-SG-04	LANDAU-14-SG-04-20140114	2014-01-14	0 - 10 cm	N	DS
						TruGrit_Landau_EIM	LANDAU-14-SG-05	LANDAU-14-SG-05-20140114	2014-01-14	0 - 10 cm	N	DS
						TruGrit_Landau_EIM	LANDAU-14-SG-06	LANDAU-14-SG-06-20140114	2014-01-14	0 - 10 cm	N	DS
Semivolatile Organics (µg/kg)												
1,2,4-Trichlorobenzene	SW8270C / SW8270D			31	51	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D			35	50	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D			110	110	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270C / SW8270D	29	29	29	29	--	--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63	63	63	63	--	--	--	--	--	--	--	--	--	--	--	--
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D					--	--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270C / SW8270D	650	650	650	650	--	--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270C / SW8270D	57	73	57	73	--	--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D			1300	1900	--	--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D			63	900	--	--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D					--	--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D			1400	1400	--	--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D			6200	6200	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D			540	540	--	--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D			200	1200	--	--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D			71	160	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D			22	70	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D			11	120	--	--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D			28	40	--	--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D	360	690	360	690	--	--	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270C / SW8270D	420	1200	420	1200	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270D					--	--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)												
2-Methylnaphthalene	SW8270C / SW8270D	38	64			--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D	16	57			--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D	66	66			--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D	220	1200			--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D	110	270			--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D	99	210			--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D	31	78			--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D	110	460			--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D	12	33			--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D	160	1200			--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D	23	79			--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	34	88			--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D	99	170			--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D	100	480			--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D	1000	1400			--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450			--	--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300			--	--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780			--	--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

						Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SC-14	LANDAU-14-SC-16	LANDAU-14-SC-16	LANDAU-14-SC-17	LANDAU-14-SC-17	LANDAU-14-SG-01	LANDAU-14-SG-02	LANDAU-14-SG-03	LANDAU-14-SG-04	LANDAU-14-SG-05	LANDAU-14-SG-06
						Sample ID	LANDAU-14-SC-14-2-3-20140121	LANDAU-14-SC-16-1-2-20140121	LANDAU-14-SC-16-2-3-20140121	LANDAU-14-SC-17-2-3-20140121	LANDAU-14-SC-17-3-4-20140121	LANDAU-14-SG-01-20140114	LANDAU-14-SG-02-20140114	LANDAU-14-SG-03-20140114	LANDAU-14-SG-04-20140114	LANDAU-14-SG-05-20140114	LANDAU-14-SG-06-20140114
						Sample Date	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-21	2014-01-14	2014-01-14	2014-01-14	2014-01-14	2014-01-14	2014-01-14
						Depth Interval	2 - 3 ft	1 - 2 ft	2 - 3 ft	2 - 3 ft	3 - 4 ft	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Chemical	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**												
Polycyclic Aromatic Hydrocarbons (µg/kg)																	
2-Methylnaphthalene	SW8270C / SW8270D			670	670	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D			500	500	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D			1300	1300	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D			960	960	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D			1300	1600	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D			1600	1600	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D			670	720	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D			1400	2800	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D			230	230	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D			1700	2500	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D			540	540	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D			600	690	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D			2100	2100	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D			1500	1500	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D			2600	3300	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270C					--	--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					--	--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					--	--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000	--	--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200	--	--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (mg/kg-OC)																	
Aroclor 1016	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65			--	--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																	
Aroclor 1016	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-07	LANDAU-14-SG-08	LANDAU-14-SG-09	LANDAU-14-SG-10	LANDAU-14-SG-11	LANDAU-14-SG-12	LANDAU-14-SG-13	LANDAU-14-SG-14	LANDAU-14-SG-15	LANDAU-14-SG-16	LANDAU-14-SG-17
						Sample ID	LANDAU-14-SG-07-20140114	LANDAU-14-SG-08-20140114	LANDAU-14-SG-09-20140114	LANDAU-14-SG-10-20140115	LANDAU-14-SG-11-20140114	LANDAU-14-SG-12-20140114	LANDAU-14-SG-13-20140115	LANDAU-14-SG-14-20140115	LANDAU-14-SG-15-20140115	LANDAU-14-SG-16-20140114	LANDAU-14-SG-17-20140114
						Sample Date	2014-01-14	2014-01-14	2014-01-14	2014-01-15	2014-01-14	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)																	
Total organic carbon	SW9060						--	--	--	**0.46**	--	--	**1.9**	--	--	--	--
Total solids	E160.3						**76**	**77**	**77**	--	**62**	**63**	--	--	--	**64**	**67**
Metals (mg/kg)																	
Arsenic	SW6020 / SW6020A	57	93	57	93		**21**	**4.5**	**17**	**7.8**	**16**	**38**	**13**	**6.6**	**38**	**11**	**31**
Cadmium	SW6020 / SW6020A	5.1	6.7	5.1	6.7		--	--	--	**0.14 J**	--	--	**1**	--	--	--	--
Chromium	SW6020 / SW6020A	260	270	260	270		--	--	--	**13**	--	--	**20**	--	--	--	--
Copper	SW6020 / SW6020A	390	390	390	390		**76**	**24**	**58**	**35**	**45**	**180**	**58**	**200**	**250**	**360**	**550**
Lead	SW6020 / SW6020A	450	530	450	530		--	--	--	**16**	--	--	**27**	--	--	--	--
Mercury	SW7471A	0.41	0.59	0.41	0.59		--	--	--	**0.026**	--	--	**0.078**	--	--	--	--
Nickel	SW6020 / SW6020A						--	--	--	**7.1**	--	--	**13**	--	--	--	--
Silver	SW6020 / SW6020A	6.1	6.1	6.1	6.1		--	--	--	**0.053 J**	--	--	**0.13 J**	--	--	--	--
Zinc	SW6020 / SW6020A	410	960	410	960		**130**	**42**	**110**	**78**	**84**	**450**	**170**	**650**	**630**	**1200**	**1700**
Metals, Dissolved (µg/L)																	
Copper	SW6020A						--	--	--	--	--	--	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D	0.81	1.8				--	--	--	--	--	--	3.4 U	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D	2.3	2.3				--	--	--	--	--	--	3.7 U	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D	3.1	9				--	--	--	--	--	--	3.4 U	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	47	78				--	--	--	--	--	--	**6.3 J**	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D	4.9	64				--	--	--	--	--	--	14 U	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D	220	1700				--	--	--	--	--	--	34 U	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D	58	4500				--	--	--	--	--	--	**1.2 J**	--	--	--	--
Dibenzofuran	SW8270C / SW8270D	15	58				--	--	--	--	--	--	**0.74 J**	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D	61	110				--	--	--	--	--	--	14 U	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D	53	53				--	--	--	--	--	--	6.8 U	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D	0.38	2.3				--	--	--	--	--	--	3.4 U	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	3.9	6.2				--	--	--	--	--	--	3.4 U	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D	11	11				--	--	--	--	--	--	3.4 U	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D						--	--	--	--	--	--	**6.3 J**	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-07	LANDAU-14-SG-08	LANDAU-14-SG-09	LANDAU-14-SG-10	LANDAU-14-SG-11	LANDAU-14-SG-12	LANDAU-14-SG-13	LANDAU-14-SG-14	LANDAU-14-SG-15	LANDAU-14-SG-16	LANDAU-14-SG-17
						Sample ID	LANDAU-14-SG-07-20140114	LANDAU-14-SG-08-20140114	LANDAU-14-SG-09-20140114	LANDAU-14-SG-10-20140115	LANDAU-14-SG-11-20140114	LANDAU-14-SG-12-20140114	LANDAU-14-SG-13-20140115	LANDAU-14-SG-14-20140115	LANDAU-14-SG-15-20140115	LANDAU-14-SG-16-20140114	LANDAU-14-SG-17-20140114
						Sample Date	2014-01-14	2014-01-14	2014-01-14	2014-01-15	2014-01-14	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Semivolatile Organics (µg/kg)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D			31	51		--	--	--	16 U	--	--	65 U	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D			35	50		--	--	--	18 U	--	--	71 U	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D			110	110		--	--	--	16 U	--	--	65 U	--	--	--	--
2,4-Dimethylphenol	SW8270C / SW8270D	29	29	29	29		--	--	--	32 U	--	--	130 U	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63	63	63	63		--	--	--	32 U	--	--	130 U	--	--	--	--
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D						--	--	--	64 U	--	--	260 U	--	--	--	--
Benzoic acid	SW8270C / SW8270D	650	650	650	650		--	--	--	800 U	--	--	3200 U	--	--	--	--
Benzyl alcohol	SW8270C / SW8270D	57	73	57	73		--	--	--	32 U	--	--	130 U	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D			1300	1900		--	--	--	**41 J**	--	--	**120 J**	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D			63	900		--	--	--	**18 J**	--	--	260 U	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D			1400	1400		--	--	--	160 U	--	--	650 U	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D			6200	6200		--	--	--	160 U	--	--	**22 J**	--	--	--	--
Dibenzofuran	SW8270C / SW8270D			540	540		--	--	--	**5.5 J**	--	--	**14 J**	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D			200	1200		--	--	--	64 U	--	--	260 U	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D			71	160		--	--	--	32 U	--	--	130 U	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D			22	70		--	--	--	16 U	--	--	65 U	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D			11	120		--	--	--	16 U	--	--	65 U	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D			28	40		--	--	--	16 U	--	--	65 U	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D	360	690	360	690		--	--	--	**33 J**	--	--	**120 J**	--	--	--	--
Phenol	SW8270C / SW8270D	420	1200	420	1200		--	--	--	**5.1 J**	--	--	130 U	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																	
2-Methylnaphthalene	SW8270C / SW8270D	38	64				--	--	--	--	--	--	**0.5 J**	--	--	--	--
Acenaphthene	SW8270C / SW8270D	16	57				--	--	--	--	--	--	**1.0 J**	--	--	--	--
Acenaphthylene	SW8270C / SW8270D	66	66				--	--	--	--	--	--	**1.0 J**	--	--	--	--
Anthracene	SW8270C / SW8270D	220	1200				--	--	--	--	--	--	**5**	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D	110	270				--	--	--	--	--	--	**13**	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D	99	210				--	--	--	--	--	--	**12**	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D	31	78				--	--	--	--	--	--	**4.6**	--	--	--	--
Chrysene	SW8270C / SW8270D	110	460				--	--	--	--	--	--	**20**	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D	12	33				--	--	--	--	--	--	**1.7 J**	--	--	--	--
Fluoranthene	SW8270C / SW8270D	160	1200				--	--	--	--	--	--	**29**	--	--	--	--
Fluorene	SW8270C / SW8270D	23	79				--	--	--	--	--	--	**1.5**	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	34	88				--	--	--	--	--	--	**6.3**	--	--	--	--
Naphthalene	SW8270C / SW8270D	99	170				--	--	--	--	--	--	1.4 U	--	--	--	--
Phenanthrene	SW8270C / SW8270D	100	480				--	--	--	--	--	--	**7.4**	--	--	--	--
Pyrene	SW8270C / SW8270D	1000	1400				--	--	--	--	--	--	**28**	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	--	--	--	--	**30**	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	--	--	--	--	**140 J**	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	--	--	--	--	**16 J**	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

						Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-07	LANDAU-14-SG-08	LANDAU-14-SG-09	LANDAU-14-SG-10	LANDAU-14-SG-11	LANDAU-14-SG-12	LANDAU-14-SG-13	LANDAU-14-SG-14	LANDAU-14-SG-15	LANDAU-14-SG-16	LANDAU-14-SG-17
						Sample ID	LANDAU-14-SG-07-20140114	LANDAU-14-SG-08-20140114	LANDAU-14-SG-09-20140114	LANDAU-14-SG-10-20140115	LANDAU-14-SG-11-20140114	LANDAU-14-SG-12-20140114	LANDAU-14-SG-13-20140115	LANDAU-14-SG-14-20140115	LANDAU-14-SG-15-20140115	LANDAU-14-SG-16-20140114	LANDAU-14-SG-17-20140114
						Sample Date	2014-01-14	2014-01-14	2014-01-14	2014-01-15	2014-01-14	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	N	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Chemical	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**												
Polycyclic Aromatic Hydrocarbons (µg/kg)																	
2-Methylnaphthalene	SW8270C / SW8270D			670	670	--	--	--	**2.8 J**	--	--	**10 J**	--	--	--	--
Acenaphthene	SW8270C / SW8270D			500	500	--	--	--	**8**	--	--	**19 J**	--	--	--	--
Acenaphthylene	SW8270C / SW8270D			1300	1300	--	--	--	**7.3**	--	--	**19 J**	--	--	--	--
Anthracene	SW8270C / SW8270D			960	960	--	--	--	**32**	--	--	**100**	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D			1300	1600	--	--	--	**99**	--	--	**240**	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D			1600	1600	--	--	--	**90**	--	--	**230**	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D			670	720	--	--	--	**43**	--	--	**87**	--	--	--	--
Chrysene	SW8270C / SW8270D			1400	2800	--	--	--	**180**	--	--	**400**	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D			230	230	--	--	--	**16**	--	--	**32 J**	--	--	--	--
Fluoranthene	SW8270C / SW8270D			1700	2500	--	--	--	**210**	--	--	**550**	--	--	--	--
Fluorene	SW8270C / SW8270D			540	540	--	--	--	**12**	--	--	**28**	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D			600	690	--	--	--	**58**	--	--	**120**	--	--	--	--
Naphthalene	SW8270C / SW8270D			2100	2100	--	--	--	**4.1 J**	--	--	26 U	--	--	--	--
Phenanthrene	SW8270C / SW8270D			1500	1500	--	--	--	**97**	--	--	**140**	--	--	--	--
Pyrene	SW8270C / SW8270D			2600	3300	--	--	--	**250**	--	--	**540**	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600	--	--	--	**190**	--	--	**500**	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270C					--	--	--	**190**	--	--	**500**	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					--	--	--	**130**	--	--	**320 J**	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					--	--	--	**130**	--	--	**320 J**	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000	--	--	--	**1100**	--	--	**2700 J**	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200	--	--	--	**160 J**	--	--	**310 J**	--	--	--	--
PCB Aroclors (mg/kg-OC)																	
Aroclor 1016	SW8082 / SW8082A					--	--	--	--	--	--	0.89 U	--	--	--	--
Aroclor 1221	SW8082 / SW8082A					--	--	--	--	--	--	1.0 U	--	--	--	--
Aroclor 1232	SW8082 / SW8082A					--	--	--	--	--	--	1.0 U	--	--	--	--
Aroclor 1242	SW8082 / SW8082A					--	--	--	--	--	--	0.89 U	--	--	--	--
Aroclor 1248	SW8082 / SW8082A					--	--	--	--	--	--	0.89 U	--	--	--	--
Aroclor 1254	SW8082 / SW8082A					--	--	--	--	--	--	0.89 U	--	--	--	--
Aroclor 1260	SW8082 / SW8082A					--	--	--	--	--	--	**0.79 J**	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65			--	--	--	--	--	--	**0.79 J**	--	--	--	--
PCB Aroclors (µg/kg)																	
Aroclor 1016	SW8082 / SW8082A					--	--	--	13 U	--	--	17 U	--	--	--	--
Aroclor 1221	SW8082 / SW8082A					--	--	--	15 U	--	--	19 U	--	--	--	--
Aroclor 1232	SW8082 / SW8082A					--	--	--	15 U	--	--	19 U	--	--	--	--
Aroclor 1242	SW8082 / SW8082A					--	--	--	13 U	--	--	17 U	--	--	--	--
Aroclor 1248	SW8082 / SW8082A					--	--	--	13 U	--	--	17 U	--	--	--	--
Aroclor 1254	SW8082 / SW8082A					--	--	--	13 U	--	--	17 U	--	--	--	--
Aroclor 1260	SW8082 / SW8082A					--	--	--	13 U	--	--	**15 J**	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000	--	--	--	15 U	--	--	**15 J**	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-18	LANDAU-14-SG-19	LANDAU-14-SG-20	LANDAU-14-SG-20	LANDAU-14-SG-21	LANDAU-14-SG-22	LANDAU-14-SG-23	LANDAU-14-SG-24	LANDAU-14-SG-25	LANDAU-14-SG-26	LANDAU-14-SG-27
						Sample ID	LANDAU-14-SG-18-20140115	LANDAU-14-SG-19-20140114	LANDAU-14-SG-20-20140115	LANDAU-14-SG-20-20140115	LANDAU-14-SG-21-20140115	LANDAU-14-SG-22-20140114	LANDAU-14-SG-23-20140114	LANDAU-14-SG-24-20140114	LANDAU-14-SG-25-20140116	LANDAU-14-SG-26-20140116	LANDAU-14-SG-27-20140116
						Sample Date	2014-01-15	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14	2014-01-14	2014-01-16	2014-01-16	2014-01-16
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)																	
Total organic carbon	SW9060						--	--	--	--	--	--	--	--	--	--	--
Total solids	E160.3						--	**59**	--	--	--	**61**	--	--	--	--	--
Metals (mg/kg)																	
Arsenic	SW6020 / SW6020A	57	93	57	93		**45**	**7.4**	**5.1**	**5.6**	**6.4**	**8.2**	**140**	**1.5**	**7.3**	**4**	**8.1**
Cadmium	SW6020 / SW6020A	5.1	6.7	5.1	6.7		--	--	--	--	--	--	--	--	--	--	--
Chromium	SW6020 / SW6020A	260	270	260	270		--	--	--	--	--	--	--	--	--	--	--
Copper	SW6020 / SW6020A	390	390	390	390		**100**	**46**	**29**	**34**	**33**	**34**	**420**	**11**	**36**	**23**	**28**
Lead	SW6020 / SW6020A	450	530	450	530		--	--	--	--	--	--	--	--	--	--	--
Mercury	SW7471A	0.41	0.59	0.41	0.59		--	--	--	--	--	--	--	--	--	--	--
Nickel	SW6020 / SW6020A						--	--	--	--	--	--	--	--	--	--	--
Silver	SW6020 / SW6020A	6.1	6.1	6.1	6.1		--	--	--	--	--	--	--	--	--	--	--
Zinc	SW6020 / SW6020A	410	960	410	960		**170**	**74**	**46**	**79**	**56**	**52**	**1200**	**24**	**51**	**32**	**42**
Metals, Dissolved (µg/L)																	
Copper	SW6020A						--	--	--	--	--	--	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D	0.81	1.8				--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D	2.3	2.3				--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D	3.1	9				--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	47	78				--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D	4.9	64				--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D	220	1700				--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D	58	4500				--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D	15	58				--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D	61	110				--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D	53	53				--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D	0.38	2.3				--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	3.9	6.2				--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D	11	11				--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D						--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-18	LANDAU-14-SG-19	LANDAU-14-SG-20	LANDAU-14-SG-20	LANDAU-14-SG-21	LANDAU-14-SG-22	LANDAU-14-SG-23	LANDAU-14-SG-24	LANDAU-14-SG-25	LANDAU-14-SG-26	LANDAU-14-SG-27
						Sample ID	LANDAU-14-SG-18-20140115	LANDAU-14-SG-19-20140114	LANDAU-14-SG-20-20140115	LANDAU-14-SG-20-20140115	LANDAU-14-SG-21-20140115	LANDAU-14-SG-22-20140114	LANDAU-14-SG-23-20140114	LANDAU-14-SG-24-20140114	LANDAU-14-SG-25-20140116	LANDAU-14-SG-26-20140116	LANDAU-14-SG-27-20140116
						Sample Date	2014-01-15	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14	2014-01-14	2014-01-16	2014-01-16	2014-01-16
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Semivolatile Organics (µg/kg)																	
1,2,4-Trichlorobenzene	SW8270C / SW8270D			31	51		--	--	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	SW8270C / SW8270D			35	50		--	--	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	SW8270C / SW8270D			110	110		--	--	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	SW8270C / SW8270D	29	29	29	29		--	--	--	--	--	--	--	--	--	--	--
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63	63	63	63		--	--	--	--	--	--	--	--	--	--	--
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D						--	--	--	--	--	--	--	--	--	--	--
Benzoic acid	SW8270C / SW8270D	650	650	650	650		--	--	--	--	--	--	--	--	--	--	--
Benzyl alcohol	SW8270C / SW8270D	57	73	57	73		--	--	--	--	--	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D			1300	1900		--	--	--	--	--	--	--	--	--	--	--
Butylbenzyl phthalate	SW8270C / SW8270D			63	900		--	--	--	--	--	--	--	--	--	--	--
Carbazole	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Di-n-butyl phthalate	SW8270C / SW8270D			1400	1400		--	--	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	SW8270C / SW8270D			6200	6200		--	--	--	--	--	--	--	--	--	--	--
Dibenzofuran	SW8270C / SW8270D			540	540		--	--	--	--	--	--	--	--	--	--	--
Diethyl phthalate	SW8270C / SW8270D			200	1200		--	--	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	SW8270C / SW8270D			71	160		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	SW8270C / SW8270D			22	70		--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D			11	120		--	--	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	SW8270C / SW8270D			28	40		--	--	--	--	--	--	--	--	--	--	--
Pentachlorophenol	SW8270C / SW8270D	360	690	360	690		--	--	--	--	--	--	--	--	--	--	--
Phenol	SW8270C / SW8270D	420	1200	420	1200		--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270D						--	--	--	--	--	--	--	--	--	--	--
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																	
2-Methylnaphthalene	SW8270C / SW8270D	38	64				--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D	16	57				--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D	66	66				--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D	220	1200				--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D	110	270				--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D	99	210				--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D	31	78				--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D	110	460				--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D	12	33				--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D	160	1200				--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D	23	79				--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	34	88				--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D	99	170				--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D	100	480				--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D	1000	1400				--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450				--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300				--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780				--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

						Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-18	LANDAU-14-SG-19	LANDAU-14-SG-20	LANDAU-14-SG-20	LANDAU-14-SG-21	LANDAU-14-SG-22	LANDAU-14-SG-23	LANDAU-14-SG-24	LANDAU-14-SG-25	LANDAU-14-SG-26	LANDAU-14-SG-27
						Sample ID	LANDAU-14-SG-18-20140115	LANDAU-14-SG-19-20140114	LANDAU-14-SG-20-20140115	LANDAU-14-SG-20-20140115	LANDAU-14-SG-21-20140115	LANDAU-14-SG-22-20140114	LANDAU-14-SG-23-20140114	LANDAU-14-SG-24-20140114	LANDAU-14-SG-25-20140116	LANDAU-14-SG-26-20140116	LANDAU-14-SG-27-20140116
						Sample Date	2014-01-15	2014-01-14	2014-01-15	2014-01-15	2014-01-15	2014-01-14	2014-01-14	2014-01-14	2014-01-16	2014-01-16	2014-01-16
						Depth Interval	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm	0 - 10 cm
						Sample Type Code	N	N	FD	N	N	N	N	N	N	N	N
						Matrix	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS	DS
Chemical	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**												
Polycyclic Aromatic Hydrocarbons (µg/kg)																	
2-Methylnaphthalene	SW8270C / SW8270D			670	670	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	SW8270C / SW8270D			500	500	--	--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	SW8270C / SW8270D			1300	1300	--	--	--	--	--	--	--	--	--	--	--	--
Anthracene	SW8270C / SW8270D			960	960	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	SW8270C / SW8270D			1300	1600	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	SW8270C / SW8270D			1600	1600	--	--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	SW8270C / SW8270D			670	720	--	--	--	--	--	--	--	--	--	--	--	--
Chrysene	SW8270C / SW8270D			1400	2800	--	--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	SW8270C / SW8270D			230	230	--	--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	SW8270C / SW8270D			1700	2500	--	--	--	--	--	--	--	--	--	--	--	--
Fluorene	SW8270C / SW8270D			540	540	--	--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D			600	690	--	--	--	--	--	--	--	--	--	--	--	--
Naphthalene	SW8270C / SW8270D			2100	2100	--	--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	SW8270C / SW8270D			1500	1500	--	--	--	--	--	--	--	--	--	--	--	--
Pyrene	SW8270C / SW8270D			2600	3300	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600	--	--	--	--	--	--	--	--	--	--	--	--
Total Benzofluoranthenes (lab reported total)	SW8270C					--	--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					--	--	--	--	--	--	--	--	--	--	--	--
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					--	--	--	--	--	--	--	--	--	--	--	--
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000	--	--	--	--	--	--	--	--	--	--	--	--
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200	--	--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (mg/kg-OC)																	
Aroclor 1016	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65			--	--	--	--	--	--	--	--	--	--	--	--
PCB Aroclors (µg/kg)																	
Aroclor 1016	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1221	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1232	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1242	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1248	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1254	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Aroclor 1260	SW8082 / SW8082A					--	--	--	--	--	--	--	--	--	--	--	--
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000	--	--	--	--	--	--	--	--	--	--	--	--

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-28	LANDAU-18-G-5	LANDAU-18-SG-14	LANDAU-18-SG-16	LANDAU-18-SG-17	LANDAU-18-SG-17
						Sample ID	LANDAU-14-SG-28-20140116	LANDAU-18-G-5-20180125	LANDAU-18-SG-14-20180125	LANDAU-18-SG-16-20180125	LANDAU-18-SG-17-20180125	LANDAU-18-SG-17-20180125
						Sample Date	2014-01-16	2018-01-25	2018-01-25	2018-01-25	2018-01-25	2018-01-25
						Depth Interval	0 - 10 cm	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft
						Sample Type Code	N	N	N	N	FD	N
						Matrix	DS	DS	DS	DS	DS	DS
Conventional Parameters (pct)												
Total organic carbon	SW9060					--	**2.7**	**0.88**	**0.75**	**0.76**	**0.77**
Total solids	E160.3					--	**61.2**	**68.3**	**65.8**	**65.2**	**63.9**
Metals (mg/kg)												
Arsenic	SW6020 / SW6020A	57	93	57	93	**5.3**	**11**	**8.5**	**14**	**70**	**81**
Cadmium	SW6020 / SW6020A	5.1	6.7	5.1	6.7	--	**0.33**	0.23 U	0.24 U	**0.24**	**0.23**
Chromium	SW6020 / SW6020A	260	270	260	270	--	**38**	**17**	**18**	**23**	**25**
Copper	SW6020 / SW6020A	390	390	390	390	**36**	**120**	**43 J**	**75**	**110**	**97**
Lead	SW6020 / SW6020A	450	530	450	530	--	**16**	**13**	**16**	**59**	**55**
Mercury	SW7471A	0.41	0.59	0.41	0.59	--	**0.048**	**0.045**	**0.05**	**0.11**	**0.12**
Nickel	SW6020 / SW6020A					--	**11**	**11**	**11**	**16**	**15**
Silver	SW6020 / SW6020A	6.1	6.1	6.1	6.1	--	**0.18**	0.11 U	**0.13**	**0.2**	**0.21**
Zinc	SW6020 / SW6020A	410	960	410	960	**49**	**390**	**77**	**150**	**250**	**240**
Metals, Dissolved (µg/L)												
Copper	SW6020A					--	--	--	--	--	--
Semivolatile Organics (mg/kg-OC)												
1,2,4-Trichlorobenzene	SW8270C / SW8270D	0.81	1.8			--	0.30 U	0.82 U	0.97 U	0.97 U	0.97 U
1,2-Dichlorobenzene	SW8270C / SW8270D	2.3	2.3			--	0.30 UJ	0.82 U	0.97 U	0.97 U	0.97 U
1,4-Dichlorobenzene	SW8270C / SW8270D	3.1	9			--	0.30 UJ	0.82 U	0.97 U	0.97 U	0.97 U
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D	47	78			--	3.6 U	9.9 U	12 U	12 U	10 U
Butylbenzyl phthalate	SW8270C / SW8270D	4.9	64			--	1.2 U	3.3 U	3.9 U	4 U	4 U
Carbazole	SW8270D					--	0.89 U	2.5 U	2.9 U	2.9 U	3.0 U
Di-n-butyl phthalate	SW8270C / SW8270D	220	1700			--	3 U	8.2 U	9.7 U	9.7 U	9.7 U
Di-n-octyl phthalate	SW8270C / SW8270D	58	4500			--	**5.9**	16 U	20 U	20 U	19 U
Dibenzofuran	SW8270C / SW8270D	15	58			--	0.89 U	2.5 U	2.9 U	2.9 U	3.0 U
Diethyl phthalate	SW8270C / SW8270D	61	110			--	3.3 U	9.0 U	10 U	11 U	11 U
Dimethyl phthalate	SW8270C / SW8270D	53	53			--	0.89 U	2.5 U	2.9 U	2.9 U	3.0 U
Hexachlorobenzene	SW8270C / SW8270D	0.38	2.3			--	0.30 U	0.82 U	0.97 U	0.97 U	0.97 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D	3.9	6.2			--	0.30 U	0.82 U	0.97 U	0.97 U	0.97 U
n-Nitrosodiphenylamine	SW8270C / SW8270D	11	11			--	0.36 U	0.99 U	1.2 U	1.2 U	1.2 U
Pentachlorophenol	SW8270C / SW8270D					--	2.4 U	6.6 U	7.7 U	7.8 U	8 U

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

						Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-28	LANDAU-18-G-5	LANDAU-18-SG-14	LANDAU-18-SG-16	LANDAU-18-SG-17	LANDAU-18-SG-17
						Sample ID	LANDAU-14-SG-28-20140116	LANDAU-18-G-5-20180125	LANDAU-18-SG-14-20180125	LANDAU-18-SG-16-20180125	LANDAU-18-SG-17-20180125	LANDAU-18-SG-17-20180125
						Sample Date	2014-01-16	2018-01-25	2018-01-25	2018-01-25	2018-01-25	2018-01-25
						Depth Interval	0 - 10 cm	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft
						Sample Type Code	N	N	N	N	FD	N
						Matrix	DS	DS	DS	DS	DS	DS
Chemical	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**							
Semivolatile Organics (µg/kg)												
1,2,4-Trichlorobenzene	SW8270C / SW8270D			31	51	--	8.0 U	7.2 U	7.3 U	7.4 U	7.5 U	
1,2-Dichlorobenzene	SW8270C / SW8270D			35	50	--	8.0 UJ	7.2 U	7.3 U	7.4 U	7.5 U	
1,4-Dichlorobenzene	SW8270C / SW8270D			110	110	--	8.0 UJ	7.2 U	7.3 U	7.4 U	7.5 U	
2,4-Dimethylphenol	SW8270C / SW8270D	29	29	29	29	--	16 UJ	14 UJ	15 UJ	15 UJ	15 UJ	
2-Methylphenol (o-Cresol)	SW8270C / SW8270D	63	63	63	63	--	24 U	22 U	22 U	22 U	23 U	
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270C / SW8270D					--	32 U	29 U	29 U	30 U	30 U	
Benzoic acid	SW8270C / SW8270D	650	650	650	650	--	400 U	360 U	360 U	370 U	380 U	
Benzyl alcohol	SW8270C / SW8270D	57	73	57	73	--	640 UJ	580 UJ	580 UJ	590 UJ	600 UJ	
Bis(2-ethylhexyl)phthalate	SW8270C / SW8270D			1300	1900	--	96 U	87 U	88 U	89 U	90 U	
Butylbenzyl phthalate	SW8270C / SW8270D			63	900	--	32 U	29 U	29 U	30 U	30 U	
Carbazole	SW8270D					--	24 U	22 U	22 U	22 U	23 U	
Di-n-butyl phthalate	SW8270C / SW8270D			1400	1400	--	80 U	72 U	73 U	74 U	75 U	
Di-n-octyl phthalate	SW8270C / SW8270D			6200	6200	--	**160**	140 U	150 U	150 U	150 U	
Dibenzofuran	SW8270C / SW8270D			540	540	--	24 U	22 U	22 U	22 U	23 U	
Diethyl phthalate	SW8270C / SW8270D			200	1200	--	88 U	79 U	80 U	82 U	83 U	
Dimethyl phthalate	SW8270C / SW8270D			71	160	--	24 U	22 U	22 U	22 U	23 U	
Hexachlorobenzene	SW8270C / SW8270D			22	70	--	8.0 U	7.2 U	7.3 U	7.4 U	7.5 U	
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270C / SW8270D			11	120	--	8.0 U	7.2 U	7.3 U	7.4 U	7.5 U	
n-Nitrosodiphenylamine	SW8270C / SW8270D			28	40	--	9.6 U	8.7 U	8.8 U	8.9 U	9.0 U	
Pentachlorophenol	SW8270C / SW8270D	360	690	360	690	--	64 U	58 U	58 U	59 U	60 U	
Phenol	SW8270C / SW8270D	420	1200	420	1200	--	24 U	22 U	22 U	22 U	23 U	
Total Benzofluoranthenes (lab reported total)	SW8270D					--	**370 J**	**160**	**100**	**120**	**100**	
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)												
2-Methylnaphthalene	SW8270C / SW8270D	38	64			--	0.30 U	0.82 U	0.97 U	0.97 U	0.97 U	
Acenaphthene	SW8270C / SW8270D	16	57			--	**0.59**	**0.67**	**0.48**	**0.5**	**0.55**	
Acenaphthylene	SW8270C / SW8270D	66	66			--	**0.52**	**0.61**	**0.56**	**0.59**	**0.53**	
Anthracene	SW8270C / SW8270D	220	1200			--	**1.7 J**	**2.5**	**2.0**	**4.9 J**	**1.9 J**	
Benzo(a)anthracene	SW8270C / SW8270D	110	270			--	**10 J**	**7.0**	**5.5**	**6.4**	**5.1**	
Benzo(a)pyrene	SW8270C / SW8270D	99	210			--	**5.6 J**	**7.6**	**5.6**	**7**	**5**	
Benzo(g,h,i)perylene	SW8270C / SW8270D	31	78			--	**1.5 J**	**2.2**	**1**	**1.7**	**1**	
Chrysene	SW8270C / SW8270D	110	460			--	**10 J**	**13**	**11**	**10**	**7.1**	
Dibenzo(a,h)anthracene	SW8270C / SW8270D	12	33			--	**0.52 J**	0.82 U	0.97 U	0.97 U	0.97 U	
Fluoranthene	SW8270C / SW8270D	160	1200			--	**24 J**	**17**	**19**	**14**	**12**	
Fluorene	SW8270C / SW8270D	23	79			--	**0.7**	**0.90**	**0.68**	**2.5 J**	**0.71 J**	
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D	34	88			--	**1.9 J**	**2.5**	**1.7**	**2.1**	**1.7**	
Naphthalene	SW8270C / SW8270D	99	170			--	**0.24 J**	**0.67**	**0.79**	**0.86**	**0.60**	
Phenanthrene	SW8270C / SW8270D	100	480			--	**3.1 J**	**5.0**	**5.1**	**7.1 J**	**3.6 J**	
Pyrene	SW8270C / SW8270D	1000	1400			--	**18 J**	**20**	**17**	**16**	**12**	
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450			--	**14 J**	**18**	**10**	**16**	**10**	
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300			--	**90 J**	**88**	**75**	**73**	**58**	
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780			--	**6.9 J**	**10**	**9.6**	**16 J**	**8.0 J**	

Table 5-4

Sediment Analytical Results Compared to SMS Criteria - Landau

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM	TruGrit_Landau_EIM
						Location ID	LANDAU-14-SG-28	LANDAU-18-G-5	LANDAU-18-SG-14	LANDAU-18-SG-16	LANDAU-18-SG-17	LANDAU-18-SG-17
						Sample ID	LANDAU-14-SG-28-20140116	LANDAU-18-G-5-20180125	LANDAU-18-SG-14-20180125	LANDAU-18-SG-16-20180125	LANDAU-18-SG-17-20180125	LANDAU-18-SG-17-20180125
						Sample Date	2014-01-16	2018-01-25	2018-01-25	2018-01-25	2018-01-25	2018-01-25
						Depth Interval	0 - 10 cm	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft	0 - 0.33 ft
						Sample Type Code	N	N	N	N	FD	N
						Matrix	DS	DS	DS	DS	DS	DS
Polycyclic Aromatic Hydrocarbons (µg/kg)												
2-Methylnaphthalene	SW8270C / SW8270D			670	670	--	8.0 U	7.2 U	7.3 U	7.4 U	7.5 U	
Acenaphthene	SW8270C / SW8270D			500	500	--	**16**	**5.9**	**3.6**	**4**	**4.2**	
Acenaphthylene	SW8270C / SW8270D			1300	1300	--	**14**	**5.4**	**4.2**	**4.5**	**4.1**	
Anthracene	SW8270C / SW8270D			960	960	--	**46 J**	**22**	**15**	**37 J**	**15 J**	
Benzo(a)anthracene	SW8270C / SW8270D			1300	1600	--	**270 J**	**62**	**41**	**49**	**39**	
Benzo(a)pyrene	SW8270C / SW8270D			1600	1600	--	**150 J**	**67**	**42**	**50**	**40**	
Benzo(g,h,i)perylene	SW8270C / SW8270D			670	720	--	**41 J**	**19**	**10**	**13**	**9**	
Chrysene	SW8270C / SW8270D			1400	2800	--	**400 J**	**110**	**83**	**76**	**55**	
Dibenzo(a,h)anthracene	SW8270C / SW8270D			230	230	--	**14 J**	7.2 U	7.3 U	7.4 U	7.5 U	
Fluoranthene	SW8270C / SW8270D			1700	2500	--	**650 J**	**150**	**140**	**110**	**96**	
Fluorene	SW8270C / SW8270D			540	540	--	**20**	**7.9**	**5.1**	**19 J**	**5.5 J**	
Indeno(1,2,3-c,d)pyrene	SW8270C / SW8270D			600	690	--	**51 J**	**22**	**13**	**16**	**13**	
Naphthalene	SW8270C / SW8270D			2100	2100	--	**6.4 J**	**5.9**	**5.9**	**6.5**	**4.6**	
Phenanthrene	SW8270C / SW8270D			1500	1500	--	**85 J**	**44**	**38**	**54 J**	**28 J**	
Pyrene	SW8270C / SW8270D			2600	3300	--	**490 J**	**180**	**130**	**120**	**91**	
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600	--	**370 J**	**160**	**100**	**120**	**100**	
Total Benzofluoranthenes (lab reported total)	SW8270C					--	--	--	--	--	--	
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 0 max limit)	Calculated					--	**220 J**	**93**	**58**	**69**	**56**	
Total cPAH TEQ (7 minimum CAEPA 2005) (U = 1/2 max limit)	Calculated					--	**220 J**	**93**	**59**	**70**	**56**	
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000	--	**2400 J**	**770**	**560**	**550**	**440**	
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200	--	**190 J**	**91**	**72**	**130 J**	**61 J**	
PCB Aroclors (mg/kg-OC)												
Aroclor 1016	SW8082 / SW8082A					--	0.059 U	0.16 U	0.20 U	0.20 U	0.19 U	
Aroclor 1221	SW8082 / SW8082A					--	0.067 U	0.18 U	0.21 U	0.21 U	0.22 U	
Aroclor 1232	SW8082 / SW8082A					--	0.067 U	0.18 U	0.21 U	0.21 U	0.22 U	
Aroclor 1242	SW8082 / SW8082A					--	0.059 U	0.16 U	0.20 U	0.20 U	0.19 U	
Aroclor 1248	SW8082 / SW8082A					--	0.067 U	0.18 U	0.21 U	0.21 U	0.22 U	
Aroclor 1254	SW8082 / SW8082A					--	**0.41**	**0.55**	**0.4**	**2.1**	**2.5**	
Aroclor 1260	SW8082 / SW8082A					--	0.059 U	0.16 U	0.20 U	0.20 U	0.19 U	
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65			--	**0.41**	**0.55**	**0.40**	**2.1**	**2.5**	
PCB Aroclors (µg/kg)												
Aroclor 1016	SW8082 / SW8082A					--	1.6 U	1.4 U	1.5 U	1.5 U	1.5 U	
Aroclor 1221	SW8082 / SW8082A					--	1.8 U	1.6 U	1.6 U	1.6 U	1.7 U	
Aroclor 1232	SW8082 / SW8082A					--	1.8 U	1.6 U	1.6 U	1.6 U	1.7 U	
Aroclor 1242	SW8082 / SW8082A					--	1.6 U	1.4 U	1.5 U	1.5 U	1.5 U	
Aroclor 1248	SW8082 / SW8082A					--	1.8 U	1.6 U	1.6 U	1.6 U	1.7 U	
Aroclor 1254	SW8082 / SW8082A					--	**11**	**4.8**	**3**	**16**	**19**	
Aroclor 1260	SW8082 / SW8082A					--	1.6 U	1.4 U	1.5 U	1.5 U	1.5 U	
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000	--	**11**	**4.8**	**3.0**	**16**	**19**	

Table 5-4
Sediment Analytical Results Compared to SMS Criteria - Landau

Notes:

TOC in range (0.5% to 3.5%):

Detected concentration is greater than SMS Marine SCO SCUM screening level.

Detected concentration is greater than SMS Marine CSL SCUM screening level.

TOC out of range:

Detected concentration is greater than AET Marine SCO SCUM screening level.

Detected concentration is greater than AET Marine CSL SCUM screening level.

Non-detect concentration is above one or more identified screening levels.

Bold: Detected result

Organic carbon normalized results are not reported if TOC concentration is outside of 0.5% to 3.5%.

µg/kg: microgram per kilogram

AET: apparent effects threshold

CSL: cleanup screening level

cm: centimeter

cPAH: carcinogenic polycyclic aromatic hydrocarbon

DS: Depositional Sediment

FD: field duplicate

ft: foot

HPAH: high-molecular-weight polycyclic aromatic hydrocarbon

J: estimated value

LPAH: low-molecular-weight polycyclic aromatic hydrocarbon

mg/kg: milligram per kilogram

N: normal

ng/kg: nanogram per kilogram

OC: organic carbon

PCB: polychlorinated biphenyl

pct: percent

SCO: sediment cleanup objective

SCUM: Sediment Cleanup User's Manual

SMS: Sediment Management Standards

TEQ: toxic equivalency quotient

TOC: total organic carbon

U: compound analyzed for but not detected above detection limit

UJ: compound analyzed for but not detected above estimated detection limit

Table 5-5
Sediment Analytical Results Compared to DMMP Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	DMMP SL	DMMP BT	DMMP ML	Task: POT_MAIN_2025 Location ID: D116 Sample ID: BW-D116CS-A-250605 Sample Date: 2025-06-05 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D116 Sample ID: BW-D116CS-B-250605 Sample Date: 2025-06-05 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D117 Sample ID: BW-D117CS-A-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D117 Sample ID: BW-D117CS-B-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D118 Sample ID: BW-D118CS-A-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D118 Sample ID: BW-D118CS-B-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D119 Sample ID: BW-D119CS-A-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D119 Sample ID: BW-D119CS-B-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D120 Sample ID: BW-D120CS-A-250605 Sample Date: 2025-06-05 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D120 Sample ID: BW-D120CS-B-250605 Sample Date: 2025-06-05 Sample Type Code: N Matrix: SE
Conventional Parameters (mg/kg)														
Ammonia as nitrogen	SM4500NH3H				**2.08 J**	**26.4 J**	**2.04**	**1.61**	**3.06**	**8.19**	**1.40**	0.44 U	**2.62 J**	**2.94 J**
Sulfide	SM4500S2D				**285 J**	**67.2 J**	**252 J**	1.27 UJ	**416 J**	**21.8 J**	**603 J**	1.12 UJ	**543 J**	1.26 UJ
Conventional Parameters (pct)														
Total organic carbon	SW9060AM				**0.45**	**0.27**	**0.49 J**	**0.50 J**	**0.47 J**	**0.21 J**	**0.59 J**	**0.06 J**	**0.48**	**0.40**
Total solids	SM2540G				**73.44**	**76.61**	**73.93**	**76.80**	**70.09**	**77.86**	**70.57**	**85.08**	**60.35**	**74.76**
Total volatile solids	PSEP-TVS				**1.98**	**1.81**	**1.94**	**1.98**	**2.65**	**1.54**	**2.78**	**0.93**	**3.63**	**1.99**
Metals (mg/kg)														
Antimony	SW6020/ SW6020B	150		200	0.27 UJ	0.25 UJ	0.25 U	0.26 U	0.26 U	0.23 U	0.26 U	0.22 U	0.32 UJ	0.26 UJ
Arsenic	SW6020/ SW6020B	57	507.1	700	**6.56 J**	**2.23 J**	**4.26**	**1.47**	**4.21**	**1.64**	**6.29**	**1.63**	**7.87 J**	**2.68 J**
Cadmium	SW6020/ SW6020B	5.1		14	**0.10 J**	**0.07 J**	**0.08 J**	0.13 U	**0.10 J**	**0.07 J**	**0.15**	**0.08 J**	**0.18**	**0.08 J**
Chromium	SW6020/ SW6020B	260			**10.3**	**13.0**	**11.4**	**10.5**	**11.3**	**11.3**	**12.8**	**10.2**	**12.7**	**9.67**
Copper	SW6020/ SW6020B	390		1300	**21.7**	**20.7**	**21.4 J**	**13.2 J**	**25.5**	**18.7 J**	**37.2**	**9.74 J**	**27.4**	**15.4**
Lead	SW6020/ SW6020B	450	975	1200	**7.33**	**3.00**	**5.98 J**	**1.54 J**	**6.17 J**	**2.35 J**	**11.3**	**1.21 J**	**9.60**	**1.69**
Mercury	SW6020B	0.41	1.5	2.3										
Mercury	SW7471B	0.41	1.5	2.3	**0.0345**	**0.0153 J**	**0.0283**	0.0266 U	**0.0391**	0.0301 U	**0.0579**	0.0206 U	**0.0481**	**0.0127 J**
Selenium	SW6020/ SW6020B		3		1.34 U	1.25 U	**0.64 J**	1.29 U	1.30 U	**0.62 J**	1.30 U	**0.62 J**	1.62 U	1.31 U
Silver	SW6020/ SW6020B	6.1		8.4	0.27 U	0.25 U	0.25 U	0.26 U	0.26 U	0.23 U	0.26 U	0.22 U	0.32 U	0.26 U
Zinc	SW6020/ SW6020B	410		3800	**34.4**	**26.7**	**32.4**	**18.9**	**34.0**	**23.1**	**64.0**	**17.9**	**57.2**	**20.4**
Organometals (µg/kg)														
Tributyltin (ion)	SW8270ESIM		73		**5.38**	3.19 U	3.50 U	3.32 U	**5.15**	3.26 U	**10.6**	3.18 U	3.53 U	3.83 U

Table 5-5
Sediment Analytical Results Compared to DMMP Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	DMMP SL	DMMP BT	DMMP ML	Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
					Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120
					Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605
					Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05
					Sample Type Code	N	N	N	N	N	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (µg/kg)															
1,2,4-Trichlorobenzene	SW8270E/ SW8270ESIM	31		64	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	SW8270E/ SW8270ESIM	35		110	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	SW8270E/ SW8270ESIM	110		120	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	SW8270E/ SW8270ESIM	29		210	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Methylphenol (o-Cresol)	SW8270E/ SW8270ESIM	63		77	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270E	670		3600	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Methylphenol (p-Cresol)	SW8270ESIM	670		3600										
Benzoic acid	SW8270E/ SW8270ESIM	650		760	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl alcohol	SW8270E/ SW8270ESIM	57		870	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-ethylhexyl)phthalate	SW8270E	1300		8300	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Butylbenzyl phthalate	SW8270E/ SW8270ESIM	63		970	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Di-n-butyl phthalate	SW8270E	1400		5100	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Di-n-octyl phthalate	SW8270E	6200		6200	100 UJ	100 U	100 UJ	100 U	100 U	100 U	100 U	100 U	100 UJ	100 UJ
Diethyl phthalate	SW8270E/ SW8270ESIM	200		1200	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dimethyl phthalate	SW8270E/ SW8270ESIM	71		1400	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Hexachlorobenzene	SW8270E/ SW8270ESIM	22	168	230	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270E/ SW8270ESIM	11		270	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	SW8270E				10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
n-Nitrosodiphenylamine	SW8270E/ SW8270ESIM	28		130	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	SW8270E/ SW8270ESIM	400	504	690	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenol	SW8270E/ SW8270ESIM	420		1200	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U

Table 5-5
Sediment Analytical Results Compared to DMMP Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	DMMP SL	DMMP BT	DMMP ML	Task Location ID Sample ID Sample Date Sample Type Code Matrix	POT_MAIN_2025 D116 BW-D116CS-A-250605 2025-06-05 N SE	POT_MAIN_2025 D116 BW-D116CS-B-250605 2025-06-05 N SE	POT_MAIN_2025 D117 BW-D117CS-A-250604 2025-06-04 N SE	POT_MAIN_2025 D117 BW-D117CS-B-250604 2025-06-04 N SE	POT_MAIN_2025 D118 BW-D118CS-A-250604 2025-06-04 N SE	POT_MAIN_2025 D118 BW-D118CS-B-250604 2025-06-04 N SE	POT_MAIN_2025 D119 BW-D119CS-A-250604 2025-06-04 N SE	POT_MAIN_2025 D119 BW-D119CS-B-250604 2025-06-04 N SE	POT_MAIN_2025 D120 BW-D120CS-A-250605 2025-06-05 N SE	POT_MAIN_2025 D120 BW-D120CS-B-250605 2025-06-05 N SE
Polycyclic Aromatic Hydrocarbons (µg/kg)															
1-Methylnaphthalene	SW8270E														
2-Methylnaphthalene	SW8270E	670		1900		**4.6**	**0.59**	**2.3**	**0.57**	**4**	0.50 U	**3.4**	0.50 U	**6.2**	0.50 U
Acenaphthene	SW8270E	500		2000		**3.5**	0.50 U	**1.8**	0.50 U	**2.6**	0.50 U	**2.9**	0.50 U	**6.3**	0.50 U
Acenaphthylene	SW8270E	560		1300		**0.9**	0.50 U	0.50 U	0.50 U	**1.3**	0.50 U	**1.5**	0.50 U	**0.8**	0.50 U
Anthracene	SW8270E	960		13000		**6.5**	0.50 U	**4.4**	0.50 U	**6.6**	0.50 U	**7.7**	0.50 U	**15**	0.50 U
Benzo(a)anthracene	SW8270E	1300		5100		**28**	**1.4**	**13**	1.0 U	**26**	1.0 U	**32**	1.0 U	**20**	1.0 U
Benzo(a)pyrene	SW8270E	1600		3600		**46 J**	**1.3**	**19 J**	0.50 U	**40**	0.50 U	**43**	0.50 U	**20 J**	0.50 UJ
Benzo(b)fluoranthene	SW8270E					**85 J**	**3**	**40 J**	0.50 U	**60**	**0.55**	**74**	**0.75**	**42 J**	**0.63 J**
Benzo(b,j,k)fluoranthenes	SW8270E														
Benzo(g,h,i)perylene	SW8270E	670		3200		**20 J**	1.0 U	**4.8 J**	1.0 U	**18**	1.0 U	**17**	1.0 U	**5.4 J**	1.0 UJ
Benzo(k)fluoranthene	SW8270E					**32 J**	**1.1**	**13 J**	0.50 U	**20**	0.50 U	**22**	0.50 U	**14 J**	0.50 UJ
Carbazole	SW8270E														
Chrysene	SW8270E	1400		21000		**36**	**2.1**	**17**	**0.71**	**36**	**0.54**	**44**	0.50 U	**29**	0.50 U
Dibenzo(a,h)anthracene	SW8270E/ SW8270ESIM	230		1900		**3.8 J**	1.0 U	**1.1 J**	1.0 U	**4**	1.0 U	**4.2**	1.0 U	**1.3 J**	1.0 UJ
Dibenzofuran	SW8270E	540		1700		**4.5**	0.50 U	**2**	0.50 U	**3.1**	0.50 U	**3.2**	0.50 U	**10**	0.50 U
Fluoranthene	SW8270E	1700	4600	30000		**59**	**1.9**	**23**	1.0 U	**35**	1.0 U	**62**	1.0 U	**95**	1.0 U
Fluorene	SW8270E	540		3600		**4.4**	0.50 U	**2.4**	0.50 U	**3.2**	0.50 U	**3.6**	0.50 U	**12**	0.50 U
Indeno(1,2,3-c,d)pyrene	SW8270E	600		4400		**19 J**	1.0 U	**4.7 J**	1.0 U	**18**	1.0 U	**18**	1.0 U	**5.4 J**	1.0 UJ
Naphthalene	SW8270E	2100		2400		**4.7**	1.0 U	**2.3**	1.0 U	**3.7**	1.0 U	**4.3**	1.0 U	**5.7**	1.0 U
Phenanthrene	SW8270E	1500		21000		**28**	**1.7**	**11**	**1.6**	**17**	**1.1**	**23**	1.0 U	**63**	1.0 U
Pyrene	SW8270E	2600	11980	16000		**82**	**3.5**	**34**	0.50 U	**44**	0.50 U	**73**	**0.73**	**97**	0.50 U
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	3200		9900		**120 J**	**4.1**	**53 J**	0.5 U	**80**	**0.55**	**96**	**0.75**	**56 J**	**0.63 J**
Total HPAH (DMMP) (U = 0 max limit)	Calculated	12000		69000		**410 J**	**14**	**170 J**	**0.71**	**300**	**1.1**	**390**	**1.5**	**330 J**	**0.63 J**
Total LPAH (DMMP) (U = 0 max limit)	Calculated	5200		29000		**48**	**1.7**	**22**	**1.6**	**34**	**1.1**	**43**	1 U	**100**	1 U
Total PAH (DMMP) (U = 0 max limit)	Calculated					**460 J**	**16**	**190 J**	**2.3**	**340**	**2.2**	**430**	**1.5**	**430 J**	**0.63 J**

Table 5-5
Sediment Analytical Results Compared to DMMP Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	DMMP SL	DMMP BT	DMMP ML	Task: POT_MAIN_2025 Location ID: D116 Sample ID: BW-D116CS-A-250605 Sample Date: 2025-06-05 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D116 Sample ID: BW-D116CS-B-250605 Sample Date: 2025-06-05 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D117 Sample ID: BW-D117CS-A-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D117 Sample ID: BW-D117CS-B-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D118 Sample ID: BW-D118CS-A-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D118 Sample ID: BW-D118CS-B-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D119 Sample ID: BW-D119CS-A-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D119 Sample ID: BW-D119CS-B-250604 Sample Date: 2025-06-04 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D120 Sample ID: BW-D120CS-A-250605 Sample Date: 2025-06-05 Sample Type Code: N Matrix: SE	Task: POT_MAIN_2025 Location ID: D120 Sample ID: BW-D120CS-B-250605 Sample Date: 2025-06-05 Sample Type Code: N Matrix: SE
Pesticides (µg/kg)														
2,4'-DDD (o,p'-DDD)	SW8081B				0.93 UJ	0.94 UJ	0.87 UJ	0.93 UJ	0.92 UJ	0.92 UJ	0.89 UJ	0.88 UJ	0.94 UJ	0.88 UJ
2,4'-DDE (o,p'-DDE)	SW8081B				0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U
2,4'-DDT (o,p'-DDT)	SW8081B				0.93 UJ	0.94 UJ	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 UJ	0.88 UJ
4,4'-DDD (p,p'-DDD)	SW8081B	16			0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U
4,4'-DDE (p,p'-DDE)	SW8081B	9			0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U
4,4'-DDT (p,p'-DDT)	SW8081B	12			0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U
Aldrin	SW8081B	9.5			0.47 UJ	0.47 UJ	0.44 U	0.47 U	0.46 U	0.46 U	0.45 U	0.44 U	0.47 UJ	0.44 UJ
Chlordane, alpha- (Chlordane, cis-)	SW8081B				0.47 UJ	0.47 UJ	0.44 U	0.47 U	0.46 U	0.46 U	0.45 U	0.44 U	0.47 UJ	0.44 UJ
Chlordane, beta- (Chlordane, trans-)	SW8081B				0.47 UJ	0.47 UJ	0.44 U	0.47 U	0.46 U	0.46 U	0.45 U	0.44 U	0.47 UJ	0.44 UJ
Dieldrin	SW8081B	1.9		1700	0.93 UJ	0.94 UJ	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 UJ	0.88 UJ
Endrin ketone	SW8081B				0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U
Heptachlor	SW8081B	1.5		270	0.47 UJ	0.47 UJ	0.44 U	0.47 U	0.46 U	0.46 U	0.45 U	0.44 U	0.47 UJ	0.44 UJ
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8081B	11		270	0.47 UJ	0.47 UJ	0.44 U	0.47 U	0.46 U	0.46 U	**0.31 J**	0.44 U	0.47 UJ	0.44 UJ
Hexachlorocyclohexane (BHC), beta-	SW8081B				0.47 U	0.47 U	0.44 U	0.47 U	0.46 U	0.46 U	0.45 U	0.44 U	0.47 U	0.44 U
Nonachlor, cis-	SW8081B				0.93 U	0.94 U	0.87 UJ	0.93 UJ	0.92 UJ	0.92 UJ	0.89 UJ	0.88 UJ	0.94 U	0.88 U
Nonachlor, trans-	SW8081B				0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U
Oxychlordane	SW8081B				0.93 UJ	0.94 UJ	0.87 UJ	0.93 UJ	0.92 UJ	0.92 UJ	0.89 UJ	0.88 UJ	0.94 UJ	0.88 UJ
Sum 4,4 DDT, DDE, DDD (U = 0 max limit)	Calculated		50	69	0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U
Total Chlordane (DMMP) (U = 0 max limit)	Calculated	2.8	37		0.93 UJ	0.94 UJ	0.87 UJ	0.93 UJ	0.92 UJ	0.92 UJ	0.89 UJ	0.88 UJ	0.94 UJ	0.88 UJ
Total DDx (U = 0 max limit)	Calculated				0.93 UJ	0.94 UJ	0.87 UJ	0.93 UJ	0.92 UJ	0.92 UJ	0.89 UJ	0.88 UJ	0.94 UJ	0.88 UJ

Table 5-5
Sediment Analytical Results Compared to DMMP Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	DMMP SL	DMMP BT	DMMP ML	Task Location ID Sample ID Sample Date Sample Type Code Matrix	POT_MAIN_2025 D116 BW-D116CS-A-250605 2025-06-05 N SE	POT_MAIN_2025 D116 BW-D116CS-B-250605 2025-06-05 N SE	POT_MAIN_2025 D117 BW-D117CS-A-250604 2025-06-04 N SE	POT_MAIN_2025 D117 BW-D117CS-B-250604 2025-06-04 N SE	POT_MAIN_2025 D118 BW-D118CS-A-250604 2025-06-04 N SE	POT_MAIN_2025 D118 BW-D118CS-B-250604 2025-06-04 N SE	POT_MAIN_2025 D119 BW-D119CS-A-250604 2025-06-04 N SE	POT_MAIN_2025 D119 BW-D119CS-B-250604 2025-06-04 N SE	POT_MAIN_2025 D120 BW-D120CS-A-250605 2025-06-05 N SE	POT_MAIN_2025 D120 BW-D120CS-B-250605 2025-06-05 N SE
Dioxin Furans (ng/kg)															
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B					**1160**	**106**	**583**	6.11 U	**883**	**209**	**3570**	**20.1**	**97100**	**41.0**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B					**45.3**	**3.35 J**	**25.3**	0.262 U	**36.7**	**3.94 J**	**200.0**	**0.873 J**	**1890**	**0.912 J**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B					**92.8**	**9.46**	**49.2**	0.470 U	**72.6**	**13.7**	**262**	1.11 UJ	**6990**	2.50 U
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B					**14.9**	**1.57 J**	**8.90**	0.235 U	**13.2**	**2.04 J**	**52.7**	0.660 U	**895**	**0.310 J**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B					**1.50 J**	0.309 U	**1.19 J**	0.320 U	**1.68 J**	1.59 U	**5.09**	1.05 U	**71.5**	0.189 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B					**0.793 J**	0.777 U	**0.630 J**	0.254 U	**0.921 J**	1.19 U	**2.34 J**	0.785 U	**32.1**	0.380 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B					**2.53**	0.247 U	**1.80 J**	0.161 U	**2.61**	1.28 U	**7.87**	0.580 U	**164**	0.160 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B					**4.94**	**0.735 J**	**2.33 J**	0.267 U	**3.48**	1.23 U	**11.8**	0.803 U	**338**	0.370 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B					**0.982 J**	0.262 U	**0.656 J**	0.159 U	**1.03 J**	1.38 U	**3.35**	0.595 U	**52.1**	0.158 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B					**2.29 J**	0.764 U	**1.41 J**	0.226 U	**1.72 J**	0.942 U	**5.28**	0.716 U	**125**	0.385 U
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B					**0.482 J**	0.331 U	0.856 U	0.220 U	0.612 U	1.75 U	**1.31 J**	0.862 U	**22.0**	0.221 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B					**0.525 J**	0.374 U	0.654 U	0.258 U	0.689 U	1.20 U	**1.28 J**	0.381 U	**20.9**	0.269 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B					**0.513 J**	0.193 U	**0.701 J**	0.165 U	**1.03 J**	0.687 U	**1.76 J**	0.321 U	**21.5**	0.151 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B					**0.969 J**	0.253 U	**0.443 J**	0.167 U	**0.324 J**	1.24 U	**1.62 J**	0.661 U	**14.1**	0.185 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B					**0.920 J**	0.175 U	**0.476 J**	0.146 U	**0.786 J**	0.592 U	**2.53**	0.291 U	**32.1**	0.129 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B					0.257 U	0.170 U	0.327 U	0.181 U	0.279 U	0.519 U	0.585 U	0.192 U	**3.28 J**	0.163 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B					**0.690 J**	**0.168 J**	**0.920**	0.125 U	**0.881**	0.437 U	**2.61**	0.174 U	**7.12**	0.139 U
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated	4[a]	10			**3.64 J**	**0.233 J**	**1.76 J**	0.258 U	**2.51 J**	**0.221 J**	**10.0 J**	**0.00629 J**	**219 J**	**0.0157 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated	4[a]	10			**3.77 J**	**0.668 J**	**2.29 J**	0.258 U	**3.03 J**	**1.66 J**	**10.3 J**	**0.614 J**	**219 J**	**0.367 J**

Table 5-5
Sediment Analytical Results Compared to DMMP Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	DMMP SL	DMMP BT	DMMP ML	Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
					Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120
					Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605
					Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05
					Sample Type Code	N	N	N	N	N	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
PCB Aroclors (mg/kg-OC)															
Aroclor 1016	SW8082A				0.78 UJ	1.3 UJ	0.73 U	0.74 U	0.79 U	1.9 U	0.64 U	5.8 U	0.73 UJ	0.85 UJ
Aroclor 1221	SW8082A				0.78 UJ	1.3 UJ	0.73 U	0.74 U	0.79 U	1.9 U	0.64 U	5.8 U	0.73 UJ	0.85 UJ
Aroclor 1232	SW8082A				0.78 UJ	1.3 UJ	0.73 U	0.74 U	0.79 U	1.9 U	0.64 U	5.8 U	0.73 UJ	0.85 UJ
Aroclor 1242	SW8082A				0.78 UJ	1.3 UJ	0.73 U	0.74 U	0.79 U	1.9 U	0.64 U	5.8 U	0.73 UJ	0.85 UJ
Aroclor 1248	SW8082A				0.78 UJ	1.3 UJ	0.73 U	0.74 U	**0.81**	1.9 U	**2.42**	5.8 U	**3.50 J**	0.85 UJ
Aroclor 1254	SW8082A				0.78 UJ	1.3 UJ	0.73 U	0.74 U	**1.1**	1.9 U	**3.78**	5.8 U	**2.15 J**	0.85 UJ
Aroclor 1260	SW8082A				0.78 UJ	1.3 UJ	0.73 U	0.74 U	**0.72 J**	1.9 U	**1.5**	5.8 U	0.73 UJ	0.85 UJ
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated		38		0.78 UJ	1.3 UJ	0.73 U	0.74 U	**2.6 J**	1.9 U	**7.7**	5.8 U	**5.65 J**	0.85 UJ
PCB Aroclors (µg/kg)															
Aroclor 1016	SW8082A				3.5 UJ	3.5 UJ	3.6 U	3.7 U	3.7 U	4.0 U	3.8 U	3.5 U	3.5 UJ	3.4 UJ
Aroclor 1221	SW8082A				3.5 UJ	3.5 UJ	3.6 U	3.7 U	3.7 U	4.0 U	3.8 U	3.5 U	3.5 UJ	3.4 UJ
Aroclor 1232	SW8082A				3.5 UJ	3.5 UJ	3.6 U	3.7 U	3.7 U	4.0 U	3.8 U	3.5 U	3.5 UJ	3.4 UJ
Aroclor 1242	SW8082A				3.5 UJ	3.5 UJ	3.6 U	3.7 U	3.7 U	4.0 U	3.8 U	3.5 U	3.5 UJ	3.4 UJ
Aroclor 1248	SW8082A				3.5 UJ	3.5 UJ	3.6 U	3.7 U	**3.8**	4.0 U	**14.3**	3.5 U	**16.8 J**	3.4 UJ
Aroclor 1254	SW8082A				3.5 UJ	3.5 UJ	3.6 U	3.7 U	**5.0**	4.0 U	**22.3**	3.5 U	**10.3 J**	3.4 UJ
Aroclor 1260	SW8082A				3.5 UJ	3.5 UJ	3.6 U	3.7 U	**3.4 J**	4.0 U	**8.8**	3.5 U	3.5 UJ	3.4 UJ
Total PCB Aroclors (DMMP) (U = 0 max limit)	Calculated	130		3100	3.5 UJ	3.5 UJ	3.6 U	3.7 U	**12 J**	4.0 U	**45**	3.5 U	**27.1 J**	3.4 UJ

Table 5-5
Sediment Analytical Results Compared to DMMP Criteria - Blair Federal Navigation Channel Side Slopes

Notes:
Detected concentration is greater than DMMP SL screening level.
Detected concentration is greater than DMMP BT screening level.
Detected concentration is greater than DMMP ML screening level.
Non-detect concentration is above one or more identified screening levels.
Bold: Detected result
a. The value representing the DMMP SL for Total Dioxin/Furan TEQ is the Disposal Site Management Objective.
blank cell: not applicable
µg/kg: microgram per kilogram
BT: Bioaccumulation Trigger
DMMP: Dredged Material Management Program
J: estimated value
mg/kg: milligram per kilogram
ML: Maximum Level
N: normal
ng/kg: nanogram per kilogram
OC: organic carbon
PCB: polychlorinated biphenyl
pct: percent
SE: sediment
SL: Screening Level
TEQ: toxic equivalency quotient
U: compound analyzed for but not detected above detection limit
UJ: compound analyzed for but not detected above estimated detection limit

Table 5-6
Sediment Analytical Results Compared to SMS Criteria - Blair Federal Navigation Channel Side Slopes

					Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
					Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120
					Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605
					Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05
					Sample Type Code	N	N	N	N	N	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Chemical	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Conventional Parameters (mg/kg)															
Ammonia as nitrogen	SM4500NH3H					**2.08 J**	**26.4 J**	**2.04**	**1.61**	**3.06**	**8.19**	**1.40**	0.44 U	**2.62 J**	**2.94 J**
Sulfide	SM4500S2D					**285 J**	**67.2 J**	**252 J**	1.27 UJ	**416 J**	**21.8 J**	**603 J**	1.12 UJ	**543 J**	1.26 UJ
Conventional Parameters (pct)															
Total organic carbon	SW9060AM					**0.45**	**0.27**	**0.49 J**	**0.50 J**	**0.47 J**	**0.21 J**	**0.59 J**	**0.06 J**	**0.48**	**0.40**
Total solids	SM2540G					**73.44**	**76.61**	**73.93**	**76.80**	**70.09**	**77.86**	**70.57**	**85.08**	**60.35**	**74.76**
Total volatile solids	PSEP-TVS					**1.98**	**1.81**	**1.94**	**1.98**	**2.65**	**1.54**	**2.78**	**0.93**	**3.63**	**1.99**
Metals (mg/kg)															
Antimony	SW6020/ SW6020B					0.27 UJ	0.25 UJ	0.25 U	0.26 U	0.26 U	0.23 U	0.26 U	0.22 U	0.32 UJ	0.26 UJ
Arsenic	SW6020/ SW6020B	57	93	57	93	**6.56 J**	**2.23 J**	**4.26**	**1.47**	**4.21**	**1.64**	**6.29**	**1.63**	**7.87 J**	**2.68 J**
Cadmium	SW6020/ SW6020B	5.1	6.7	5.1	6.7	**0.10 J**	**0.07 J**	**0.08 J**	0.13 U	**0.10 J**	**0.07 J**	**0.15**	**0.08 J**	**0.18**	**0.08 J**
Chromium	SW6020/ SW6020B	260	270	260	270	**10.3**	**13.0**	**11.4**	**10.5**	**11.3**	**11.3**	**12.8**	**10.2**	**12.7**	**9.67**
Copper	SW6020/ SW6020B	390	390	390	390	**21.7**	**20.7**	**21.4 J**	**13.2 J**	**25.5**	**18.7 J**	**37.2**	**9.74 J**	**27.4**	**15.4**
Lead	SW6020/ SW6020B	450	530	450	530	**7.33**	**3.00**	**5.98 J**	**1.54 J**	**6.17 J**	**2.35 J**	**11.3**	**1.21 J**	**9.60**	**1.69**
Mercury	SW6020B	0.41	0.59	0.41	0.59										
Mercury	SW7471B	0.41	0.59	0.41	0.59	**0.0345**	**0.0153 J**	**0.0283**	0.0266 U	**0.0391**	0.0301 U	**0.0579**	0.0206 U	**0.0481**	**0.0127 J**
Selenium	SW6020/ SW6020B					1.34 U	1.25 U	**0.64 J**	1.29 U	1.30 U	**0.62 J**	1.30 U	**0.62 J**	1.62 U	1.31 U
Silver	SW6020/ SW6020B	6.1	6.1	6.1	6.1	0.27 U	0.25 U	0.25 U	0.26 U	0.26 U	0.23 U	0.26 U	0.22 U	0.32 U	0.26 U
Zinc	SW6020/ SW6020B	410	960	410	960	**34.4**	**26.7**	**32.4**	**18.9**	**34.0**	**23.1**	**64.0**	**17.9**	**57.2**	**20.4**
Organometals (mg/kg-OC)															
Tributyltin (ion)	SW8270ESIM								0.664 U			**1.80**			
Organometals (µg/kg)															
Tributyltin (ion)	SW8270ESIM					**5.38**	3.19 U	3.50 U	3.32 U	**5.15**	3.26 U	**10.6**	3.18 U	3.53 U	3.83 U

Table 5-6
Sediment Analytical Results Compared to SMS Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
						Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120
						Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605
						Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05
						Sample Type Code	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Semivolatile Organics (mg/kg-OC)																
1,2,4-Trichlorobenzene	SW8270E/ SW8270ESIM	0.81	1.8						2 U			2 U				
1,2-Dichlorobenzene	SW8270E/ SW8270ESIM	2.3	2.3						2 U			2 U				
1,4-Dichlorobenzene	SW8270E/ SW8270ESIM	3.1	9						2 U			2 U				
Bis(2-ethylhexyl)phthalate	SW8270E	47	78						20 U			20 U				
Butylbenzyl phthalate	SW8270E/ SW8270ESIM	4.9	64						10 U			8 U				
Di-n-butyl phthalate	SW8270E	220	1700						10 U			8 U				
Di-n-octyl phthalate	SW8270E	58	4500						20 U			20 U				
Diethyl phthalate	SW8270E/ SW8270ESIM	61	110						10 U			8 U				
Dimethyl phthalate	SW8270E/ SW8270ESIM	53	53						5.0 U			4.2 U				
Hexachlorobenzene	SW8270E/ SW8270ESIM	0.38	2.3						2 U			2 U				
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270E/ SW8270ESIM	3.9	6.2						2 U			2 U				
n-Nitrosodiphenylamine	SW8270E/ SW8270ESIM	11	11						2 U			2 U				
Pentachlorophenol	SW8270E/ SW8270ESIM								10 U			8 U				

Table 5-6
Sediment Analytical Results Compared to SMS Criteria - Blair Federal Navigation Channel Side Slopes

					Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
					Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120
					Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605
					Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05
					Sample Type Code	N	N	N	N	N	N	N	N	N	N
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Chemical	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**										
Semivolatile Organics (µg/kg)															
1,2,4-Trichlorobenzene	SW8270E/ SW8270ESIM			31	51	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	SW8270E/ SW8270ESIM			35	50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	SW8270E/ SW8270ESIM			110	110	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	SW8270E/ SW8270ESIM	29	29	29	29	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
2-Methylphenol (o-Cresol)	SW8270E/ SW8270ESIM	63	63	63	63	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
3-Methylphenol & 4-Methylphenol (m&p-Cresol)	SW8270E	670	670	670	670	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Methylphenol (p-Cresol)	SW8270ESIM	670	670	670	670										
Benzoic acid	SW8270E/ SW8270ESIM	650	650	650	650	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Benzyl alcohol	SW8270E/ SW8270ESIM	57	73	57	73	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Bis(2-ethylhexyl)phthalate	SW8270E			1300	1900	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Butylbenzyl phthalate	SW8270E/ SW8270ESIM			63	900	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Di-n-butyl phthalate	SW8270E			1400	1400	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Di-n-octyl phthalate	SW8270E			6200	6200	100 UJ	100 U	100 UJ	100 U	100 U	100 U	100 U	100 U	100 UJ	100 UJ
Diethyl phthalate	SW8270E/ SW8270ESIM			200	1200	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dimethyl phthalate	SW8270E/ SW8270ESIM			71	160	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Hexachlorobenzene	SW8270E/ SW8270ESIM			22	70	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8270E/ SW8270ESIM			11	120	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	SW8270E					10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
n-Nitrosodiphenylamine	SW8270E/ SW8270ESIM			28	40	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	SW8270E/ SW8270ESIM	360	690	360	690	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenol	SW8270E/ SW8270ESIM	420	1200	420	1200	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U

Table 5-6
Sediment Analytical Results Compared to SMS Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
						Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120
						Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605
						Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05
						Sample Type Code	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (mg/kg-OC)																
1-Methylnaphthalene	SW8270E															
2-Methylnaphthalene	SW8270E	38	64							**0.11**			**0.58**			
Acenaphthene	SW8270E	16	57							0.10 U			**0.49**			
Acenaphthylene	SW8270E	66	66							0.10 U			**0.25**			
Anthracene	SW8270E	220	1200							0.10 U			**1.3**			
Benzo(a)anthracene	SW8270E	110	270							0.20 U			**5.4**			
Benzo(a)pyrene	SW8270E	99	210							0.10 U			**7.3**			
Benzo(b)fluoranthene	SW8270E									0.10 U			**13**			
Benzo(b,j,k)fluoranthenes	SW8270E	230	450													
Benzo(g,h,i)perylene	SW8270E	31	78							0.20 U			**2.9**			
Benzo(k)fluoranthene	SW8270E															
Carbazole	SW8270E															
Chrysene	SW8270E	110	460							**0.14**			**7.5**			
Dibenzo(a,h)anthracene	SW8270E/ SW8270ESIM	12	33							0.20 U			**0.71**			
Dibenzofuran	SW8270E	15	58							0.10 U			**0.54**			
Fluoranthene	SW8270E	160	1200							0.20 U			**11**			
Fluorene	SW8270E	23	79							0.10 U			**0.61**			
Indeno(1,2,3-c,d)pyrene	SW8270E	34	88							0.20 U			**3.1**			
Naphthalene	SW8270E	99	170							0.20 U			**0.73**			
Phenanthrene	SW8270E	100	480							**0.32**			**3.9**			
Pyrene	SW8270E	1000	1400							0.10 U			**12**			
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated	230	450							0.1 U			**16**			
Total HPAH (SMS) (U = 0 max limit)	Calculated	960	5300							**0.14**			**66**			
Total LPAH (SMS) (U = 0 max limit)	Calculated	370	780							**0.32**			**7.3**			

Table 5-6
Sediment Analytical Results Compared to SMS Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
						Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120
						Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605
						Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05
						Sample Type Code	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Polycyclic Aromatic Hydrocarbons (µg/kg)																
1-Methylnaphthalene	SW8270E															
2-Methylnaphthalene	SW8270E			670	670		**4.6**	**0.59**	**2.3**	**0.57**	**4**	0.50 U	**3.4**	0.50 U	**6.2**	0.50 U
Acenaphthene	SW8270E			500	500		**3.5**	0.50 U	**1.8**	0.50 U	**2.6**	0.50 U	**2.9**	0.50 U	**6.3**	0.50 U
Acenaphthylene	SW8270E			1300	1300		**0.9**	0.50 U	0.50 U	0.50 U	**1.3**	0.50 U	**1.5**	0.50 U	**0.8**	0.50 U
Anthracene	SW8270E			960	960		**6.5**	0.50 U	**4.4**	0.50 U	**6.6**	0.50 U	**7.7**	0.50 U	**15**	0.50 U
Benzo(a)anthracene	SW8270E			1300	1600		**28**	**1.4**	**13**	1.0 U	**26**	1.0 U	**32**	1.0 U	**20**	1.0 U
Benzo(a)pyrene	SW8270E			1600	1600		**46 J**	**1.3**	**19 J**	0.50 U	**40**	0.50 U	**43**	0.50 U	**20 J**	0.50 UJ
Benzo(b)fluoranthene	SW8270E						**85 J**	**3**	**40 J**	0.50 U	**60**	**0.55**	**74**	**0.75**	**42 J**	**0.63 J**
Benzo(b,j,k)fluoranthenes	SW8270E			3200	3600											
Benzo(g,h,i)perylene	SW8270E			670	720		**20 J**	1.0 U	**4.8 J**	1.0 U	**18**	1.0 U	**17**	1.0 U	**5.4 J**	1.0 UJ
Benzo(k)fluoranthene	SW8270E						**32 J**	**1.1**	**13 J**	0.50 U	**20**	0.50 U	**22**	0.50 U	**14 J**	0.50 UJ
Carbazole	SW8270E															
Chrysene	SW8270E			1400	2800		**36**	**2.1**	**17**	**0.71**	**36**	**0.54**	**44**	0.50 U	**29**	0.50 U
Dibenzo(a,h)anthracene	SW8270E/ SW8270ESIM			230	230		**3.8 J**	1.0 U	**1.1 J**	1.0 U	**4**	1.0 U	**4.2**	1.0 U	**1.3 J**	1.0 UJ
Dibenzofuran	SW8270E			540	540		**4.5**	0.50 U	**2**	0.50 U	**3.1**	0.50 U	**3.2**	0.50 U	**10**	0.50 U
Fluoranthene	SW8270E			1700	2500		**59**	**1.9**	**23**	1.0 U	**35**	1.0 U	**62**	1.0 U	**95**	1.0 U
Fluorene	SW8270E			540	540		**4.4**	0.50 U	**2.4**	0.50 U	**3.2**	0.50 U	**3.6**	0.50 U	**12**	0.50 U
Indeno(1,2,3-c,d)pyrene	SW8270E			600	690		**19 J**	1.0 U	**4.7 J**	1.0 U	**18**	1.0 U	**18**	1.0 U	**5.4 J**	1.0 UJ
Naphthalene	SW8270E			2100	2100		**4.7**	1.0 U	**2.3**	1.0 U	**3.7**	1.0 U	**4.3**	1.0 U	**5.7**	1.0 U
Phenanthrene	SW8270E			1500	1500		**28**	**1.7**	**11**	**1.6**	**17**	**1.1**	**23**	1.0 U	**63**	1.0 U
Pyrene	SW8270E			2600	3300		**82**	**3.5**	**34**	0.50 U	**44**	0.50 U	**73**	**0.73**	**97**	0.50 U
Total Benzofluoranthenes (b,j,k) (U = 0 max limit)	Calculated			3200	3600		**120 J**	**4.1**	**53 J**	0.5 U	**80**	**0.55**	**96**	**0.75**	**56 J**	**0.63 J**
Total HPAH (SMS) (U = 0 max limit)	Calculated			12000	17000		**410 J**	**14**	**170 J**	**0.71**	**300**	**1.1**	**390**	**1.5**	**330 J**	**0.63 J**
Total LPAH (SMS) (U = 0 max limit)	Calculated			5200	5200		**48**	**1.7**	**22**	**1.6**	**34**	**1.1**	**43**	1 U	**100**	1 U
Total PAH (DMMP) (U = 0 max limit)	Calculated						**460 J**	**16**	**190 J**	**2.3**	**340**	**2.2**	**430**	**1.5**	**430 J**	**0.63 J**

Table 5-6
Sediment Analytical Results Compared to SMS Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
						Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120
						Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605
						Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05
						Sample Type Code	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Pesticides (mg/kg-OC)																
2,4'-DDD (o,p'-DDD)	SW8081B									0.19 UJ			0.15 UJ			
2,4'-DDE (o,p'-DDE)	SW8081B									0.19 U			0.15 U			
2,4'-DDT (o,p'-DDT)	SW8081B									0.19 U			0.15 U			
4,4'-DDD (p,p'-DDD)	SW8081B									0.19 U			0.15 U			
4,4'-DDE (p,p'-DDE)	SW8081B									0.19 U			0.15 U			
4,4'-DDT (p,p'-DDT)	SW8081B									0.19 U			0.15 U			
Aldrin	SW8081B									0.094 U			0.076 U			
Chlordane, alpha- (Chlordane, cis-)	SW8081B									0.094 U			0.076 U			
Chlordane, beta- (Chlordane, trans-)	SW8081B									0.094 U			0.076 U			
Dieldrin	SW8081B									0.19 U			0.15 U			
Endrin ketone	SW8081B									0.19 U			0.15 U			
Heptachlor	SW8081B									0.094 U			0.076 U			
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8081B	3.9	6.2							0.094 U			**0.053 J**			
Hexachlorocyclohexane (BHC), beta-	SW8081B									0.094 U			0.076 U			
Nonachlor, cis-	SW8081B									0.19 UJ			0.15 UJ			
Nonachlor, trans-	SW8081B									0.19 U			0.15 U			
Oxychlordane	SW8081B									0.19 UJ			0.15 UJ			
Pesticides (µg/kg)																
2,4'-DDD (o,p'-DDD)	SW8081B					0.93 UJ	0.94 UJ	0.87 UJ	0.93 UJ	0.92 UJ	0.92 UJ	0.89 UJ	0.88 UJ	0.94 UJ	0.88 UJ	
2,4'-DDE (o,p'-DDE)	SW8081B					0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U	
2,4'-DDT (o,p'-DDT)	SW8081B					0.93 UJ	0.94 UJ	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 UJ	0.88 UJ	
4,4'-DDD (p,p'-DDD)	SW8081B					0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U	
4,4'-DDE (p,p'-DDE)	SW8081B					0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U	
4,4'-DDT (p,p'-DDT)	SW8081B					0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U	
Aldrin	SW8081B					0.47 UJ	0.47 UJ	0.44 U	0.47 U	0.46 U	0.46 U	0.45 U	0.44 U	0.47 UJ	0.44 UJ	
Chlordane, alpha- (Chlordane, cis-)	SW8081B					0.47 UJ	0.47 UJ	0.44 U	0.47 U	0.46 U	0.46 U	0.45 U	0.44 U	0.47 UJ	0.44 UJ	
Chlordane, beta- (Chlordane, trans-)	SW8081B					0.47 UJ	0.47 UJ	0.44 U	0.47 U	0.46 U	0.46 U	0.45 U	0.44 U	0.47 UJ	0.44 UJ	
Dieldrin	SW8081B					0.93 UJ	0.94 UJ	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 UJ	0.88 UJ	
Endrin ketone	SW8081B					0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U	
Heptachlor	SW8081B					0.47 UJ	0.47 UJ	0.44 U	0.47 U	0.46 U	0.46 U	0.45 U	0.44 U	0.47 UJ	0.44 UJ	
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	SW8081B			11	120	0.47 UJ	0.47 UJ	0.44 U	0.47 U	0.46 U	0.46 U	**0.31 J**	0.44 U	0.47 UJ	0.44 UJ	
Hexachlorocyclohexane (BHC), beta-	SW8081B					0.47 U	0.47 U	0.44 U	0.47 U	0.46 U	0.46 U	0.45 U	0.44 U	0.47 U	0.44 U	
Nonachlor, cis-	SW8081B					0.93 U	0.94 U	0.87 UJ	0.93 UJ	0.92 UJ	0.92 UJ	0.89 UJ	0.88 UJ	0.94 U	0.88 U	
Nonachlor, trans-	SW8081B					0.93 U	0.94 U	0.87 U	0.93 U	0.92 U	0.92 U	0.89 U	0.88 U	0.94 U	0.88 U	
Oxychlordane	SW8081B					0.93 UJ	0.94 UJ	0.87 UJ	0.93 UJ	0.92 UJ	0.92 UJ	0.89 UJ	0.88 UJ	0.94 UJ	0.88 UJ	
Total DDx (U = 0 max limit)	Calculated					0.93 UJ	0.94 UJ	0.87 UJ	0.93 UJ	0.92 UJ	0.92 UJ	0.89 UJ	0.88 UJ	0.94 UJ	0.88 UJ	

Table 5-6
Sediment Analytical Results Compared to SMS Criteria - Blair Federal Navigation Channel Side Slopes

Chemical	Method	SMS SCO	SMS CSL	AET SCO	AET CSL	Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
						Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120
						Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605
						Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05
						Sample Type Code	N	N	N	N	N	N	N	N	N	N
						Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Dioxin Furans (ng/kg)																
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	E1613B						**1160**	**106**	**583**	6.11 U	**883**	**209**	**3570**	**20.1**	**97100**	**41.0**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	E1613B						**45.3**	**3.35 J**	**25.3**	0.262 U	**36.7**	**3.94 J**	**200.0**	**0.873 J**	**1890**	**0.912 J**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	E1613B						**92.8**	**9.46**	**49.2**	0.470 U	**72.6**	**13.7**	**262**	1.11 UJ	**6990**	2.50 U
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	E1613B						**14.9**	**1.57 J**	**8.90**	0.235 U	**13.2**	**2.04 J**	**52.7**	0.660 U	**895**	**0.310 J**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	E1613B						**1.50 J**	0.309 U	**1.19 J**	0.320 U	**1.68 J**	1.59 U	**5.09**	1.05 U	**71.5**	0.189 U
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**0.793 J**	0.777 U	**0.630 J**	0.254 U	**0.921 J**	1.19 U	**2.34 J**	0.785 U	**32.1**	0.380 U
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**2.53**	0.247 U	**1.80 J**	0.161 U	**2.61**	1.28 U	**7.87**	0.580 U	**164**	0.160 U
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**4.94**	**0.735 J**	**2.33 J**	0.267 U	**3.48**	1.23 U	**11.8**	0.803 U	**338**	0.370 U
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.982 J**	0.262 U	**0.656 J**	0.159 U	**1.03 J**	1.38 U	**3.35**	0.595 U	**52.1**	0.158 U
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	E1613B						**2.29 J**	0.764 U	**1.41 J**	0.226 U	**1.72 J**	0.942 U	**5.28**	0.716 U	**125**	0.385 U
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.482 J**	0.331 U	0.856 U	0.220 U	0.612 U	1.75 U	**1.31 J**	0.862 U	**22.0**	0.221 U
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	E1613B						**0.525 J**	0.374 U	0.654 U	0.258 U	0.689 U	1.20 U	**1.28 J**	0.381 U	**20.9**	0.269 U
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**0.513 J**	0.193 U	**0.701 J**	0.165 U	**1.03 J**	0.687 U	**1.76 J**	0.321 U	**21.5**	0.151 U
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	E1613B						**0.969 J**	0.253 U	**0.443 J**	0.167 U	**0.324 J**	1.24 U	**1.62 J**	0.661 U	**14.1**	0.185 U
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	E1613B						**0.920 J**	0.175 U	**0.476 J**	0.146 U	**0.786 J**	0.592 U	**2.53**	0.291 U	**32.1**	0.129 U
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	E1613B						0.257 U	0.170 U	0.327 U	0.181 U	0.279 U	0.519 U	0.585 U	0.192 U	**3.28 J**	0.163 U
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	E1613B						**0.690 J**	**0.168 J**	**0.920**	0.125 U	**0.881**	0.437 U	**2.61**	0.174 U	**7.12**	0.139 U
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0 max limit)	Calculated						**3.64 J**	**0.233 J**	**1.76 J**	0.258 U	**2.51 J**	**0.221 J**	**10.0 J**	**0.00629 J**	**219 J**	**0.0157 J**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 1/2 max limit)	Calculated						**3.77 J**	**0.668 J**	**2.29 J**	0.258 U	**3.03 J**	**1.66 J**	**10.3 J**	**0.614 J**	**219 J**	**0.367 J**

Table 5-6
Sediment Analytical Results Compared to SMS Criteria - Blair Federal Navigation Channel Side Slopes

					Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
					Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120	
					Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605	
					Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05	
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	
					Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	
Chemical	**Method**	**SMS SCO**	**SMS CSL**	**AET SCO**	**AET CSL**											
PCB Aroclors (mg/kg-OC)																
Aroclor 1016	SW8082A								0.74 U			0.64 U			
Aroclor 1221	SW8082A								0.74 U			0.64 U			
Aroclor 1232	SW8082A								0.74 U			0.64 U			
Aroclor 1242	SW8082A								0.74 U			0.64 U			
Aroclor 1248	SW8082A								0.74 U			**2.42**			
Aroclor 1254	SW8082A								0.74 U			**3.78**			
Aroclor 1260	SW8082A								0.74 U			**1.5**			
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated	12	65						0.74 U			**7.7**			
PCB Aroclors (µg/kg)																
Aroclor 1016	SW8082A					3.5 UJ	3.5 UJ	3.6 U	3.7 U	3.7 U	4.0 U	3.8 U	3.5 U	3.5 UJ	3.4 UJ	
Aroclor 1221	SW8082A					3.5 UJ	3.5 UJ	3.6 U	3.7 U	3.7 U	4.0 U	3.8 U	3.5 U	3.5 UJ	3.4 UJ	
Aroclor 1232	SW8082A					3.5 UJ	3.5 UJ	3.6 U	3.7 U	3.7 U	4.0 U	3.8 U	3.5 U	3.5 UJ	3.4 UJ	
Aroclor 1242	SW8082A					3.5 UJ	3.5 UJ	3.6 U	3.7 U	3.7 U	4.0 U	3.8 U	3.5 U	3.5 UJ	3.4 UJ	
Aroclor 1248	SW8082A					3.5 UJ	3.5 UJ	3.6 U	3.7 U	**3.8**	4.0 U	**14.3**	3.5 U	**16.8 J**	3.4 UJ	
Aroclor 1254	SW8082A					3.5 UJ	3.5 UJ	3.6 U	3.7 U	**5.0**	4.0 U	**22.3**	3.5 U	**10.3 J**	3.4 UJ	
Aroclor 1260	SW8082A					3.5 UJ	3.5 UJ	3.6 U	3.7 U	**3.4 J**	4.0 U	**8.8**	3.5 U	3.5 UJ	3.4 UJ	
Total PCB Aroclors (SMS Marine 2019) (U = 0 max limit)	Calculated			130	1000	3.5 UJ	3.5 UJ	3.6 U	3.7 U	**12 J**	4.0 U	**45**	3.5 U	**27.1 J**	3.4 UJ	

Table 5-6
Sediment Analytical Results Compared to SMS Criteria - Blair Federal Navgation Channel Side Slopes

Notes:
Organic carbon normalized results are not reported if TOC concentration is outside of 0.5% to 3.5%.
Non-detect concentration is above one or more identified screening levels.
TOC in range (0.5% to 3.5%):
Detected concentration is greater than SMS Marine SCO SCUM screening level.
Detected concentration is greater than SMS Marine CSL SCUM screening level.
TOC out of range:
Detected concentration is greater than AET Marine SCO SCUM screening level.
Detected concentration is greater than AET Marine CSL SCUM screening level.
blank cell: not applicable
Bold: Detected result
µg/kg: microgram per kilogram
AET: apparent effects threshold
CSL: cleanup screening level
J: estimated value
mg/kg: milligram per kilogram
N: normal
ng/kg: nanogram per kilogram
OC: organic carbon
PCB: polychlorinated biphenyl
pct: percent
TEQ: toxic equivalency quotient
TOC: total organic carbon
SCO: sediment cleanup objective
SCUM: Sediment Cleanup User's Manual
SE: sediment
SMS: Sediment Management Standards
TOC: total organic carbon
U: compound analyzed for but not detected above detection limit
UJ: compound analyzed for but not detected above estimated detection limit

Table 5-7
Sediment Core Sample Grain Size Results - Tru-Grit

Task		PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
Location ID		TG-SC01	TG-SC02	TG-SC03	TG-SC03	TG-SC04	TG-SC04	TG-SC05	TG-SC06	TG-SC06	TG-SC07	TG-SC07	TG-SC08	TG-SC08	TG-SC09	TG-SC09
Sample ID		TG-SC01-00-01-241113	TG-SC02-00-1.7-241108	TG-SC03-0.8-6.3-241108	TG-SC03-00-0.8-241108	TG-SC04-02-04-241029	TG-SC04-04-06-241029	TG-SC05-00-1.6-241113	TG-SC06-1.5-2.7-241108	TG-SC06-3.1-06-241108	TG-SC07-00-3.6-241113	TG-SC07-3.6-5.9-241113	TG-SC08-00-4.9-241114	TG-SC08-4.9-06-241114	TG-SC09-00-5.8-241113	TG-SC09-5.8-6.7-241113
Sample Date		2024-11-13	2024-11-08	2024-11-08	2024-11-08	2024-10-29	2024-10-29	2024-11-13	2024-11-08	2024-11-08	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-13	2024-11-13
Depth Interval		0 - 1 ft	0 - 1.7 ft	0.8 - 6.3 ft	0 - 0.8 ft	2 - 4 ft	4 - 6 ft	0 - 1.6 ft	1.5 - 2.7 ft	3.1 - 6 ft	0 - 3.6 ft	3.6 - 5.9 ft	0 - 4.9 ft	4.9 - 6 ft	0 - 5.8 ft	5.8 - 6.7 ft
Sample Type Code		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Chemical	**Method**															
Grain Size (pct)																
Clay, coarse	D422	**0.2**	**0.2**	**8.1**	**0.1**	**1.2**	**0.8**	**0.6**	0.10 U	**5.8**	**1.2**	**3**	**1.6**	**1.3**	**3**	**0.2**
Clay, fine	D422	**2.4**	**2.3**	**11.8**	**3.6**	**3.7**	**3.7**	**1.8**	**3.6**	**10.5**	**3.6**	**4.1**	**10.5**	**5.8**	**8.1**	**5**
Clay, medium	D422	0.10 U	0.10 U	**3.9**	0.10 U	**0.6**	**0.3**	**0.3**	0.10 U	**2.5**	**0.6**	**1.5**	**0.8**	**0.6**	**1.9**	0.10 U
Gravel, coarse	D422	**1**	**1.6**	0.10 U	0.10 U	**3.3**	**3.7**	**0.6**	**0.1**	0.10 U	**1.7**	**0.4**	**0.2**	0.10 U	**0.2**	0.10 U
Gravel, medium	D422	**7**	**8.2**	**0.2**	**0.8**	**10.0**	**10.0**	**2.3**	**0.3**	0.10 U	**4.6**	**0.2**	**0.2**	**0.2**	**0.8**	**0.1**
Gravel, very coarse	D422	**2.9**	**11.3**	0.10 U	**1.2**	**9.3**	**10.7**	**0.3**	**0.3**	0.10 U	**15.7**	0.10 U	**5**	**0.1**	**3.2**	**0.1**
Sand, coarse	D422	**19.9**	**16.7**	**1.8**	**15.8**	**13.7**	**19.4**	**14.8**	**0.5**	**0.2**	**12.6**	**11.3**	**2.5**	**13.4**	**12.0**	**7.3**
Sand, fine	D422	**11.6**	**12.5**	**2.4**	**18.2**	**11.3**	**17.4**	**10.4**	**43.0**	**2.9**	**8.8**	**8.2**	**7.4**	**6.6**	**5.8**	**21.3**
Sand, medium	D422	**34.8**	**32.5**	**1.8**	**43.4**	**27.1**	**14.1**	**48.7**	**31.5**	**1.6**	**24.4**	**31.1**	**14.9**	**53.0**	**18.2**	**53.6**
Sand, very coarse	D422	**10.1**	**7.9**	**1.4**	**2.8**	**8.3**	**8.4**	**5.3**	**0.2**	**0.2**	**4.6**	**1.2**	**0.7**	**1**	**4**	**0.9**
Sand, very fine	D422	**4.9**	**4.4**	**1.7**	**8.4**	**3.9**	**3.7**	**6**	**14.9**	**2.2**	**7.6**	**3.6**	**9.7**	**2.3**	**6.8**	**6.8**
Silt, coarse	D422	**1.7**	**0.2**	**33.7**	**2.4**	0.10 U	**0.4**	**6.1**	**1.3**	**40.5**	**3.4**	**12.6**	**13.4**	**8.9**	**9.5**	**0.4**
Silt, fine	D422	**1**	**1.2**	**12.8**	**1.7**	**3.2**	**2.6**	**1.3**	**2.7**	**13.6**	**5.1**	**8**	**10.0**	**3.5**	**11.4**	**2**
Silt, medium	D422	**1**	0.10 U	**4.9**	**0.8**	**2.4**	**2.4**	**0.4**	**1.7**	**6.8**	**3.5**	**8**	**19.1**	**0.9**	**11.1**	**0.7**
Silt, very fine	D422	**1.4**	**1**	**15.5**	**0.7**	**1.9**	**2.4**	**1.2**	0.10 U	**13.3**	**2.4**	**6.8**	**4**	**2.6**	**3.9**	**1.5**

Table 5-7
Sediment Core Sample Grain Size Results - Tru-Grit

Task		PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
Location ID		TG-SC10	TG-SC11	TG-SC11	TG-SC12	TG-SC12	TG-SC13	TG-SC13	TG-SC14	TG-SC14	TG-SC15	TG-SC15	TG-SC16	TG-SC16	TG-SC17	TG-SC17
Sample ID		TG-SC10-00-5.2-241112	TG-SC11-00-02-241111	TG-SC11-02-4.4-241111	TG-SC12-0.9-4.5-241111	TG-SC12-00-0.9-241111	TG-SC13-00-1.9-241113	TG-SC13-1.9-3.3-241113	TG-SC14-00-3.6-241114	TG-SC14-4.1-6.1-241114	TG-SC15-00-1.9-241113	TG-SC15-1.9-3.2-241113	TG-SC16-00-02-241114	TG-SC16-03-05-241114	TG-SC17-00-4.2-241114	TG-SC17-4.2-6.2-241114
Sample Date		2024-11-12	2024-11-11	2024-11-11	2024-11-11	2024-11-11	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-14	2024-11-14
Depth Interval		0 - 5.2 ft	0 - 2 ft	2 - 4.4 ft	0.9 - 4.5 ft	0 - 0.9 ft	0 - 1.9 ft	1.9 - 3.3 ft	0 - 3.6 ft	4.1 - 6.1 ft	0 - 1.9 ft	1.9 - 3.2 ft	0 - 2 ft	3 - 5 ft	0 - 4.2 ft	4.2 - 6.2 ft
Sample Type Code		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Matrix		SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Chemical	Method															
Grain Size (pct)																
Clay, coarse	D422	**1.8**	**0.6**	**1.2**	**0.6**	**0.5**	**2**	**2.9**	**3**	**9.3**	**2**	**0.6**	**4.3**	**4.3**	**3.3**	**1.2**
Clay, fine	D422	**3.7**	**4.3**	**2.9**	**1.7**	**4**	**5.7**	**11.2**	**8.1**	**17.5**	**6.2**	**4**	**8.3**	**9.5**	**7.8**	**5.8**
Clay, medium	D422	**1**	**0.4**	**0.6**	**0.3**	0.10 U	**1.2**	**1.5**	**1.6**	**4.6**	**1**	**0.3**	**2.5**	**2.3**	**1.8**	**0.6**
Gravel, coarse	D422	**2.7**	**1.8**	**0.1**	**0.2**	**0.1**	0.10 U	0.10 U	**0.3**	**0.2**	0.10 U	**0.2**	0.10 U	0.10 U	**0.1**	**0.1**
Gravel, medium	D422	**8.7**	**4.1**	**0.3**	**1.2**	**0.7**	**2.3**	**0.2**	**1.8**	**0.1**	**1.3**	**1.8**	**2.5**	**0.6**	**0.4**	**1.5**
Gravel, very coarse	D422	**17.5**	**9.7**	**0.3**	**0.4**	**0.5**	**1.1**	0.10 U	**0.2**	0.10 U	**0.3**	0.10 U	0.10 U	0.10 U	**0.5**	**1.6**
Sand, coarse	D422	**10.1**	**9.1**	**9.2**	**9.6**	**7.2**	**14.5**	**1.3**	**16.3**	**1.8**	**15.6**	**33.0**	**6.6**	**8.8**	**3.1**	**9.9**
Sand, fine	D422	**10.0**	**9.5**	**14.3**	**23.6**	**18.6**	**12.7**	**11.4**	**5.9**	**1.3**	**12.8**	**7.4**	**11.2**	**7.8**	**26.3**	**20.6**
Sand, medium	D422	**13.4**	**14.1**	**47.6**	**48.0**	**35.6**	**39.0**	**10.3**	**20.9**	**3**	**30.2**	**37.0**	**12.9**	**26.6**	**16.0**	**35.6**
Sand, very coarse	D422	**7.3**	**5.2**	**1**	**2.1**	**1.3**	**4.6**	**0.4**	**4.1**	**1.1**	**4.7**	**8.5**	**6.9**	**1.8**	**1.1**	**2.8**
Sand, very fine	D422	**6.6**	**8.4**	**6.5**	**7.5**	**9.2**	**7.7**	**21.7**	**7**	**2**	**8.8**	**3.5**	**12.0**	**5.7**	**12.8**	**9.5**
Silt, coarse	D422	**3.7**	**10.9**	**9.5**	**2.7**	**5**	**1.5**	**13.8**	**14.0**	**21.6**	**4.5**	0.10 U	**12.6**	**8.3**	**8.1**	**2.2**
Silt, fine	D422	**6.6**	**4.9**	**2.1**	**1.2**	**7.5**	**3.5**	**9.3**	**6.7**	**13.5**	**4.5**	**1.2**	**8.4**	**8.9**	**8.2**	**3.9**
Silt, medium	D422	**4**	**15.8**	**2.2**	0.10 U	**6.8**	**2.6**	**10.1**	**5.3**	**8.1**	**4.8**	**1.3**	**5.4**	**7.7**	**5.7**	**2.5**
Silt, very fine	D422	**2.9**	**1.2**	**2.4**	**1**	**3.1**	**1.5**	**5.9**	**4.8**	**15.9**	**3.4**	**1.2**	**6.3**	**7.7**	**4.9**	**2.3**

Table 5-7
Sediment Core Sample Grain Size Results - Tru-Grit

Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
Location ID	TG-SC18	TG-SC18	TG-SC19	TG-SC19	TG-SC20	TG-SC20	TG-SC21	TG-SC21	TG-SC22	TG-SC22	TG-SC23	TG-SC23	TG-SC24	TG-SC24
Sample ID	TG-SC18-00-02-241101	TG-SC18-06-08-241101	TG-SC19-00-2.6-241112	TG-SC19-2.6-5.4-241112	TG-SC20-00-2.1-241114	TG-SC20-2.1-4.8-241114	TG-SC21-00-3.8-241113	TG-SC21-3.8-06-241113	TG-SC22-00-1.9-241114	TG-SC22-1.9-6.8-241114	TG-SC23-00-3.9-241113	TG-SC23-3.9-5.5-241113	TG-SC24-00-02-241028	TG-SC24-06-08-241028
Sample Date	2024-11-01	2024-11-01	2024-11-12	2024-11-12	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-11-14	2024-11-14	2024-11-13	2024-11-13	2024-10-28	2024-10-28
Depth Interval	0 - 2 ft	6 - 8 ft	0 - 2.6 ft	2.6 - 5.4 ft	0 - 2.1 ft	2.1 - 4.8 ft	0 - 3.8 ft	3.8 - 6 ft	0 - 1.9 ft	1.9 - 6.8 ft	0 - 3.9 ft	3.9 - 5.5 ft	0 - 2 ft	6 - 8 ft
Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Chemical / Method														
Grain Size (pct)														
Clay, coarse / D422	**2**	**1**	**2.8**	**3**	**4**	**0.7**	**2.5**	**0.1**	**4**	**0.8**	**3.8**	**0.7**	**3.2**	**0.1**
Clay, fine / D422	**6**	**2.2**	**5.2**	**7.2**	**10.0**	**6.1**	**7.3**	**4.3**	**8.9**	**5.1**	**8.8**	**3.5**	**8.9**	**2.4**
Clay, medium / D422	**1.1**	**0.6**	**1.4**	**1.4**	**2.2**	**0.3**	**1.3**	0.10 U	**2.1**	**0.3**	**2.1**	**0.3**	**1.5**	0.10 U
Gravel, coarse / D422	**0.5**	**0.1**	0.10 U	0.10 U	**0.1**	0.10 U	**0.1**	**0.1**	**0.1**	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Gravel, medium / D422	**0.8**	**0.2**	**0.1**	0.10 U	0.10 U	**0.3**	0.10 U	**0.1**	**0.1**	**0.1**	0.10 U	0.10 U	0.10 U	**0.1**
Gravel, very coarse / D422	**4.5**	**0.2**	0.10 U	0.10 U	0.10 U	**0.1**	**0.1**	**0.3**	0.10 U	0.10 U	**4.3**	0.10 U	**0.1**	0.10 U
Sand, coarse / D422	**3.2**	**13.3**	**0.6**	**0.4**	**0.7**	**1**	**0.9**	**5.5**	**0.4**	**1.1**	**0.7**	**0.2**	**0.6**	**2.3**
Sand, fine / D422	**14.0**	**14.1**	**15.6**	**13.5**	**15.5**	**28.6**	**23.1**	**18.7**	**11.5**	**33.7**	**11.9**	**27.2**	**13.1**	**24.5**
Sand, medium / D422	**16.3**	**53.7**	**6.7**	**5.3**	**10.5**	**30.0**	**12.0**	**61.0**	**5.8**	**18.8**	**5.7**	**57.8**	**6.8**	**58.5**
Sand, very coarse / D422	**0.9**	**0.8**	**0.1**	**0.1**	**0.2**	**0.3**	**0.1**	**0.4**	**0.1**	**0.4**	0.10 U	0.10 U	**0.2**	**0.4**
Sand, very fine / D422	**12.9**	**7.3**	**17.6**	**19.1**	**21.3**	**13.9**	**21.9**	**7.5**	**18.4**	**27.3**	**14.0**	**6**	**20.2**	**5.1**
Silt, coarse / D422	**14.7**	**2.3**	**18.9**	**19.4**	**8.6**	**7.4**	**9**	**0.2**	**17.5**	**1.4**	**17.8**	**0.4**	**16.7**	**3.1**
Silt, fine / D422	**8.7**	**2.1**	**12.8**	**12.8**	**10.7**	**4.2**	**6.4**	**0.5**	**11.1**	**3.7**	**11.1**	**1.1**	**9.7**	**1.2**
Silt, medium / D422	**11.4**	**1.2**	**13.2**	**10.6**	**9.9**	**4.8**	**10.3**	**0.5**	**13.4**	**4.7**	**13.3**	**1**	**11.5**	**1.6**
Silt, very fine / D422	**3**	**1**	**5**	**7.1**	**6.4**	**2.3**	**5.1**	**0.7**	**6.7**	**2.7**	**6.3**	**2**	**7.5**	**0.7**

Notes:
Bold: detected result
ft: foot
N: normal
pct: percent
SE: sediment
U: compound analyzed for but not detected above detection limit

Table 5-8
Surface Sediment Sample Grain Size Results - Landau

Chemical	Method	Task	Location ID	Sample ID	Sample Date	Depth Interval	Sample Type Code	Matrix
		TruGrit_Landau_EIM	LANDAU-14-SG-10	LANDAU-14-SG-10-20140115	2014-01-15	0 - 10 cm	N	DS
		TruGrit_Landau_EIM	LANDAU-14-SG-13	LANDAU-14-SG-13-20140115	2014-01-15	0 - 10 cm	N	DS
		TruGrit_Landau_EIM	LANDAU-18-G-5	LANDAU-18-G-5-20180125	2018-01-25	0 - 0.33 ft	N	DS
		TruGrit_Landau_EIM	LANDAU-18-SG-14	LANDAU-18-SG-14-20180125	2018-01-25	0 - 0.33 ft	N	DS
		TruGrit_Landau_EIM	LANDAU-18-SG-16	LANDAU-18-SG-16-20180125	2018-01-25	0 - 0.33 ft	N	DS
		TruGrit_Landau_EIM	LANDAU-18-SG-17	LANDAU-18-SG-17-20180125	2018-01-25	0 - 0.33 ft	N	DS
Grain Size (pct)								
Clay	PLUMB1981	--	--	**11**	**9.6**	**13**	**13**
Cobbles	PLUMB1981	--	--	**0**	**0**	**0**	**0**
Gravel	PLUMB1981	--	--	**24**	**2.1**	**0.8**	**0.4**
Particle/Grain Size, Phi Scale <-1	D422	**0.9**	**0.7**	--	--	--	--
Phi 00.0	D422	**1.7**	**1.3**	--	--	--	--
Phi 02.0	D422	**19.2**	**2.3**	--	--	--	--
Phi 03.0	D422	**68.5**	**16.6**	--	--	--	--
Phi 04.0	D422	**0.04**	**2**	--	--	--	--
Phi 06.0	D422	**2.7**	**51.6**	--	--	--	--
Phi 10.0	D422	**7**	**27.5**	--	--	--	--
Sand	PLUMB1981	--	--	**27**	**51**	**35**	**33**
Silt	PLUMB1981	--	--	**39**	**37**	**51**	**54**

Notes:
Bold: detected result
cm: centimeter
DS: depositional sediment
N: normal
pct: percent
U: compound analyzed for but not detected above detection limit

Table 5-9
Sediment Core Sample Grain Size Results - Blair Federal Navigation Channel Side Slopes

Chemical	Method	Task	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025	POT_MAIN_2025
		Location ID	D116	D116	D117	D117	D118	D118	D119	D119	D120	D120
		Sample ID	BW-D116CS-A-250605	BW-D116CS-B-250605	BW-D117CS-A-250604	BW-D117CS-B-250604	BW-D118CS-A-250604	BW-D118CS-B-250604	BW-D119CS-A-250604	BW-D119CS-B-250604	BW-D120CS-A-250605	BW-D120CS-B-250605
		Sample Date	2025-06-05	2025-06-05	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-04	2025-06-05	2025-06-05
		Sample Type Code	N	N	N	N	N	N	N	N	N	N
		Matrix	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
Grain Size Classification Summary (pct)												
Gravel	D6913		0 U	0 U	0 U	0 U	0 U	0 U	0 U	**0.4**	**0.5**	**1.2**
Sand	D6913		**49**	**17**	**58.7**	**65.1**	**39.2**	**32.8**	**31.4**	**90.3**	**40.7**	**58.2**
Total fines (reported, not calculated)[a]	D6913		**51**	**83**	**41.3**	**34.9**	**60.8**	**67.2**	**68.6**	**9.3**	**58.8**	**40.6**
Silt (calculated, not reported) [b]	D7928		***42.1***	***69.0***	***33.8***	***29.4***	***32.2***	***30.7***	***55.2***	***7.9***	***45.7***	***24.9***
Clay (calculated, not reported) [b]	D7928		***1.7***	***1.1***	***2.1***	*0 U*	***27.6***	***34.9***	***5.8***	*0 U*	***9.3***	***14.9***
Grain Size Sieve Summary (pct)												
Percent passing 0.75 inch (3/4-inch sieve)	D6913		--	--	--	--	--	--	--	--	--	--
Percent passing 0.5 inch (1/2-inch sieve)	D6913		--	--	--	--	--	--	--	--	--	--
Percent passing 0.375 inch (3/8-inch sieve)	D6913		--	--	--	--	--	--	--	**100**	**100**	**100**
Percent passing 4,750-micron sieve (#4)	D6913		**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**99**	**99**
Percent passing 2,000-micron sieve (#10)	D6913		**100**	**100**	**100**	**99**	**100**	**100**	**100**	**98**	**98**	**98**
Percent passing 850-micron sieve (#20)	D6913		**99**	**100**	**99**	**99**	**99**	**100**	**99**	**97**	**97**	**95**
Percent passing 425-micron sieve (#40)	D6913		**97**	**100**	**94**	**96**	**98**	**100**	**96**	**82**	**93**	**84**
Percent passing 250-micron sieve (#60)	D6913		**90**	**99**	**80**	**86**	**92**	**99**	**90**	**44**	**85**	**67**
Percent passing 150-micron sieve (#100)	D6913		**75**	**98**	**62**	**63**	**80**	**94**	**81**	**18**	**75**	**54**
Percent passing 110-micron sieve (#140)	D6913		**62**	**94**	**50**	**46**	**70**	**83**	**75**	**12**	**67**	**47**
Percent passing 75-micron sieve (#200)[a]	D6913		**51**	**83**	**41**	**35**	**61**	**67**	**69**	**9.3**	**59**	**41**

Notes:

a. Total fines based on percent passing the 75 µm (#200) sieve as reported per ASTM D6913. DMMP defines total fines as the percent passing the 62.5 µm (#230) sieve, thus the difference between the *Total fines* and the sum of the calculated *Silt* and *Clay* content (DMMP 2021).

b. Silt and clay defined per DMMP classifications. Percent fines at the 3.9- and 62.5-µm cutoffs were obtained by linear interpolation between the nearest bracketing measurements as reported per ASTM D7928. Silt and clay particle size ranges per the DMMP are as follows:

Silt: 3.9 to 62.5 µm

Clay: 0 to 3.9 µm

Bold: detected result

Italics : calculated, not reported

--: not applicable

µm: micron/micrometer

ASTM: ASTM International

N: normal sample

pct: percent

SE: Sediment

U: compound analyzed for but not detected above detection limit

Source:

DMMP (Dredged Material Management Program), 2025. *Dredged Material Evaluation and Disposal Procedures User Manual* . Dredged Material Management Program: U.S. Army Corps of Engineers, Seattle District; Environmental Protection Agency, Region 10; Washington State Department of Natural Resources; and Washington State Department of Ecology. Accessed October 23, 2024. November 2025. Available at: https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/5397.

Table 5-10

Sediment Core Sample Atterberg Limits Results - Tru-Grit

Chemical	Method	Task	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit	PoT_TruGrit
		Location ID	TG-SC03	TG-SC04	TG-SC06	TG-SC18	TG-SC19
		Sample ID	TG-SC03-0.8-6.3-241108	TG-SC04-5.8-06-241029	TG-SC06-3.1-06-241108	TG-SC18-03-04-241101	TG-SC19-2.6-5.4-241112
		Sample Date	2024-11-08	2024-10-29	2024-11-08	2024-11-01	2024-11-12
		Depth Interval	0.8 - 6.3 ft	5.8 - 6 ft	3.1 - 6 ft	3 - 4 ft	2.6 - 5.4 ft
		Sample Type Code	N	N	N	N	N
		Matrix	SE	SE	SE	SE	SE
Conventional Parameters (pct)							
Plastic limit	D4318		**31.5**	NA	**43.5**	**11.8**	NA J
Plasticity index	D4318		**28.5**	NA N	**38.9**	**13.9**	NA J
Liquid limit	D4318		**60.0**	**26.2**	**82.4**	**36.7**	NA J

Notes:

Bold: detected result

ft: foot

J: estimated value

N (sample type code): Normal

N (qualifier): Sample was deemed to be non-plastic due to the material not being workable down to 1/8-inch rolls/ribbons without breaking apart.

NA: Not applicable

pct: percent

SE: sediment

U: compound analyzed for but not detected above detection limit

Table 5-11
Summary of Dredged Material Waste Profile Testing Composites and Biological Testing Results

Composite Sample[1]	Discrete Sample	Chemical Analytical Results (mg/kg)			Waste Characterization Analyses		Biological Results			
		Arsenic	Copper	Lead	Static Acute Fish Toxicity Test (80-12)	TCLP/ SPLP Metals	Rainbow Trout % Mortality in 10 mg/L Treatment	Rainbow Trout % Mortality in 100 mg/L Treatment	Designated as Dangerous Waste?[2]	Designated as Extremely Hazardous Waste?[2]
TG-COMP-A/B-091025/ TG-COMP-A-B-102725	TG-SC15-00-02-241113	1,620	1,260	1,290	Y	Y	0	0	No	No
	TG-SC15-02-3.2-241113	1,030	1,180	853	Y	Y				
	TG-SC26-04-06-250331	39.5	397	54.7	Y	Y				
	TG-SC17-02-04-241114	146	232	193	Y	Y				
TG-COMP-C-091025/ TG-COMP-C-102725	TG-SC10-02-04-241112	67.8	776	189	Y	Y	0	0	No	No
	TG-SC10-04-5.2-241112	62.5	615	171	Y	Y				
	TG-SC11-00-02-241111	220	484	258	Y	Y				
	TG-SC09-06-6.7-241113	221	382	359	Y	Y				
TG-COMP-D-091025/ TG-COMP-D-102725	TG-SC25-00-02-250328	10.1	1,060	40	Y	--	0	0	No	No
	TG-SC27-02-04-250512	117	307	124	Y	Y				
	TG-SC25-02-04-250328	10.4	286	17.7	Y	--				
	TG-SC27-00-02-250512	34.3	278	42.3	Y	Y				
	TG-SC25-06-08-250328	36.1	91.8	42.2	--	Y				
	TG-SC31-02-04-250826	51.6	109	61.9	--	Y				

Notes:

When a sample exhibits an LC_{50} less than or equal to 100 mg/L, the sample is designated as dangerous waste.

When a sample exhibits an LC_{50} less than or equal to 10 mg/L, the sample is designated as extremely hazardous waste.

-- : not analyzed

LC_{50}: median lethal concentration

mg/kg: milligram per kilogram

mg/L: milligram per liter

SPLP: Synthetic Precipitation Leaching Procedure

TCLP: Toxicity Characteristic Leaching Procedure

1. Composite samples TG-COMP-A/B-091025, TG-COMP-C-091025, and TG-COMP-D-091025 are for the Static Acute Fish Toxicity Test (80-12), and composite samples TG-COMP-A-B-102725, TG-COMP-C-102725, and TG-COMP-D-102725 are for TCLP/SPLP Metals.

2. Washington State Department of Ecology, 2024. *Biological Testing Methods 80-12 for the Designation of Dangerous Waste. Static Acute Fish Toxicity Test.* Publication 80-12. Hazardous Waste and Toxics Reduction Program. Revised March 2024.

Table 5-12
TCLP Results

Chemical	Method	RCRA TCLP Screening Criteria	Task Location ID Sample ID Sample Date Depth Interval Sample Type Code Matrix	PoT_TruGrit TG-COMP-A-B TG-COMP-A-B-102725 2025-10-27 N SE	PoT_TruGrit TG-COMP-C TG-COMP-C-102725 2025-10-27 N SE	PoT_TruGrit TG-COMP-D TG-COMP-D-102725 2025-10-27 N SE
Metals (SW1311) (mg/L)						
Antimony	SW6010D			0.25 U	0.25 U	0.25 U
Arsenic	SW6010D	5		**0.0900 J**	0.25 U	0.25 U
Beryllium	SW6010D			0.0050 U	0.0050 U	0.0050 U
Cadmium	SW6010D	1		0.0100 U	0.0100 U	0.0100 U
Chromium	SW6010D	5		0.0450 U	0.0450 U	0.0450 U
Copper	SW6010D			**0.0160 J**	0.0250 U	0.0250 U
Lead	SW6010D	5		**0.0830 J**	0.1 U	0.1 U
Mercury	SW7470A	0.2		0.000100 U	0.000100 U	0.000100 U
Nickel	SW6010D			**0.0475 J**	**0.179**	0.0500 U
Selenium	SW6010D	1		0.25 U	0.25 U	0.25 U
Silver	SW6010D	5		0.0150 U	0.0150 U	0.0150 U
Thallium	SW6010D			0.25 U	0.25 U	0.25 U
Zinc	SW6010D			**5.1**	**0.552**	**0.218**

Notes:

PRELIMINARY RESULTS

Bold: detected result

J: estimated value

mg/L: milligram per liter

N: Normal

RCRA: Resource Conservation and Recovery Act

SE: Sediment

TCLP: Toxicity Characteristic Leaching Procedure

U: compound analyzed for but not detected above detection limit

Table 5-13
SPLP Results

Chemical	Method	Task Location ID Sample ID Sample Date Depth Interval Sample Type Code Matrix	PoT_TruGrit TG-COMP-A-B TG-COMP-A-B-102725 2025-10-27 N SE	PoT_TruGrit TG-COMP-C TG-COMP-C-102725 2025-10-27 N SE	PoT_TruGrit TG-COMP-D TG-COMP-D-102725 2025-10-27 N SE
Metals (SW1312) (µg/L)					
Antimony	SW6010D		**770**	**58.5 J**	**112 J**
Arsenic	SW6010D		250 U	250 U	250 U
Beryllium	SW6010D		5.0 U	5.0 U	5.0 U
Cadmium	SW6010D		10.0 U	10.0 U	10.0 U
Chromium	SW6010D		25.0 U	25.0 U	25.0 U
Copper	SW6010D		**35.5**	15.0 U	**13.0 J**
Lead	SW6010D		100 U	100 U	100 U
Nickel	SW6010D		**60.5**	50.0 U	50.0 U
Selenium	SW6010D		250 U	250 U	250 U
Silver	SW6010D		15.0 U	15.0 U	15.0 U
Thallium	SW6010D		250 U	250 U	250 U
Zinc	SW6010D		**83.5 J**	100 U	100 U

Notes:

PRELIMINARY RESULTS

Bold: Detected result

µg/L: microgram per liter

J: estimated value

N: Normal

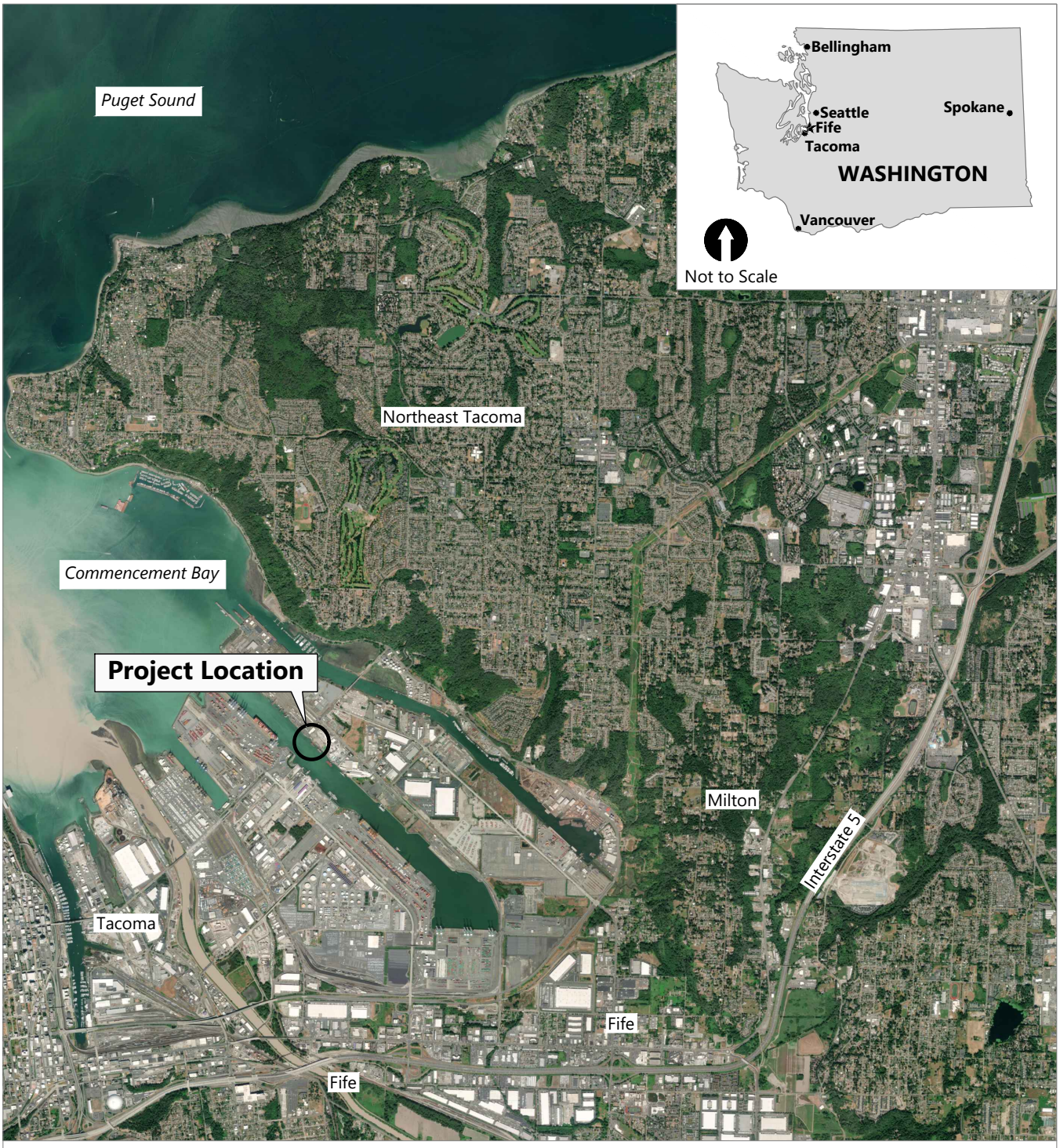
SE: Sediment

SPLP: Synthetic Precipitation Leaching Procedure

U: compound analyzed for but not detected above detection limit

Figures

DRAFT



SOURCE: Aerial by Global Mapper
HORIZONTAL DATUM: Washington State Plane South Zone, NAD83, U.S. Survey Feet

0 1
Miles

Publish Date: 2026/01/12 9:03 AM | User: dholmer
Filepath: K:\Projects\0092-Port of Tacoma\Dredged Material Characterization for Tru-Grit Sediment Investigation\SCR\0092-RP-001 (Vicinity Map-SCR).dwg Figure 1-1 (Sediment Characterization Report)

ANCHOR QEA

Figure 1-1
Vicinity Map

Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary
- Easement Boundary for Concrete Dock (Graymont)
- Underwater Communications Crossing
- Underwater Watermain Crossing
- Navigation Tower
- Navigational Aid

NOTES:

1. Aerial imagery: Esri (2025)
2. Horizontal Datum: NAD83 State Plane Washington South, U.S. feet
3. Navigational aids source: Port of Tacoma 2003. Locations of navigational aids are approximate and will be verified during design.

NAD83: North American Datum of 1983

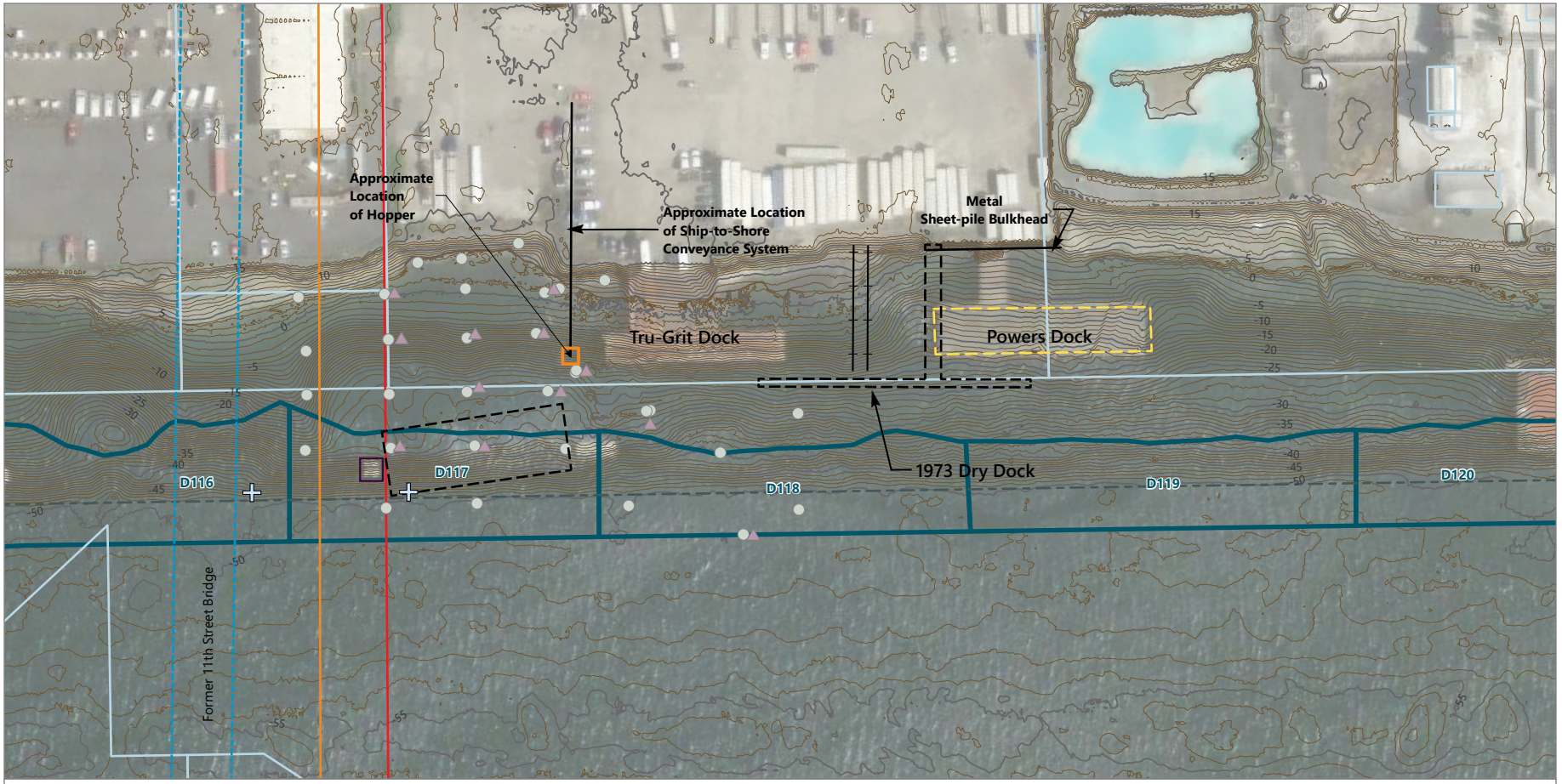
0 100
Feet

Publish Date: 2026/01/14, 3:23 PM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig2_1_SitePhysicalSetting

ANCHOR QEA

Figure 2-1
Site Physical Setting
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary
- Upper DMMU Boundary
- Easement Boundary for Concrete Dock (Graymont)
- Former Dry Dock
- Elevation (MLLW, 5-Foot Interval)
- Underwater Communications Crossing
- Underwater Watermain Crossing
- Former Marine Railway
- Former 11th Street Bridge
- Navigation Tower
- Hopper
- Navigational Aid

Previous Sample Location

- Subsurface Sediment
- Surface Sediment

NOTES:

1. Aerial imagery: Esri (2025)
2. Contour Source: Survey by USACE, dated October 27, 2021, and David Evans Associates Inc., dated May 27, 2022, with data gaps filled from survey by USACE dated November 14, 2022
3. Horizontal Datum: NAD83 State Plane Washington South, U.S. feet
4. Vertical Datum: MLLW, feet
5. The later dry dock was located in approximately the same position.
6. Navigational aids source: Port of Tacoma 2003. Locations of navigational aids are approximate and will be verified during design.

DMMU: dredged material management unit
MLLW: mean lower low water
NAD83: North American Datum of 1983
USACE: U.S. Army Corps of Engineers

0 200
Feet

Publish Date: 2026/01/14, 2:57 PM | User: eiverson
Filepath: \\gstfile01\gis\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig2_2_PreviousSampling

ANCHOR QEA

Figure 2-2
Historical Features and Previous Sampling Locations
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

Feasibility Study Navigation Channel Boundary

Proposed Sample Location

- Core (Subsurface Sediment)
- Grab (Surface Sediment)

Actual Upper Slope Sample Location

- Core (Subsurface Sediment)
- Grab (Surface Sediment)

Actual Lower Slope Sample Location

- Core (Subsurface Sediment)
- Grab (Surface Sediment)

NOTE:
1. Aerial imagery: Esri (2025)

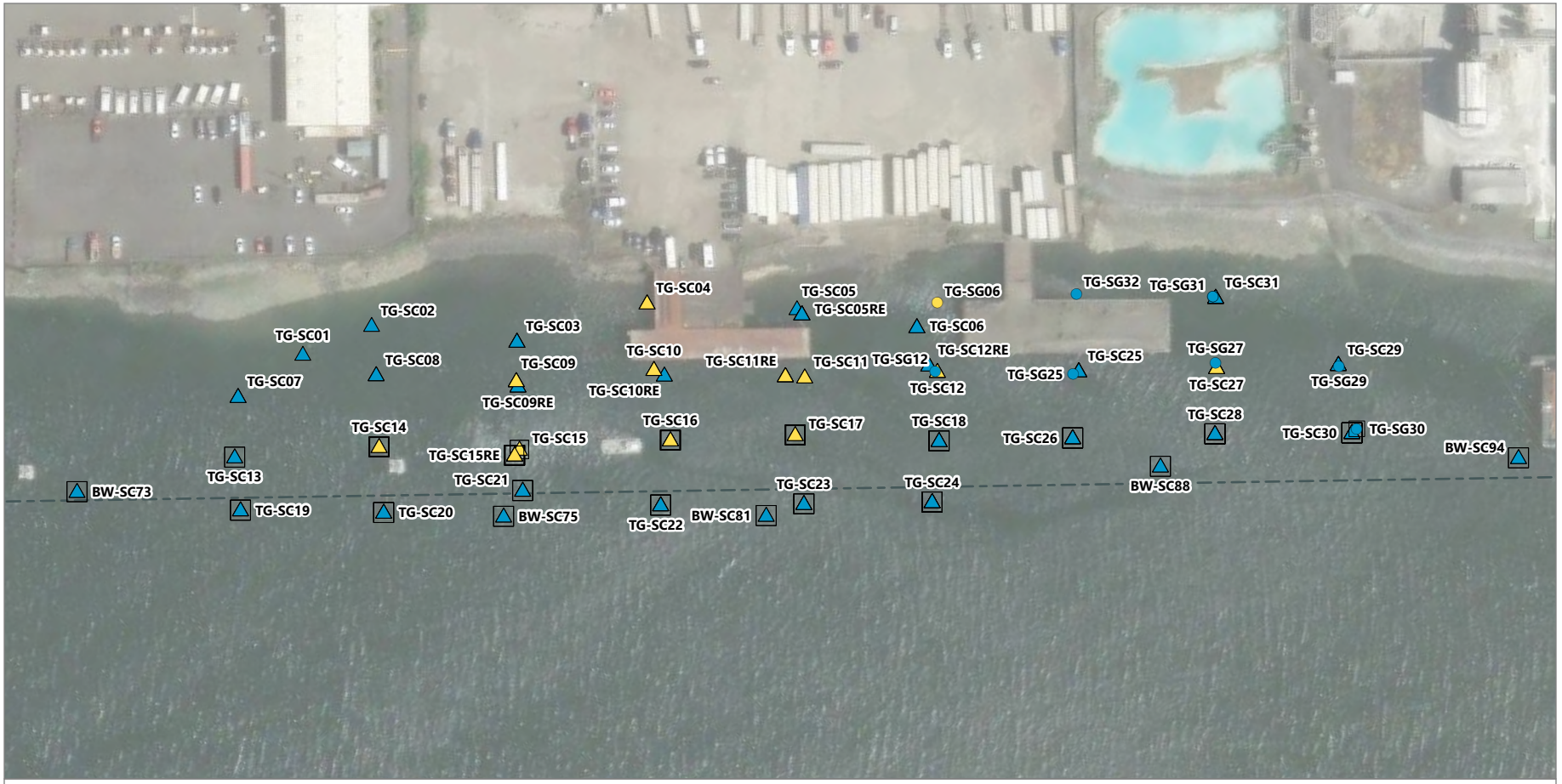
0 200
Feet

Publish Date: 2025/12/16, 11:56 AM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig2_3_RecentSampling

ANCHOR QEA

Figure 2-3
Proposed and Actual Sampling Locations
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

Feasibility Study Navigation Channel Boundary

Upper Slope Sample Location

- Core (Subsurface Sediment)
- Grab

Lower Slope Sample Location

- Core (Subsurface Sediment)
- Grab

Arsenic Exceedance

- No SCO Exceedance
- SCO Exceedance

NOTES:
1. Aerial imagery: Esri (2025)
2. Screening criteria for arsenic is 57 mg/kg based on the DMMP Screening Level and SMS Marine SCO (SCUM).
3. Maximum sample concentration within each core is displayed, regardless of sample depth.

DMMP: Dredged Material Management Program
mg/kg: milligram per kilogram
SCO: sediment cleanup objective
SCUM: Sediment Cleanup User's Manual (WA State Dept. of Ecology 2025)
SMS: sediment management standards

0 200
Feet

Publish Date: 2026/01/09, 9:47 AM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_1a_Arsenic

ANCHOR QEA

Figure 5-1a
Extent of Site-Associated Heavy Metals Contaminants: Arsenic
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

Feasibility Study Navigation Channel Boundary

Upper Slope Sample Location

- Core (Subsurface Sediment)
- Grab

Lower Slope Sample Location

- Core (Subsurface Sediment)
- Grab

Chromium Exceedance

- No SCO Exceedance
- SCO Exceedance

NOTES:
1. Aerial imagery: Esri (2025)
2. Screening criteria for chromium is 260 mg/kg based on the DMMP Screening Level and SMS Marine SCO (SCUM).
3. Maximum sample concentration within each core is displayed, regardless of sample depth.

DMMP: Dredged Material Management Program
mg/kg: milligram per kilogram
SCO: sediment cleanup objective
SCUM: Sediment Cleanup User's Manual (WA State Dept. of Ecology 2025)
SMS: sediment management standards

0 200
Feet

Publish Date: 2026/01/09, 9:50 AM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_1b_Chromium

ANCHOR QEA

Figure 5-1b
Extent of Site-Associated Heavy Metals Contaminants: Chromium
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

Feasibility Study Navigation Channel Boundary

Upper Slope Sample Location

- Core (Subsurface Sediment)
- Grab

Lower Slope Sample Location

- Core (Subsurface Sediment)
- Grab

Copper Exceedance

- No SCO Exceedance
- SCO Exceedance

NOTES:
1. Aerial imagery: Esri (2025)
2. Screening criteria for copper is 390 mg/kg based on the DMMP Screening Level and SMS Marine SCO (SCUM).
3. Maximum sample concentration within each core is displayed, regardless of sample depth.

DMMP: Dredged Material Management Program
mg/kg: milligram per kilogram
SCO: sediment cleanup objective
SCUM: Sediment Cleanup User's Manual (WA State Dept. of Ecology 2025)
SMS: sediment management standards

0 200
Feet

Publish Date: 2026/01/09, 9:51 AM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_1c_Copper

ANCHOR QEA

Figure 5-1c
Extent of Site-Associated Heavy Metals Contaminants: Copper
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

Feasibility Study Navigation Channel Boundary

Upper Slope Sample Location

- Core (Subsurface Sediment)
- Grab

Lower Slope Sample Location

- Core (Subsurface Sediment)
- Grab

Lead Exceedance

- No SCO Exceedance
- SCO Exceedance

NOTES:
1. Aerial imagery: Esri (2025)
2. Screening criteria for lead is 450 mg/kg based on the DMMP Screening Level and SMS Marine SCO (SCUM).
3. Maximum sample concentration within each core is displayed, regardless of sample depth.

DMMP: Dredged Material Management Program
mg/kg: milligram per kilogram
SCO: sediment cleanup objective
SCUM: Sediment Cleanup User's Manual (WA State Dept. of Ecology 2025)
SMS: sediment management standards

0 200
Feet

Publish Date: 2026/01/09, 9:52 AM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_1d_Lead

ANCHOR QEA

Figure 5-1d
Extent of Site-Associated Heavy Metals Contaminants: Lead
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

Feasibility Study Navigation Channel Boundary

Upper Slope Sample Location

- Core (Subsurface Sediment)
- Grab

Lower Slope Sample Location

- Core (Subsurface Sediment)
- Grab

Zinc Exceedance

- No SCO Exceedance
- SCO Exceedance

NOTES:
1. Aerial imagery: Esri (2025)
2. Screening criteria for zinc is 410 mg/kg based on the DMMP Screening Level and SMS Marine SCO (SCUM).
3. Maximum sample concentration within each core is displayed, regardless of sample depth.

DMMP: Dredged Material Management Program
mg/kg: milligram per kilogram
SCO: sediment cleanup objective
SCUM: Sediment Cleanup User's Manual (WA State Dept. of Ecology 2025)
SMS: sediment management standards

0 200
Feet

Publish Date: 2026/01/09, 9:53 AM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_1e_Zinc

ANCHOR QEA

Figure 5-1e
Extent of Site-Associated Heavy Metals Contaminants: Zinc
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

Feasibility Study Navigation Channel Boundary

Upper Slope Sample Location

△ Core (Subsurface Sediment)

○ Grab

Lower Slope Sample Location

Core (Subsurface Sediment)

Grab

Total PCB Exceedance

No SCO Exceedance

SCO Exceedance

Not Analyzed

NOTES:
1. Aerial imagery: Esri (2025)
2. Screening criteria for total PCB Aroclors 130 µg/kg based on the DMMP Screening Level and AET Marine SCO (SCUM).
3. Maximum sample concentration within each core is displayed, regardless of sample depth.

µg/kg: microgram per kilogram
AET: apparent effects threshold
DMMP: Dredged Material Management Program
mg/kg: milligram per kilogram
PCB: polychlorinated biphenyl
SCO: sediment cleanup objective
SCUM: Sediment Cleanup User's Manual (WA State Dept. of Ecology 2025)

0 200
Feet

Publish Date: 2026/01/12, 2:34 PM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_1f_tPCB

ANCHOR QEA

Figure 5-1f
Distribution of Other Site-Associated Contaminants: Total PCB Aroclors
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

Feasibility Study Navigation Channel Boundary

Upper Slope Sample Location

△ Core (Subsurface Sediment)

○ Grab

Lower Slope Sample Location

△ Core (Subsurface Sediment)

◎ Grab

Tributyltin Exceedance

No SCO Exceedance

SCO Exceedance

Not Analyzed

NOTES:

1. Aerial imagery: Esri (2025)
2. Screening criteria for tributyltin is 73 µg/kg based on the DMMP Bioaccumulation Trigger.
3. Maximum sample concentration within each core is displayed, regardless of sample depth.

µg/kg: microgram per kilogram
DMMP: Dredged Material Management Program
SCO: sediment cleanup objective

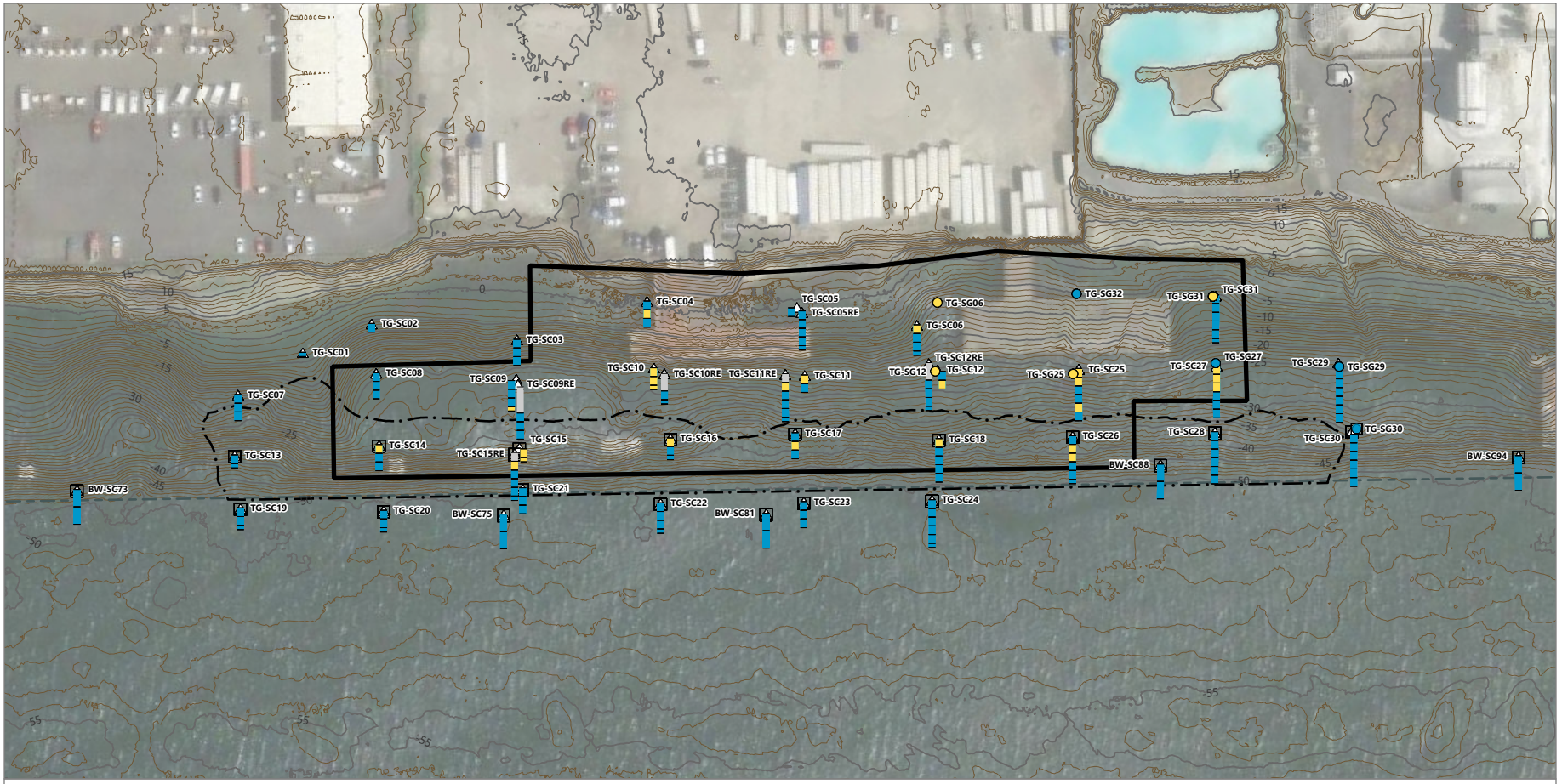
0 200
Feet

Publish Date: 2026/01/12, 2:35 PM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_1g_TBT

ANCHOR QEA

Figure 5-1g
Distribution of Other Site-Associated Contaminants: Tributyltin
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

- Feasibility Study Navigation Channel Boundary
- SCO Exceedance Boundary
- Elevation (MLLW, 5-Foot Interval)
- FNC Deepening Project Design Elevation Slough Boundary in Tru-Grit Area

Upper Slope Sample Location

- Core (Subsurface Sediment)
- Grab (Surface Sediment)

Lower Slope Sample Location

- Core (Subsurface Sediment)
- Grab (Surface Sediment)

- Exceedance
- No Exceedance
- Not Analyzed

SCO

Core Depth Below Mudline in Feet
0
2.0
4.0
6.0
12.0

1. Aerial imagery: Esri (2025)
2. Contour Source: Survey by USACE, dated October 27, 2021, and David Evans Associates Inc., dated May 27, 2022, with data gaps filled from survey by USACE dated November 14, 2022.
3. Horizontal Datum: NAD83 State Plane Washington South, U.S. feet
4. Vertical Datum: MLLW, feet
5. Site boundary is based on the distribution of SCO exceedances at any depth. See Section 5 of the Sediment Characterization Report for discussion.

FNC: Federal Navigation Channel
MLLW: Mean Lower Low Water
SCO: Sediment Cleanup Objective

0 200
Feet

Publish Date: 2026/01/08, 5:03 PM | User: eiverson
Filepath: \\gstfile01\gis\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_2a_VerticalDistibution_SCO

ANCHOR QEA

Figure 5-2a
Vertical Distribution of Site-Associated Contaminants
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

- Feasibility Study Navigation Channel Boundary
- SCO Exceedance Boundary
- Elevation (MLLW, 5-Foot Interval)
- FNC Deepening Project Design Elevation Slough Boundary in Tru-Grit Area

Upper Slope Sample Location

- Core (Subsurface Sediment)
- Grab (Surface Sediment)

Lower Slope Sample Location

- Core (Subsurface Sediment)
- Grab (Surface Sediment)

- Exceeds (>10 ng/kg)
- Exceeds (>4 ng/kg)
- No Exceedance
- Not Analyzed

D/F TEQ

Core Depth Below Mudline in Feet

0
2.0
4.0
6.0
12.0

1. Aerial imagery: Esri (2025)
2. Contour Source: Survey by USACE, dated October 27, 2021, and David Evans Associates Inc., dated May 27, 2022, with data gaps filled from survey by USACE dated November 14, 2022.
3. Horizontal Datum: NAD83 State Plane Washington South, U.S. feet
4. Vertical Datum: MLLW, feet
5. Site boundary is based on the distribution of SCO exceedances at any depth. See Section 5 of the Sediment Characterization Report for discussion.

D/F: Dioxin/Furans
FNC: Federal Navigation Channel
MLLW: Mean Lower Low Water
ng/kg: nanograms per kilogram
SCO: Sediment Cleanup Objective
TEQ: Toxic Equivalency Quotient

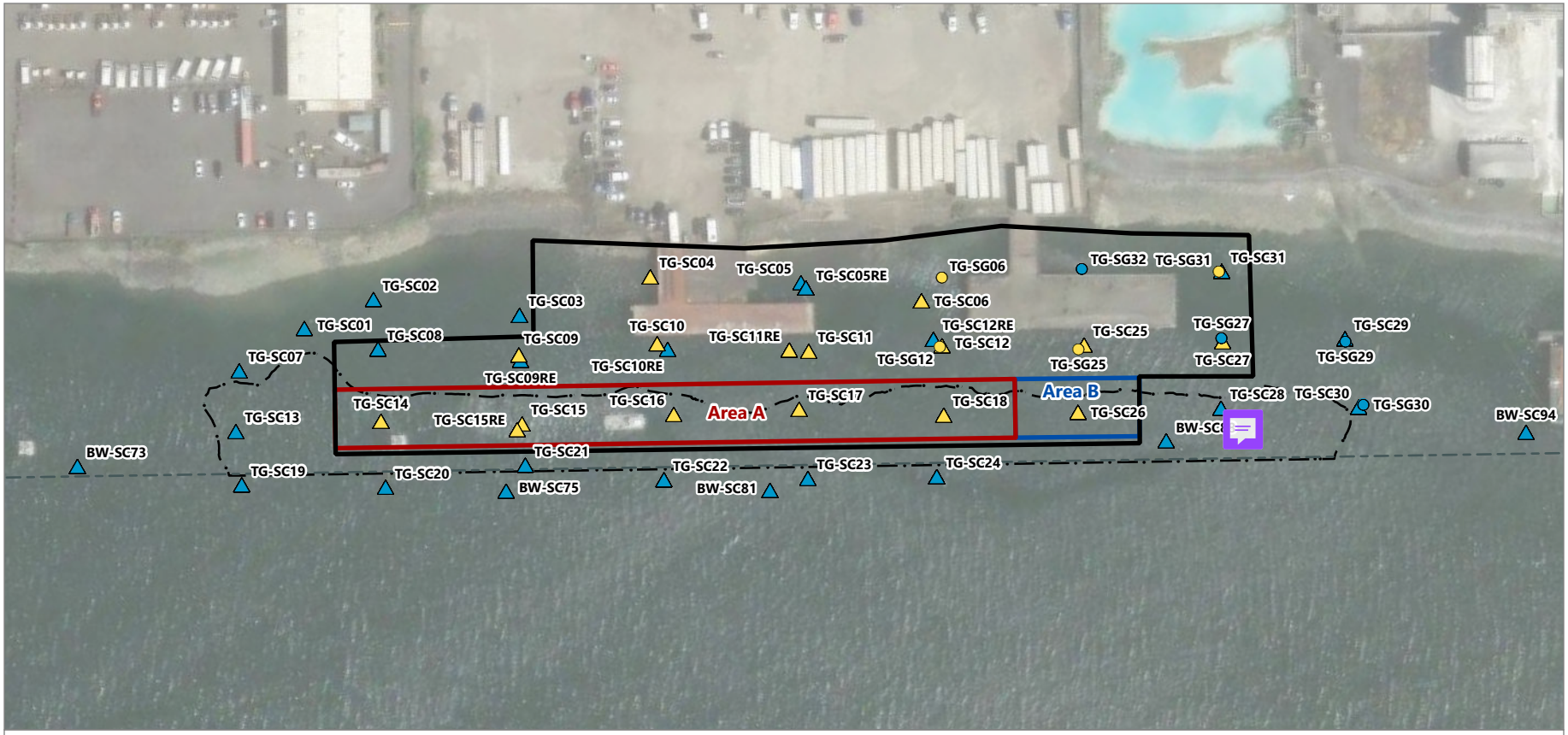
0 200
Feet

Publish Date: 2026/01/08, 5:03 PM | User: eiverson
Filepath: \\gstfile01\gis\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_2b_VerticalDistibution_DF

ANCHOR QEA

Figure 5-2b
Vertical Distribution of Dioxin/Furans
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Preliminary Site Boundary
- Dredge Area A, Lower Slope 4' Dredge Depth + 2' Over-Dredge (Confirmed Contamination within Slough Area)
- Dredge Area B, Lower Slope 8' Dredge Depth + 2' Over-Dredge (Confirmed Contamination within Slough Area)
- FNC Deepening Project Design Elevation Slough Boundary in Tru-Grit Area

Sample Location

- Core (Subsurface Sediment)
- Grab

SCO Exceedance

- No SCO Exceedance
- SCO Exceedance

NOTES:
1. Aerial imagery: Esri (2025)
2. Site boundary is based on the distribution of SCO exceedances at any depth. See Section 5 of the Sediment Characterization Report for discussion.

SCO: sediment cleanup objective

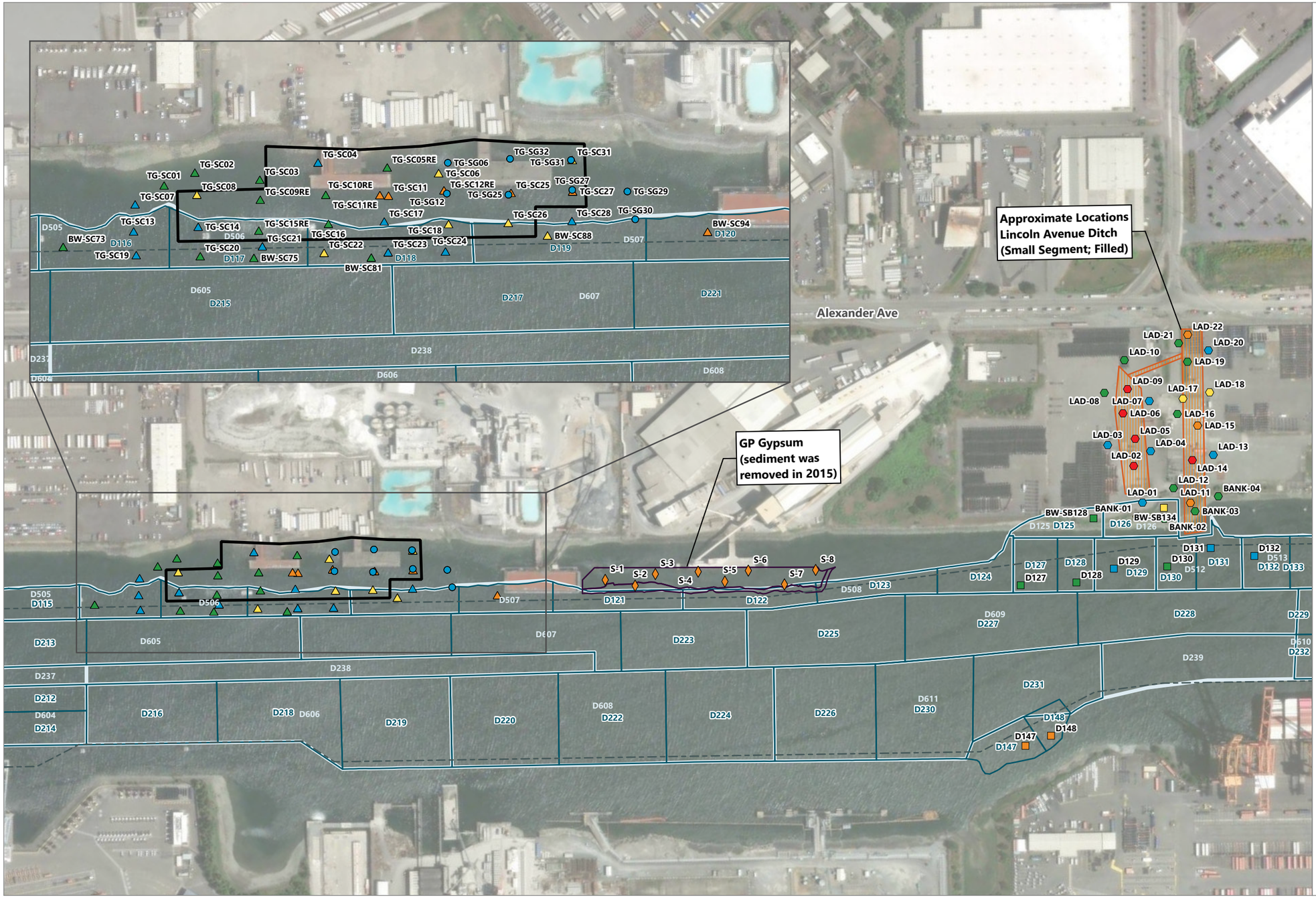
0 200
Feet

Publish Date: 2025/12/19, 5:41 PM | User: eiverson
Filepath: \\gstfile01\gis\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_3_ExceedanceSummary

ANCHOR QEA

Figure 5-3
Exceedances Summary for Site Contaminants
Sediment Characterization Report
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Preliminary Site Boundary
- Upper DMMU Boundary
- Lower DMMU Boundary
- Georgia Pacific Gypsum Dredge Prism Boundary

Sample Location

- Tru-Grit Core (Subsurface Sediment; 2024-2025)
- Tru-Grit Grab (Surface Sediment; 2025)
- Blair Waterway (2025)
- Lincoln Avenue Ditch (2025)
- Georgia Pacific (2015)

Maximum Dioxin-Furans (ng/kg TEQ)

- ≤4
- >4 to ≤10
- >10 to ≤40
- >40 to ≤400
- >400

NOTES:

1. Aerial imagery: Esri (2025)
2. Screening criteria for Dioxin-Furans is 4 ng/kg TEQ based on the DMMP Screening Level and 10 ng/kg TEQ based on the DMMP Bioaccumulation Trigger.

DMMP: Dredged Material Management Program
DMMU: dredged material management unit
GP: Georgia Pacific
ng/kg: nanogram per kilogram
TEQ: toxic equivalency quotient

0 300
Feet

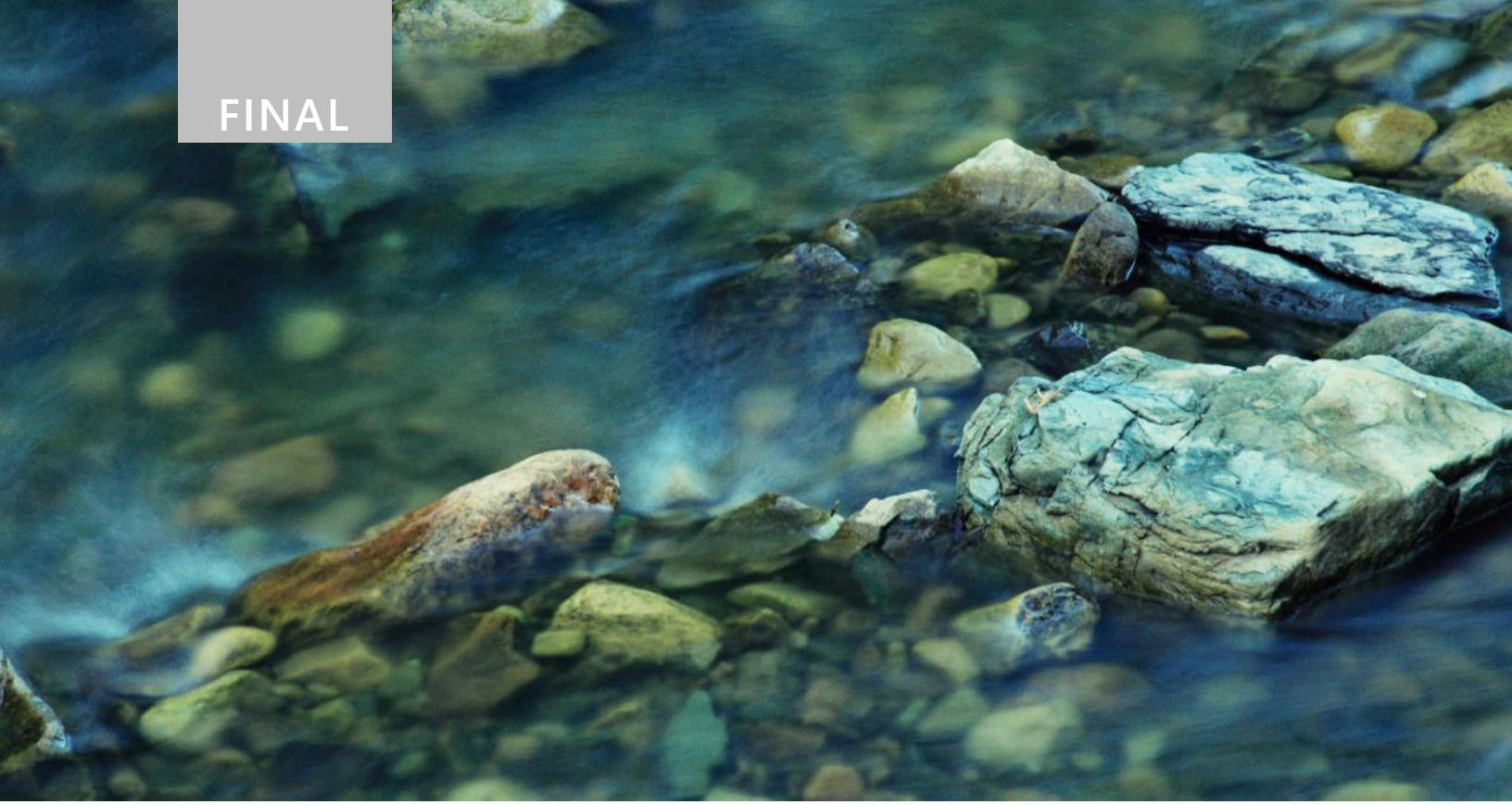
Publish Date: 2026/01/14, 2:58 PM | User: eiverson
Filepath: \\gstfile01\gis\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_Fig5_4_RegionalContaminants_DF

ANCHOR QEA

Figure 5-4
Distribution of Regional Contaminant Dioxin/Furan Contamination
Sediment Characterization Report
Port of Tacoma – Tru-Grit

Appendix A-1
SQAPP

FINAL



July 2024
Tru-Grit Site Data Gaps Field Investigation

ANCHOR QEA

Sampling and Quality Assurance Project Plan

Prepared for Port of Tacoma

FINAL

July 2024
Tru-Grit Site Data Gaps Field Investigation

Sampling and Quality Assurance Project Plan

Prepared for
Port of Tacoma
One Sitcum Plaza
Tacoma, Washington 98401

Prepared by
Anchor QEA
1201 3rd Avenue, Suite 2600
Seattle, Washington 98101

Project Number: 230092-01.08
\\fuji\Tacoma\Projects\Port_of_Tacoma\2023 TruGrit\Deliverables\SQAPP\Working\Port of Tacoma-Tru-Grit_SQAPP_Final_07-09-24.docx

FINAL

TABLE OF CONTENTS

1 Introduction 1

1.1 Site History 1

1.2 Document Organization 2

2 Existing Data and Data Gaps 3

2.1 Previous In-Water and Intertidal Investigations 3

2.1.1 Commencement Bay Near-Shore/Tideflats Remedial Investigation 3

2.1.2 Grit Material Characterization 3

2.1.3 Grit Content in Sediments 3

2.1.4 2008 Tru-Grit Sediment Investigation 4

2.1.5 2014 Tru-Grit Sediment Investigation 4

2.1.6 2018 Tru-Grit Sediment Investigation 5

2.1.7 Additional Investigations 5

2.2 Previous Upland Investigations 6

2.3 Data Gaps 6

3 Project Management 7

3.1 Project/Task Organization 7

3.2 Special Training Requirements/Certifications 7

3.3 Documentation and Records 8

3.3.1 Field Records 8

3.3.2 Analytical Records 9

3.3.3 Data Reduction 9

4 Sample Collection 10

4.1 Sampling Design 10

4.1.1 Slope Characterization Samplings and Analysis 10

4.1.2 Sediment Profiling for Reuse or Disposal 11

4.2 Sampling Methods 11

4.2.1 Sample Identification 11

4.2.2 Station Positioning 12

4.2.3 Subsurface Sediment Collection 12

4.2.4 Subsurface Sediment Processing Methods 14

4.2.5 Archaeological Observations 15

4.3 Sample Handling Requirements 15

4.3.1 Field Decontamination Procedures 15
4.3.2 Investigation-Derived Waste Management 16
4.3.3 Sample Custody and Shipping Requirements 16
4.4 Laboratory Methods 17

5 Quality Assurance/Quality Control 19
5.1 Field Quality Control 19
5.2 Field Quality Assurance and Quality Control Sampling 19
5.2.1 Sample Containers 20
5.2.2 Sample Identification and Labels 20
5.3 Data Quality Objectives and Criteria 20
5.3.1 Precision 20
5.3.2 Accuracy 21
5.3.3 Representativeness 22
5.3.4 Comparability 22
5.3.5 Completeness 22
5.3.6 Sensitivity 23
5.4 Laboratory Quality Control 23
5.4.1 Laboratory Instrument Calibration and Frequency 24
5.4.2 Laboratory Duplicates/Replicates 24
5.4.3 Matrix Spikes and Matrix Spike Duplicates 24
5.4.4 Method Blanks 24
5.4.5 Laboratory Control Samples 25
5.4.6 Laboratory Deliverables 25
5.5 Instrument/Equipment Testing, Inspection, and Maintenance Requirements 27
5.5.1 Field Instruments/Equipment 27
5.5.2 Laboratory Instruments/Equipment 28
5.6 Inspection/Acceptance of Supplies and Consumables 29
5.7 Data Management 29

6 Assessments and Response Actions 30
6.1 Compliance Assessments 30
6.2 Response and Corrective Actions 30
6.2.1 Field Activities 30
6.2.2 Laboratory 30
6.3 Reports to Management 31

7 Data Validation, Usability, and Reporting 32
7.1 Data Review, Validation, and Verification 32
7.2 Validation and Verification Methods 32
7.3 Reconciliation with User Requirements 33
7.4 Data Summary Report 33

8 References 35

TABLES

Table 1 Sample Locations, Coordinates, Intervals, and Analyses Summary
Table 2 Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits
Table 3 Sample Handling and Storage Guidelines
Table 4 Field and Laboratory Quality Assurance/Quality Control Requirements
Table 5 Field and Laboratory Data Quality Objectives

FIGURES

Figure 1 Vicinity Map
Figure 2 Surface Sediment and Approximate Grit Content
Figure 3 Surface Sediment Analytical and Bioassay Results
Figure 4 Subsurface Sediment Analytical Results
Figure 5 Proposed Sampling Locations
Figure 6a Site Plan
Figure 6b Cross Sections A-A′ and B-B′
Figure 6c Cross Sections C-C′ and D-D′

APPENDICES

Appendix A Field Forms

ABBREVIATIONS

ARL	Analytical Resources, LLC
ASTM	ASTM International
CanAm	CanAm Minerals, Inc.
CCV	continuation calibration verification
DGPS	differential global positioning system
DQO	data quality objective
Ecology	Washington State Department of Ecology
EDL	estimated detection limit
EPA	U.S. Environmental Protection Agency
FC	field coordinator
FNC	federal navigation channel
FS	feasibility study
GC	gas chromatography
HAZWOPER	Hazardous Waste Operations and Emergency Response
IDW	investigation-derived waste
MD	matrix duplicate
MDL	method detection limit
MLLW	mean lower low water
MS	matrix spike
MSD	matrix spike duplicate
NAD 83	North American Datum 1983
NIST	National Institute of Standards and Technology
OSHA	Occupational Safety and Health Act
Orion Marine	Orion Marine Group, Inc.
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PM	project manager
Port	Port of Tacoma
QA/QC	quality assurance/quality control
RI	remedial investigation
RL	reporting limit
RPD	relative percent difference
SCO	sediment cleanup objective
Site	Tru-Grit Site
SMS	Sediment Management Standards
SOP	standard operating procedure

SPLP	synthetic precipitation leaching procedure
SQAPP	Sampling and Quality Assurance Project Plan
SVOC	semivolatile organic compound
TCLP	toxicity characteristic leaching procedure
Tru-Grit	Tru-Grit Abrasives, Inc.
USACE	U.S. Army Corps of Engineers

1 Introduction

On behalf of the Port of Tacoma (Port), Anchor QEA has prepared this Sampling and Quality Assurance Project Plan (SQAPP) that details sample collection methods and analytical protocols for sediment sample collection activities in the Tru-Grit Abrasives, Inc. (Tru-Grit) site (Site) located at 1110 East Alexander Avenue, Tacoma, Washington (Figure 1).

Investigation of the Site was conducted under an Agreed Order (No. DE-8978; Ecology 2012) executed between the Washington State Department of Ecology (Ecology) and CanAm Minerals, Inc. (CanAm; parent company of Tru-Grit). CanAm was identified by Ecology as a potentially liable party under the Washington State Model Toxics Control Act due to releases of an ore-derived grit material containing elevated concentrations of copper and zinc. Work completed to date by CanAm includes a remedial investigation (RI; Landau 2021) and draft feasibility study (FS; Landau 2019). Cleanup of Site-related contaminated sediments has not yet been implemented.

The U.S. Army Corps of Engineers (USACE) is currently planning to deepen the federal navigation channel (FNC) in the Blair Waterway. The assessment described in this SQAPP is intended to delineate the extent of Site-associated contaminated sediments that could by impacted by that deepening project. The Port currently plans to remove those contaminated sediments prior to the FNC deepening to be conducted by the USACE.

This SQAPP was prepared based on Anchor QEA's understanding of USACE's plan to deepen the FNC to -57 mean lower low water (MLLW) plus a 2-foot overdredge (final elevation to -59 feet MLLW). The side slopes for the dredging were calculated using a 10-foot buffer landward of the FNC boundary identified by USACE in the FS phase (feasibility boundary) and a 2 horizontal:1 vertical (2:1) slope ratio.[1] Eighteen cores are proposed to characterize material contained within the Lower Slope areas that are adjacent to the side slopes of the FNC deepening program. Six additional cores will also be collected in the Upper Slope areas to provide additional information useful to future final cleanup of those Site areas. The Upper Slope areas are not expected to be impacted by the FNC deepening program.

1.1 Site History

The Site is located along the Blair Waterway. Investigations at the Site have included both upland and in-water areas. The upland portion of the Site includes the Tru-Grit facility and portions of the

[1] The feasibility boundary is a conservative boundary that assumes a wider navigation channel closer to the Tru-Grit site, but the preliminary engineering and design evaluations by USACE may result in a narrower FNC boundary that is farther from the Site. The 2:1 side slope line is also conservative, because deepening the FNC is expected to result in side slopes outside of the FNC that are steeper than 2:1.

adjacent Orion Marine Group, Inc. (Orion Marine) lease area, which Tru-Grit used briefly for material storage (Landau 2021).

Beginning in the 1960s and continuing through the mid-1980s, the property was used for marine construction, shipbuilding, and boat storage and maintenance by a series of owners, including Sea-Tac Alaska Ship Building Corporation, Sexton Marine, A.H. Powers, and Martinolich. Metallurgical slags were commonly used as abrasive blast grit in marine shipyards throughout this period, including slags manufactured from the slag produced at the ASARCO metals smelter in Tacoma (Landau 2021). The ASARCO-derived slag products contained elevated concentrations of arsenic, copper, lead, and zinc. A floating dry dock was in use at the property by Martinolich in the 1960s through the 1970s and was located in approximately the same location as where barges were moored for grit material offloading by CanAm.

The property was unoccupied during the mid-1980s, until Tru-Grit began operations in approximately 1990. Between 1990 and 2013, Tru-Grit operations included receiving and offloading grit shipments and processing and packaging grit for resale. The CanAm grit is a copper-smelting byproduct that undergoes preliminary processing before being shipped to the Site and was sold to roofing manufacturers and sandblasters under the name Tru-Grit Roofing Granules. The CanAm grit material was rich in copper and zinc but not arsenic.

Grit shipments were received by the facility 2 to 3 times a year, offloaded from barges using a series of ship-to-shore conveyors, and stored in an outdoor area surrounded by 8-foot-high concrete block walls. Grit was also temporarily stored on the Orion Marine portion of the property between 2005 and 2007, until Tru-Grit expanded their on-site containment area. After 2013, barge offloading operations ceased, and Tru-Grit operations only encompassed the upland storage and processing of grit materials. During this period, grit was trucked from a nearby Tru-Grit facility (Landau 2021).

1.2 Document Organization

This SQAPP was prepared in accordance with Ecology guidance, as described in the *Sediment Cleanup User's Manual* (Ecology 2021a). This SQAPP is organized into the following sections:

- Section 2 – Existing Data and Data Gaps
- Section 3 – Project Management
- Section 4 – Sample Collection
- Section 5 – Quality Assurance/Quality Control
- Section 6 – Assessments and Response Actions
- Section 7 – Data Validation, Usability, and Reporting
- Section 8 – References

2 Existing Data and Data Gaps

This section summarizes previous in-water and upland investigations conducted at the Site.

2.1 Previous In-Water and Intertidal Investigations

Several previous in-water and intertidal investigations have occurred at the Site and are summarized in this section.

2.1.1 Commencement Bay Near-Shore/Tideflats Remedial Investigation

In 1985, the Commencement Bay Near-Shore/Tideflats RI collected sediment samples from eight potentially impacted areas in Commencement Bay, including the Blair Waterway. This study detected polycyclic aromatic hydrocarbons (PAHs), metals (i.e., copper and lead), polychlorinated biphenyls (PCBs), phenols, and phthalate esters concentrated around the Lincoln Avenue Drain and reaching the former 11th Street bridge (Landau 2021; Tetra Tech 1985).

2.1.2 Grit Material Characterization

Prior to Tru-Grit commencing operations at the facility in the early 1990s, Tru-Grit performed an analysis of their raw material to determine whether the material would be classified as a hazardous waste. Analyses included total metals, toxicity characteristic leaching procedure (TCLP) metals, and bioassays. Results from these tests indicated the material did not classify as hazardous waste (Landau 2021). Investigations completed at the Site have confirmed the presence of two types of grit in marine sediments. Grit containing copper and zinc levels characteristic of CanAm grit materials tends to be present in surficial sediments. But deeper sediments have been shown to also contain grit that is elevated in arsenic as well as copper and zinc. These deeper sediments appear to be associated with historical shipyard operations and are consistent with the use of ASARCO-derived blasting grits that were commonly used in area shipyards before the mid-1980s.

2.1.3 Grit Content in Sediments

Of the 32 surface sediment samples collected as part of the RI between 2008 and 2018 (Figure 2), grit was visually identified as present in 18 samples, and none was identified in the three relative background samples that were collected outside the vicinity of the Site. The amount of grit present was estimated by drying and sieving the sediment samples and examining the sieved sediment under a microscope to visually estimate grit percentage content. The highest percentages of grit content encountered were west of the loading dock within a relatively flat bathymetric area and coinciding with the ship-to-shore conveyance system area. Grit material was not identified within the intertidal area adjacent to Outfall 4 or adjacent to the Tru-Grit maintenance building; however, some grit material was present in surface sediment beneath the loading dock west of the Orion Marine

facility. The presence of surface grit is well bounded in most directions, except for to the southeast (Landau 2021).

Core samples were also sieved and percentages of grit content estimated. Grit material was vertically bounded in the cores and is concentrated in the upper 5 feet of sediment around the ship-to-shore conveyance system area.

2.1.4 2008 Tru-Grit Sediment Investigation

Seven surface sediment samples were collected in 2008 by Landau Associates for CanAm. Five of these samples were in the vicinity of Tru-Grit's offloading pier (Figure 3), and two were collected as background samples outside of the pier vicinity (Landau 2021). Grit material was visible in all five pier samples and in one background sample approximately 130 feet northwest of the end of the pier, which prompted the collection of the second reference sample, where no grit was identified. The samples were analyzed for copper and zinc, known constituents of the grit material found on site, and arsenic, which is found in other varieties of slag but not related to Tru-Grit's operations (Landau 2021, 2009). All three metals were present in concentrations exceeding sediment screening levels, and arsenic and zinc exceeded screening levels in the background sample.

2.1.5 2014 Tru-Grit Sediment Investigation

As part of the Beach Area investigation, six surface sediment samples were collected in 2014 from the intertidal beach area adjacent to the Tru-Grit facility, near Outfall 4, and the underpier area of Orion Marine (Figure 3) and analyzed for total arsenic, copper, and zinc. Arsenic, copper, and zinc exceeded the Sediment Management Standards (SMS) sediment cleanup objective (SCO) in the sample collected from the location closest to the Tru-Grit pier, and arsenic exceeded the SMS SCO in the sample collected from the location second closest to the Tru-Grit pier. All other results were below SCO values (Landau 2021).

As part of the Blair Waterway Area investigation, surface and subsurface sediment samples were collected and analyzed in 2014 and 2018. Eighteen surface sediment samples were collected from the subtidal area in 2014, and after a preliminary assessment of grit material in the sediments, four additional step-out samples were collected to bound surface areas with grit content. Two background samples located northwest and southeast of the Tru-Grit facility were also collected to assess background metals concentrations in the waterway. Two samples collected near the offloading area were analyzed for the full marine sediment SMS suite of analyses to screen out other potential chemicals of potential concern. All results in both samples were below SMS SCO values. The 2018 investigation is discussed in Section 2.1.5.

Twelve subsurface sediment cores were collected in 2014 at the Site (Figure 4), and one was collected across the Blair Waterway, outside of the Site, to evaluate background metals concentrations. Cores

were processed into 1-foot intervals. Two samples from each core were submitted for analyses of arsenic, copper, and zinc, with the intervals selected based on the highest apparent presence of grit. If no grit was visually apparent, samples collected from the 1-to-2-foot- and 2-to-3-foot-below-mudline intervals were submitted. One additional sample was collected from the core nose at one location where the core was advanced to refusal, resulting in 25 samples submitted for analyses. Eleven samples from seven locations exceeded SMS SCO values. The samples were all within the vicinity or just west of the ship-to-shore conveyance system area. Arsenic exceeded the SCO value in all ten samples, copper exceeded the SCO in eight samples from five locations, and zinc exceeded the SCO in ten samples from all seven locations. The highest concentrations occurred nearest the pier locations, and contamination was not vertically bounded in five of these locations (Landau 2021).

2.1.6 2018 Tru-Grit Sediment Investigation

In 2018, four surface sediment samples were collected from locations previously sampled in 2014 (Figure 3) to evaluate the potential benthic toxicity of the sediments due to the elevated copper and zinc concentrations. The samples were analyzed for the full suite of SMS parameters and for SMS marine bioassays. Chemistry results were below SMS SCO levels, except for arsenic in one sample and its field duplicate. This sample, along with one other sample, also failed the larval development bioassay SCO. Both samples were collected near where the ship-to-shore conveyance system was in operation and had more than 15% grit.

Additional grit characterization was conducted as part of the RI in 2018. Three samples were collected and analyzed for total metals and synthetic precipitation leaching procedure (SPLP) metals. Results were comparable to previous grit characterization results.

2.1.7 Additional Investigations

Additional investigations that occurred within a 1-mile radius of the Site include the following (Landau 2021):

- Metals, including copper and zinc; PAHs; phenols; and phthalate esters were detected in sediments in Commencement Bay, approximately 1 mile northwest of the Site in the 1991 Port RI and Natural Resources Damages Assessment.
- Elevated arsenic, copper, and zinc concentrations were detected at one sediment location 0.1 mile northwest of the Site in the 1993 Konioke Pacific Terminal Study.
- Metals, PAHs, phenols, and phthalate esters were detected in sediment samples approximately 1 mile southeast of the Site in the 1994 Port Blair Bridge study.

Additionally, SMS exceedances occurred during an investigation of the Blair Waterway performed by Anchor QEA in 2019. Exceedances included dioxin/furan toxic equivalencies and

hexachlorobutadiene within the proposed navigation channel boundary bordering the Site (Anchor QEA 2019).

2.2 Previous Upland Investigations

One investigation was performed on the upland portion of the Site and was conducted by Landau Associates in 2013. Six surface soil samples were collected from three areas where grit material could have been in direct contact with the soil at the Site and analyzed for total copper and zinc. All copper and zinc concentrations were below applicable screening criteria.

Seep samples were also collected from two seeps along the shoreline in 2013, and one of the seeps (Seep-2) was sampled twice more in 2018. Samples collected in 2013 were analyzed for dissolved copper and zinc. Samples collected in 2018 were analyzed for dissolved copper only. Copper exceeded screening criteria in the Seep-2 sample and field duplicate collected in 2013 but was below detection in all samples and field duplicates collected in 2018. All zinc results were below applicable screening criteria.

2.3 Data Gaps

Based on the investigation data collected to date, no additional work is required within upland areas of the Site. However, additional information is required to confirm the nature and extent of Site-associated contamination in sediment that could be impacted during future deepening of the FNC or that could require additional remediation to achieve final cleanup of the Tru-Grit Site.

Sections 3 through 7 of this SQAPP outline the specific work to be completed as part of this assessment, including the following:

- Place sediment core samples in Lower Slope areas and analyze collected samples for Site-associated contaminants to determine the areas and volumes of contaminated sediments that may be impacted by the planned deepening of the FNC.
- Place sediment core samples in Upper Slope areas and analyze collected samples for Site-associated contaminants to determine the areas and volumes of contaminated sediments that may require additional remediation in these areas in the future.
- Assess the geotechnical properties of the sediments to help determine how sediments are likely to slough during planned deepening of the FNC.
- Collect sediment quality data for the sediments to be removed from the Site to assess potential sediment reuse or disposal options.

3 Project Management

This section discusses the proposed project team and team member responsibilities for conducting the field investigation, lists training and certification requirements for sampling personnel, and describes documentation and recordkeeping procedures.

3.1 Project/Task Organization

Responsibilities of the team members, as well as of the laboratory project managers, are described in the following paragraphs.

Anchor QEA Project Manager (PM). Christine Simmons will be responsible for directing the project team for the implementation of all activities described in this SQAPP. She will also be responsible for production of work plans, producing all project deliverables, and performing the administrative tasks needed to ensure timely and successful completion of these studies. The PM will provide the overall programmatic guidance to support staff and will ensure that all documents, procedures, and project activities meet the objectives contained within this SQAPP. The PM will also be responsible for resolving project concerns or conflicts related to technical matters.

Field Coordinator (FC). Nik Bacher or his designee will be responsible for coordination of field sampling activities. He will ensure that appropriate protocols for sample collection, preservation, and holding times are observed, and he will oversee submission of environmental samples to the designated laboratory for chemical and physical analyses.

Quality Assurance/Quality Control (QA/QC) Manager. Delaney Peterson will provide QA/QC oversight for both the field sampling and laboratory programs, ensure that samples are collected and documented appropriately, coordinate with the analytical laboratories, ensure data quality, oversee data validation, and supervise project QA coordination and data validation.

3.2 Special Training Requirements/Certifications

For sample preparation tasks, it is important that field crews are trained in standardized data collection requirements so that the data collected are consistent among the field crews. Field crews will comprise individuals who are fully trained in sediment core collection and processing, decontamination protocols, field documentation, and chain-of-custody procedures.

In addition, the 29 *Code of Federal Regulations* 1910.120 Occupational Safety and Health Act (OSHA) regulations require training to provide employees with the knowledge and skills enabling them to perform their jobs safely and with minimum risk to their personal health. All field personnel will have completed the 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training course and 8-hour refresher courses, as necessary, to meet the OSHA regulations.

3.3 Documentation and Records

This project will require central project files to be maintained at Anchor QEA. Project records will be stored and maintained in a secure manner. Each project team member is responsible for filing all necessary project information or providing it to the person responsible for the filing system. Individual team members may maintain files for individual tasks but must file documents in the central project files upon completion of each task. Hard copy documents will be scanned and saved to the central files. Electronic data will be maintained in the database, and database exports will be stored in a designated directory at Anchor QEA.

3.3.1 Field Records

All documents generated during the field effort are controlled documents that become part of the project file. Field team members will keep a daily record of significant events, observations, and measurements on field forms specific to the collection activity. Field documentation will consist of a daily field log and sediment core collection and processing forms (Appendix A). Field forms will be maintained by the FC. The sampling documentation will contain information on each sample collected and will include, at a minimum, the following information:

- Project name
- Field personnel on site
- Site visitors
- Weather conditions
- Field observations
- Sample collection dates and times
- Sample collection methods and description of activities
- Identification or serial numbers of instruments or equipment used
- Deviations from this SQAPP
- Meetings associated with field sampling activities

Entries for each day will begin on a new form. The person recording information must enter the date and time. In general, sufficient information will be recorded during sample collection and processing activities so that reconstruction of the event can occur without relying on the memory of the field personnel.

The field forms may be electronic or handwritten. If handwritten, they will be on water-resistant, durable paper. Notes will be made in indelible, waterproof blue or black ink. Errors will be corrected by crossing out with a single line and initialing the change. Each form will list the project name, number, and date. The field forms will be scanned or saved into Anchor QEA's project file directory as convenient during the sampling event or upon completion of each sampling event.

3.3.2 Analytical Records

The laboratory will retain analytical data records. Additionally, Anchor QEA will retain copies of PDF analytical data in the central project files. Data reporting requirements will include those items necessary to complete data validation, including copies of raw data. Elements to be reported in the laboratory data packages are listed in Section 5.4.6.

Instrument data shall be fully restorable at the laboratory from electronic backup. The laboratory will be required to maintain records relevant to project sample analyses for a minimum of 5 years. Data validation reports will be maintained in the central project files with the analytical data reports.

3.3.3 Data Reduction

Data reduction is the process by which original data (analytical measurements) are converted or reduced to a specified format or unit to facilitate analysis of the data. Data reduction requires that all aspects of sample preparation that could affect test results, such as sample mass or volume analyzed, sample moisture content, or dilutions required, be taken into account in the final result. The laboratory analyst is responsible to reduce the data, which are subject to further review by the laboratory manager, the PM, the QA/QC manager, and independent reviewers. Data reduction may be performed manually or electronically.

4 Sample Collection

The rationale for the sampling design and design assumptions for locating and selecting samples, as well as methods and procedures for the collection of field samples, are provided in this section. Sampling will be conducted following standard procedures documented in this SQAPP. In general, all sampling procedures will also comply with previously approved sample collection standards established for the study area.

4.1 Sampling Design

Subsurface sediment core samples will be collected to determine the extent of contamination in the study area in order to support development of dredging design in the area near the FNC prior to deepening of the FNC and to support further remediation planning in areas not near the FNC. Table 1 summarizes the sample locations, coordinates, sample intervals, and planned analyses. Figure 5 shows target sample locations.

4.1.1 Slope Characterization Samplings and Analysis

Two sampling areas have been identified for this field investigation. The Lower Slope area is expected to overlap with the FNC deepening project and encompasses the eastern boundary of the navigation channel in front of the Site and the anticipated side slopes landward of the channel (Figure 5). The Upper Slope area is landward of the slope cutback characterization area and is not expected to overlap with the FNC deepening project (Figure 5).

Subsurface sediment core samples will be collected using a vibracorer from 12 locations in the Lower Slope area and 12 locations in the Upper Slope area. The target core penetration depth is 16 feet below mudline using 17-foot core tubes, or until refusal. Figure 6a shows a plan view with four cross sections, and Figure 6b and 6c show the cross sections across the Lower and Upper slopes with target core locations. Core samples will be sectioned into 2-foot intervals to the bottom of the core. Sample intervals may be modified in the field based on lithology, total depth collected, native interval contact, or other factors. The FC will consult with the PM for sample interval modifications.

The upper six samples representing 2-foot intervals between 0 to 12 feet below mudline (Table 1) will be submitted for Tier 1 analyses for metals and total solids (Table 2), and additional sample mass for each sample will be collected and stored in frozen archive pending initial results. The shallowest interval with metals concentrations below SMS SCO and bounded either by clean intervals below or as the deepest interval analyzed will be submitted for Tier 2 analyses to confirm the vertical extent of contamination and estimate the leave surface (Z-layer) conditions. Tier 2 analyses include total volatile solids, total organic carbon, semivolatile organic compound, pesticides, PCBs, butyltins, and dioxin/furans (Table 2). If metal concentrations exceed SCOs in the deepest interval analyzed, archives for deeper intervals will be triggered for metals analyses. Select testing will be conducted to

support geotechnical considerations for dredge design, including two representative samples per core analyzed for grain size and one representative sample per core analyzed for Atterberg limits. Interval aliquots not initially submitted for analyses will be stored in frozen archive for potential future analyses.

4.1.2 Sediment Profiling for Reuse or Disposal

For every sample, one aliquot will be stored in frozen archive for potential profiling of sediments for reuse or disposal options. One aliquot will be stored in refrigerated archive for associated bioassay testing. Up to five composites will be generated based on contaminant concentrations, contaminant distribution, and ability to segregate the sediment represented by the archives into dredgeable units. Sediment profiling analyses may include TCLP, SPLP, and Static Acute Fish Toxicity testing (Table 2). The Static Acute Fish Toxicity testing will follow Ecology Biological Testing Methods 80-12 (Ecology 2021b).

4.2 Sampling Methods

This section describes sampling methods and includes sample identification, station positioning, and subsurface sediment collection and processing.

4.2.1 Sample Identification

Each sediment and water sample will be assigned a unique alphanumeric identifier according to the following method:

- Each sample ID will be identified by the overall Site ("TG") and location within the Site as well as the sample collection method.
  - The sample collection method will be identified by "SC" for subsurface sediment core samples.
  - Station numbers will be added after the collection method identifier and are listed in Table 1 and shown in Figure 5.
  - The depth of the sediment sample will be added using four digits separated by a dash to represent the upper and lower interval in feet.
  - The date in YYMMDD format will be appended to the end of the sample ID.
  - An example sample identification nomenclature is TG-SC03-02-04-240722, which designates a subsurface core sample collected from the 2-to-4-foot interval from location SC03 on July 22, 2024.
- A field duplicate will be identified by the addition of 100 to the sample station number. A duplicate sample collected from the above example would be TG-SC103-02-04-240722 collected on July 22, 2024.

- Rinsate blank samples will use the overall Site identifier and collection method followed by "RB" and the date. The resulting nomenclature of a rinsate blank of the decontaminated core sample processing equipment collected on July 22, 2024, would be TG-SC-RB-240722.

4.2.2 Station Positioning

Station locations are listed in Table 1 and shown in Figure 5. Horizontal positioning will be determined in the field by differential global positioning system (DGPS) based on target coordinates. Target coordinates are provided in Table 1, and cores will be collected as close to target locations as reasonably feasible. The horizontal datum will be the North American Datum 1983 (NAD 83), Washington State Plane, South Zone, U.S. feet. Measured geographical coordinates for station positions will be recorded and reported to the nearest 0.01 second. In addition, state plane coordinates will be reported to the nearest foot. The DGPS accuracy is less than 1 meter and generally less than 30 cm, depending on the satellite coverage and the number of data points collected.

The vertical elevation of each sediment station will be measured using a fathometer or lead line and converted to MLLW elevation. Tidal elevations will be determined based on published tide predictions from Tides and Currents software and confirmed using measured data from the National Oceanic and Atmospheric Administration's automated tide gauge station number 9446484, located in Commencement Bay in Tacoma, Washington. Vertical elevations of sampling stations will be converted to elevations in North American Vertical Datum of 1988, and a conversion table will be presented in the data report.

4.2.3 Subsurface Sediment Collection

Subsurface sediment cores will be collected from a sufficiently outfitted marine sampling vessel or in areas with limited access, such as under the pier, a remote floating platform will be used. Core samples will be collected using a vibracore advanced to 16 feet or refusal depth. Cores deployed from the remote platform will be advanced to a depth of 6 feet or refusal. Samples will be collected from target locations shown in Figure 5. Vibracore sediment samples will be collected in the following manner:

1. The vessel will maneuver to the proposed sample location.
2. A clean core tube 1 foot longer than the length of the desired penetration depth will be secured to the vibratory assembly and deployed from the vessel.
3. The cable umbilical to the vibrator assembly will be drawn taut and perpendicular while the core rests on the bottom sediment.
4. The location of the umbilical hoist will be measured and recorded by the location control personnel, and depth to sediment will be measured with a survey tape attached to the head assembly.

5. A 4-inch-diameter, thin-walled aluminum or polycarbonate tube will be driven into the sediment using two counter-rotating vibrating heads. The core tubes may be lined with low-density polyethylene liners to aid in core extraction from the tube.
6. A continuous core sample will be collected to the designated coring depth or until refusal.
7. The depth of core penetration will be measured and recorded.
8. The vibrator will be turned off, and the core barrel will be extracted from the sediment using the winch.
9. While suspended from the A-frame, the assembly and core barrel will be sprayed off and then placed on the vessel deck.
10. The length of recovered sediment will be recorded.

Cores will be evaluated to determine whether they meet acceptability requirements for the project. Acceptance criteria for sediment core samples are as follows:

- Overlying water is present and the surface is intact.
- The core tube appears intact without obstruction or blocking.
- Recovery is greater than 75% of the drive length.
- Penetration is deep enough to collect all target depth intervals.

If sample acceptance criteria are not achieved, the sample will be rejected unless modified acceptance criteria (i.e., lower percent recovery after multiple attempts) are approved by the FC in consultation with the PM. Up to three attempts will be made before abandoning the sample location and selecting a new location in coordination with the PM.

Anchor QEA personnel will record field conditions and drive notes on a standard core collection log (see Appendix A). Logs will include the following information:

- Water depth at each station using lead line or fathometer at point of sampling station
- Coordinates of each station as determined by DGPS
- Date and time of collection of each sediment core sample
- Names of field personnel collecting and handling the samples
- Observations made during sample collection, including weather conditions, complications, ship traffic, and other details associated with the sampling effort
- The sample station identification
- Length and depth intervals of each core section
- Percent recovery for each core sample
- Qualitative notation of apparent resistance of the sediment column to coring (how the core drove)
- Any deviation from the approved SQAPP

Once the core samples are deemed acceptable, the cutterhead will be removed, and a cap will be placed over the end of the tube and secured firmly in place with duct tape. The core tube will then be removed from the sampler, and the other end of the core will be capped and taped. The core tube will be labeled with permanent black pen and scribed with the location ID and an arrow pointing to the top of core. The cores may be cut into appropriate lengths for transport to the processing location and labeled appropriately. The cores will be sealed tightly enough to prevent leakage or disturbance during transport to the processing station. Cores will be transported daily to the processing area.

4.2.4 Subsurface Sediment Processing Methods

The vibracore processing station will be located in a covered, well-ventilated area within the Port property. Transported cores will be handled consistent with ASTM International (ASTM) procedures (ASTM D 4220) and stored upright and cool until processed. The core caps will be removed, and if a liner was used, the core will be extracted by pulling the liner and sediment free from the core tube. If no liner is used, the core will be cut longitudinally using a circular saw, metal shears, or similar. The core will be split into two halves for processing. Alternatively, a section can be cut longitudinally from the core and surface material scraped from the core prior to processing.

Prior to sampling, Anchor QEA field staff will take color photographs and record a sediment description of each core on a standard core processing log (Appendix A). The following parameters will be noted:

- Sample recovery length
- Physical soil description in accordance with ASTM procedures (ASTM D 2488 and ASTM D 2487—Unified Soil Classification System) including soil type, density/consistency of soil, and color
- Odor (e.g., hydrogen sulfide and petroleum)
- Visual stratification (including the horizon with native alluvium, if discernable), structure, and texture
- Vegetation and debris (e.g., wood chips or fibers, concrete and metal debris, paint chips, sand blast grit, slag, and creosote)
- Biological activity (e.g., detritus, shells, tubes, bioturbation, and live or dead organisms)
- Presence of oily sheen or non-aqueous phase liquids
- Contact with native material

Cores will be assumed to have uniform compaction through the core, and core recovery compaction correction will be applied. Cores will be processed in 2-foot intervals. Interval depths may be adjusted for lithology, apparent contamination, or other reasons, as determined by the FC. Intervals less than 6 inches in depth will be combined with the interval above or below, depending on depth and purpose. Intervals greater than 6 inches will be collected as discrete samples or combined with

adjacent intervals, depending on whether sufficient sample mass for analyses is available. Intervals will be limited to a maximum depth of 3 feet.

Samples for each interval will be placed in a decontaminated stainless-steel bowl, homogenized using a decontaminated stainless-steel mixing spoon until uniform in color and consistency, and then spooned into laboratory-supplied jars for analyses. Sample handling requirements are presented in Table 3. Subsurface sediment samples collected for chemical and physical analyses will be securely packed and delivered to Analytical Resources, LLC (ARL) or an equivalent U.S. Environmental Protection Agency (EPA)-accredited laboratory. Archived sample aliquots will be held at the laboratory in frozen storage for potential future chemical analyses and refrigerated for potential fish toxicity testing.

4.2.5 Archaeological Observations

Archaeological monitoring will be conducted during sampling activities. Monitoring will include examination of all available core segments above glacial levels. Notes and photographs will be taken for each sample. Notes will include color of sediment using a Munsell Soil color chart, type of sediment observed, cultural material description (if applicable), date, and monitoring conditions. Select core sediments will be water screened through 1/8-inch hardware cloth. If any core segments contain cultural materials, the segments and cultural materials will be retained for further examination by the archaeologist or designee.

4.3 Sample Handling Requirements

This section addresses the sampling program requirements for field decontamination, investigation-derived waste (IDW) management, sample custody, and sample shipping requirements.

4.3.1 Field Decontamination Procedures

Sample containers, instruments, working surfaces, and other items that may come into contact with sediment sample material must meet high standards of cleanliness. All equipment and instruments used that are in direct contact with sediment collected for analyses must be made of glass, stainless steel, high-density polyethylene, or polytetrafluoroethylene. These items will be cleaned prior to each day's use and between sampling or compositing events. Decontamination of all items will follow Puget Sound Estuary Program protocols (PSEP 1997). The decontamination procedure is as follows:

1. Scrub until free of visible sediment in tap water or Site water.
2. Wash with a solution of tap water and phosphate-free soap (e.g., Alconox) and scrub brush.
3. Rinse with tap water.
4. Rinse three times with distilled water.
5. Cover (no contact) all decontaminated items with aluminum foil.

6. Store in a clean, closed container. Bowls may be stored inverted on a clean, foil-covered surface for next use.

4.3.2 Investigation-Derived Waste Management

Any sediment spilled on the deck of the sampling vessel will be washed into the surface waters at the collection site. Sediment remaining after subsurface core processing (landside) is considered IDW and will be collected in 55-gallon drums. The drums will be stored in a secure area and appropriately labeled. A composite sample of IDW will be collected and analyzed for TCLP metals to obtain representative data for sediment disposal profiling.

All disposable sampling materials and personal protective equipment used in sample processing, such as disposable coveralls, gloves, and paper towels, will be placed in heavy-duty garbage bags or other appropriate containers. Disposable supplies will be placed in a normal refuse container on site for disposal as solid waste.

4.3.3 Sample Custody and Shipping Requirements

Samples are considered to be in one's custody if they are in the custodian's possession or view, in a secured location (under lock) with restricted access, or in a container that is secured with official seals such that the sample cannot be reached without breaking the seals.

Chain-of-custody procedures will be followed for all samples throughout the collection, handling, and analytical processes. The principal document used to track possession and transfer of samples is the chain-of-custody form. Each sample ID will be listed on an electronic or handwritten chain-of-custody form the day it is collected. All handwritten data entries will be made using an indelible ink pen. Corrections will be made by drawing a single line through the error, writing in the correct information, and then initialing the change. Blank lines and spaces on chain-of-custody forms will be lined-out, dated, and initialed by the individual maintaining custody.

A chain-of-custody form will accompany each shipment of samples to the analytical laboratory. Each person who has custody of the samples will ensure that the samples are not left unattended unless properly secured. Copies of all chain-of-custody forms will be retained in the project files.

All samples will be shipped or hand-delivered to the analytical laboratory no later than the day after collection. Samples collected on Friday may be held until the following Monday for shipment, provided this does not jeopardize any holding time requirements. Specific sample shipping procedures are as follows:

- Each cooler or container with samples will be hand-delivered, couriered, or shipped via overnight delivery to the appropriate analytical laboratory. If Saturday delivery is required, the FC or designee will contact the analytical laboratory before 3 p.m. on Friday to ensure the

laboratory is accepting sample deliveries and is aware of the number of containers shipped. The airbill tracking numbers for those containers will be provided to the laboratory.

- Ice will be sealed in separate plastic bags and placed in shipping containers. Ice may be kept in the bags provided and placed in the cooler if the samples will be couriered or hand-delivered.
- Individual samples will be placed in sealable plastic bags, packed to prevent breakage, and transported in a sealed cooler or other suitable container.
- Glass jars will be separated in the shipping container by shock absorbent material (e.g., bubble wrap) to prevent breakage.
- If samples are transferred using a commercial shipping company, the following procedures will be followed:
  - The shipping containers will be clearly labeled with sufficient information (name of project, laboratory name and shipping address, and consultant's name and return address) to enable positive identification.
  - Chain-of-custody forms will be enclosed in a plastic bag and placed inside the cooler.
  - A minimum of two signed and dated chain-of-custody seals will be placed on adjacent sides of each cooler prior to shipping.
  - Each cooler will be secured with packing tape.

Upon transfer of sample possession to the analytical laboratory, the persons transferring custody of the sample container will sign the chain-of-custody form. Upon receipt of samples at the laboratory, the person receiving the cooler will sign the chain-of-custody forms. The shipping container seals will be broken (if applicable), and the receiver will record the condition of the samples on a sample receipt form. Chain-of-custody forms will be used internally in the lab to track sample handling and final disposition.

4.4 Laboratory Methods

This section summarizes the target physical and chemical analyses that will be conducted on the samples collected. All sample analyses will be conducted in accordance with EPA-approved methods or other commonly acceptable methods and this SQAPP. Prior to analyses, all samples will be maintained according to the appropriate holding times and temperatures for each analysis (Table 3). Analytes, analytical methods, and target detection limits for chemical and physical testing are presented in Table 2. The analytical laboratory will prepare a detailed report in accordance with this SQAPP.

Prior to sample analyses, the laboratory will calculate method detection limits (MDLs) and establish reporting limits (RLs) for each analyte of interest, where applicable. RLs will be at or below the values specified in Table 2, if technically feasible.

Chemical/physical testing will be conducted at ARL in Tukwila, Washington. ARL is accredited under the National Environmental Laboratories Accreditation Program. All chemical and physical testing will adhere to the most recent EPA QA/QC procedures outlined in the approved analytical methods and in this SQAPP. The laboratory may use more current analytical methods if available.

In completing chemical analyses for this project, the contract laboratories are expected to meet the following minimum requirements:

- Adhere to the methods outlined in this SQAPP, including methods referenced for each analytical procedure (Table 2).
- Deliver electronic data as specified.
- Meet reporting requirements for deliverables.
- Meet agreed-upon turnaround times for deliverables.
- Implement QA/QC procedures discussed in this SQAPP, including following Data Quality Objectives (DQOs), laboratory quality control requirements, and performance evaluation testing requirements.
- Notify the project QA manager of any SQAPP QA/QC problems when they are identified to allow for quick resolution.
- Allow laboratory and data audits to be performed, if deemed necessary.

5 Quality Assurance/Quality Control

Field and laboratory activities will be conducted in such a manner that the results meet specified quality objectives and are fully defensible. Guidance for QA/QC is derived from the protocols developed for EPA SW-846 (1986), the EPA Contract Laboratory Program (EPA 2020a, 2020b, 2020c), and the cited methods.

5.1 Field Quality Control

Anchor QEA personnel will identify and label samples in a consistent manner to ensure that field samples are traceable. Labels should be used in conjunction with the chain-of-custody and this SQAPP to provide all information necessary for the laboratory to conduct required analyses properly. QA samples will be collected in the field to ensure project DQOs are met. Samples will be placed in appropriate containers and preserved for shipment to the laboratory in accordance with the requirements presented in Table 3.

5.2 Field Quality Assurance and Quality Control Sampling

Field QA/QC procedures will consist of following procedures for acceptable practices for sample collection and handling. This also includes periodic and routine equipment inspection.

Field QA/QC samples will be collected along with the environmental samples. Field QA/QC samples are useful in identifying possible problems resulting from sample collection or sample processing in the field. The collection of field QA/QC samples includes equipment rinsate blanks and field duplicates as specified in Table 4. Rinsate blanks will be collected at a frequency of one per event and evaluated during data validation. Field duplicates will be collected at a frequency of 1 per 20 samples collected, provided sufficient sample mass can be collected. Field duplicates will be collected by collecting extra material from the core, homogenizing until uniform in color and texture, and dividing the sample between two sets of jars to create two discrete samples.

Field QA/QC samples will also include the collection of additional sample mass as required to ensure that the laboratory has sufficient sample mass or volume to run the matrix-specified analytical QA/QC (matrix duplicate [MD]/matrix spike [MS]/MS duplicate [MSD]) samples for analyses as specified in Table 4. Additional sample mass to meet this requirement will be collected at a frequency of 1 per 20 samples collected. The samples designated for MD/MS/MSD analyses should be clearly marked on the chain-of-custody forms.

All field QA/QC samples will be documented on the field forms and verified by the QA/QC manager or designee.

5.2.1 Sample Containers

Sample containers and preservatives will be provided by the laboratory. The laboratory will maintain documentation certifying the cleanliness of bottles and the purity of preservatives provided. Container requirements are listed in Table 3.

5.2.2 Sample Identification and Labels

Each sample will have an adhesive plastic or waterproof paper label affixed to the container and will be labeled at the time of collection. The following information will be recorded on the container label at the time of collection:

- Company name
- Project name
- Sample identification
- Date and time of sample collection
- Preservative type (if applicable)
- Analysis to be performed

5.3 Data Quality Objectives and Criteria

The DQOs for this project will ensure that data collected are of known and acceptable quality so that the project objectives described in this SQAPP are achieved. The quality of the laboratory data is assessed by precision, accuracy, representativeness, comparability, and completeness (the "PARCC" parameters). Definitions of these parameters and the applicable quality control procedures are given below. Applicable quantitative goals for these data quality parameters are listed or referenced in Table 5.

5.3.1 Precision

Precision is the ability of an analytical method or instrument to reproduce its own measurement. It is a measure of the variability, or random error, in sample collection, sample handling, and laboratory analyses. ASTM recognizes two levels of precision (ASTM 2002):

- Repeatability: the random error associated with measurements made by a single test operator on identical aliquots of test material in a given laboratory with the same apparatus under constant operating conditions
- Reproducibility: the random error associated with measurements made by different test operators in different laboratories using the same method but different equipment to analyze identical samples of test material

In the laboratory, "within-batch" precision is measured using duplicate sample or quality control analyses and is expressed as the relative percent difference (RPD) between the measurements. The

"batch-to-batch" precision is determined from the variance observed in the analyses of standard solutions or laboratory control samples from multiple analytical batches.

Field precision will be evaluated by the collection of field duplicates for chemistry samples at a frequency of 1 in 20 samples. Field chemistry duplicate precision will be screened against an RPD of 50%, as listed in Table 5. Laboratory precision control limits are also listed in Table 5 for each analysis. Equation 1 shows the RPD equation used to express precision:

Equation 1

$$RPD = \frac{(C_1 - C_2)x\ 100\%}{(C_1 + C_2)/2}$$

where:

RPD	=	relative percent difference
C_1	=	larger of the two observed values
C_2	=	smaller of the two observed values

Precision measurements can be affected by the nearness of a chemical concentration to the MDL, where the percent error (expressed as RPD) increases. Parent and field duplicate results that are less than five times reporting limits will be evaluated by using the difference between results using a control limit of ± 2x RL.

5.3.2 Accuracy

Accuracy is a measure of the closeness of an individual measurement (or an average of multiple measurements) to the true or expected value. Accuracy is determined by calculating the value of results from analyses of laboratory control samples, standard reference materials, and standard solutions. In addition, matrix-spiked samples are also measured, which indicate the accuracy or bias in the actual sample matrix. Accuracy is expressed as percent recovery of the measured value, relative to the true or expected value. If a measurement process produces results that are not the true or expected values, the process is said to be biased. Bias is the systematic error either inherent in a method of analysis (e.g., extraction efficiencies) or caused by an artifact of the measurement system (e.g., contamination). Analytical laboratories use several quality control measures to eliminate analytical bias, including systematic analysis of method blanks, laboratory control samples, and independent calibration verification standards. Because bias can be positive or negative, and because several types of bias can occur simultaneously, only the net, or total, bias can be evaluated in a measurement.

Laboratory accuracy will be evaluated using quantitative laboratory control sample, MS, surrogate spike, and calibration standard recoveries compared with criteria listed in Table 5 or the method-specified performance criteria. Accuracy can be expressed as a concentration compared to the true or reference value, or as a percent recovery in those analyses where reference materials are not available and spiked samples are analyzed. Equation 2 shows the equation used to express accuracy:

Equation 2

$$\%R = 100\% \; x \; (S - U)/Csa$$

where:

$\%R$	=	percent recovery
S	=	measured concentration in the spiked aliquot
U	=	measured concentration in the unspiked aliquot
Csa	=	actual concentration of spike added

Field accuracy will be controlled by adherence to sample collection procedures outlined in this SQAPP.

5.3.3 Representativeness

Representativeness expresses the degree to which data accurately and precisely represent an environmental condition.

5.3.4 Comparability

Comparability expresses the confidence with which one dataset can be evaluated in relation to another dataset. For this program, comparability of data will be established through the use of standard analytical methodologies and reporting formats and through common traceable calibration standards and reference materials.

5.3.5 Completeness

Completeness is a measure of the amount of data that is determined to be valid in proportion to the amount of data collected. Completeness will be calculated using Equation 3:

Equation 3

$$C = \frac{(Number\ of\ acceptable\ data\ points)x\ 100}{Total\ number\ of\ data\ points}$$

The DQO for completeness for all components of this project is 95%. Data that have been qualified as estimated because the quality control criteria were not met will be considered valid for the purpose of assessing completeness. Data that have been rejected will not be considered valid for the purpose of assessing completeness.

5.3.6 Sensitivity

Sensitivity is a measure of analytical detection and RLs. In general, the lowest technologically achievable MDLs and RLs will be targeted for this project, and high-resolution method data will be reported to estimated detection limits (EDLs).

The MDL is defined as the minimum concentration at which a given target analyte can be measured and reported with 99% confidence that the analyte concentration is greater than zero. Laboratory RLs are defined as the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. EDLs are defined as the minimum concentration required to produce a signal with a peak height or area at least 2.5 times the background or noise level. EDLs are sample- and analyte-specific and calculated at the time of analysis, so they cannot be determined ahead of time. Laboratory MDLs, RLs, and EDLs will be used to evaluate the method sensitivity and applicability prior to the acceptance of a method for this program. Method blanks will be analyzed to ensure target analytes are not introduced during sample preparation or analysis that would affect analytical sensitivities.

The sample-specific MDLs, RLs, and EDLs will be reported by the laboratory and will take into account any factors relating to the sample analysis that might decrease or increase these limits (e.g., dilution factor, percent moisture, and analytical mass). If MDLs, RLs, or EDLs are elevated due to matrix interferences and subsequent dilutions or reductions in sample aliquots, the data will be evaluated by Anchor QEA and the laboratory to determine whether an alternative course of action is required or possible. The sample-specific MDLs, RLs, and EDLs will be the values stored in the project database.

5.4 Laboratory Quality Control

Laboratory QC procedures, where applicable, include instrument performance checks, initial and continuing instrument calibrations, standard reference materials, laboratory control samples, surrogate spikes (for organic analyses), labeled compound spikes (for high-resolution analyses), and method blanks. Sample-specific matrix laboratory control analyses include matrix replicates and MSs. Laboratory quantitative DQOs are listed in Table 5. QA/QC sample analytical frequencies are provided in Table 4.

The analyst will review the results of the quality control samples from each sample group immediately after a sample group has been analyzed. The quality control sample results will be evaluated to determine whether control limits have been exceeded. Samples will be reprepared and

re-analyzed to correct or confirm exceedances. If non-matrix QC control limits are exceeded after they have been confirmed, the QA manager will be contacted, and corrective action (e.g., method modifications followed by reprocessing the affected samples) will be discussed and implemented as determined to be necessary.

5.4.1 Laboratory Instrument Calibration and Frequency

An initial calibration will be performed on each laboratory instrument to be used prior to the start of the project, after each major interruption to the analytical instrument, and when ongoing calibration does not meet method control criteria. An initial calibration verification will be analyzed following each initial calibration and will meet method criteria prior to analyses of samples. Continuing calibration verifications (CCV) will be analyzed at method-required frequencies to track instrument performance. The frequency of CCVs varies with method. For gas chromatography (GC)/mass spectrometer methods, one will be analyzed every 12 hours. For GC, metals, and inorganic methods, one will be analyzed for every 10 field samples analyzed and at the end of each run, or as specified in the method. If a continuing calibration is out of control, the source of the control failure will be investigated and eliminated or reduced to meet control specifications, which may include analyzing a new initial calibration. Any project samples analyzed while the instrument calibration was out of control will be re-analyzed.

Instrument blanks or continuing calibration blanks provide information on the stability of the baseline established. Continuing calibration blanks will be analyzed immediately prior to or immediately following CCVs at the instrument for each type of applicable analysis.

5.4.2 Laboratory Duplicates/Replicates

Analytical duplicates provide information on the precision of the analysis and are useful in assessing potential sample heterogeneity and matrix effects. Analytical duplicates and replicates are subsamples of the original sample that are prepared and analyzed as a separate sample.

5.4.3 Matrix Spikes and Matrix Spike Duplicates

Analyses of MS samples provide information on the extraction efficiency of the method on the sample matrix as well as any interferences introduced by the sample matrix. By analyzing MS samples in duplicate, precision data are also provided.

5.4.4 Method Blanks

Method blanks are prepared and analyzed in the same manner as project samples to assess possible laboratory contamination at all stages of sample preparation and analyses. The method blank for all analyses must be less than the method reporting limit of any single target analyte. If a laboratory method blank exceeds this criterion for any analyte, and the concentration of the analyte in any of

the samples is less than five times the concentration found in the blank (10 times for common contaminants), analyses must stop, and the source of contamination must be eliminated or reduced. Affected samples should be reprepared and re-analyzed, if possible.

5.4.5 Laboratory Control Samples

Laboratory control samples are analyzed to assess possible laboratory bias at all stages of sample preparation and analysis. The laboratory control sample is a matrix-dependent spiked sample prepared at the time of sample preparation along with the preparation of the sample, MD, MS, and method blank. The laboratory control sample will provide information on the accuracy of the analytical process and, when analyzed in duplicate, will also provide precision data.

5.4.6 Laboratory Deliverables

Data packages will be checked for completeness immediately upon receipt from the laboratory to ensure that data and QA/QC information requested are present. The analytical laboratory will be required, where applicable, to report the following:

- **Project Narrative**. This summary will include a discussion of any problems encountered during analyses. This summary should include (but not be limited to) QA/QC, sample receipt, sample storage, and analytical difficulties. Any problems encountered and their resolutions will be documented in as much detail as appropriate.
- **Chain-of-Custody Records**. Legible copies of the chain-of-custody forms will be provided as part of the data packages. This documentation will include the time of receipt and condition of the samples received by the laboratory. Additional internal tracking of sample custody by the laboratory will also be documented on a sample receipt form. The form must include sample shipping container temperatures measured at the time of sample receipt.
- **Sample Results**. Data packages will provide results for each sample analyzed. The summary will include the following information when applicable:
  - Field sample identification code and the corresponding laboratory identification code
  - Sample matrix
  - Date of sample preparation/extraction
  - Date and time of analysis
  - Mass or volume used for preparation and analysis
  - Final dilution or concentration factors
  - Identification of the instrument used for analysis
  - MDLs, RLs, and/or EDLs accounting for sample-specific factors (e.g., dilution and total solids)
  - Analytical results with reporting units
  - Data qualifiers and their definitions

- **QA/QC Summaries**. This section will contain the results of the laboratory QA/QC procedures. Each QA/QC sample analysis will be documented with the same information required for the sample results. No recovery or blank corrections will be made by the laboratory. The required summaries are as follows (additional information may be requested):
  - **Instrument Performance Checks**. Injection times, ion abundances, and mass resolution checks will be reported and compared to method criteria. Associated samples and analysis times will also be reported.
  - **Calibration Data Summary**. These summaries will report the concentrations of the initial calibration and continuing calibration standards and the date and time of analyses. The response factor, percent relative standard deviation, percent drift/difference, percent recovery, and retention time for each analyte will be listed, as appropriate. Calibration results for standards will be documented to indicate instrument sensitivity.
  - **Internal Standard Area Summary**. Internal standard areas will be reported and evaluated against method criteria.
  - **Method Blank Analysis**. The method blank analysis associated with each sample and the concentration of all target analytes identified in these blanks will be reported.
  - **Surrogate and Labeled Compound Spike Recoveries**. All surrogate spike recoveries for organic analyses will be reported. The name and concentration of all compounds added, percent recoveries, and range of acceptable recoveries will be provided.
  - **MS Recovery**. MS recovery data for all applicable analyses will be reported. The names and concentrations of analytes added, percent recoveries, and range of acceptable recoveries will be listed. The percent recoveries and RPD values for MSD analyses will be reported.
  - **Matrix Duplicates**. The RPD values for MD analyses will be reported.
  - **Laboratory Control Sample**. Laboratory control sample recovery data will be reported. The names and concentrations of analytes added, percent recoveries, and range of acceptable recoveries will be included. The percent recoveries and RPD values for laboratory control sample duplicate analyses will be included.
- **Original Data**. Legible copies of the original data generated by the laboratory will include the following information:
  - Sample extraction, preparation, and cleanup logs, including methods used
  - Instrument analysis logs for all instruments used on days of calibration and sample analyses
  - Calculation worksheets as applicable
  - Ion chromatograms for all samples, standards, blanks, calibrations, spikes, replicates, and reference materials, as applicable

  - Copies of full scan chromatograms and quantitation reports for GC/mass spectrometer analyses of samples, standards, blanks, calibrations, spikes, replicates, and reference materials
  - Enhanced spectra of detected compounds with associated best-match spectra for each sample
- **Electronic Data Deliverable**. An electronic data deliverable will be provided in the Anchor QEA custom EQuIS format specified in advance.

5.5 Instrument/Equipment Testing, Inspection, and Maintenance Requirements

This section describes procedures for testing, inspection, and maintenance of field and laboratory equipment.

5.5.1 Field Instruments/Equipment

In accordance with the QA program, Anchor QEA shall maintain an inventory of field instruments and equipment. The frequency and types of maintenance will be based on the manufacturer's recommendations and previous experience with the equipment.

The Anchor QEA FC will be responsible for the preparation, documentation, and implementation of the preventative maintenance program. The equipment maintenance information will be documented in the instrument's calibration log. The frequency of maintenance is dependent on the type and stability of the equipment, the methods used, the intended use of the equipment, and the recommendations of the manufacturer. Detailed information regarding the calibration and frequency of equipment calibration is provided in each specific manufacturer's instruction manuals.

All maintenance records will be verified prior to each sampling event. The FC will be responsible for verifying that required maintenance has been performed prior to using the equipment in the field. For this project, maintenance inspections will include the following activities:

- The subcontractor responsible for navigation will confirm proper operation of the navigation equipment daily. This verification may consist of internal diagnostics or visiting a location with known coordinates to confirm the coordinates indicated by the navigation system.
- The winch line and vibracorer will be inspected daily for fraying, misalignment, loose connections, and any other applicable mechanical problems.

Any problems will be noted in the field logbook and corrected prior to continuing sampling operations.

5.5.2 Laboratory Instruments/Equipment

In accordance with the QA program, the laboratory shall maintain an inventory of instruments and equipment, and the frequency of maintenance will be based on the manufacturer's recommendations and previous experience with the equipment.

The laboratory preventative maintenance program, as detailed in the laboratory QA Plan, is organized to maintain proper instrument and equipment performance and to prevent instrument and equipment failure during use. The program considers instrumentation, equipment, and parts that are subject to wear, deterioration, or other changes in operational characteristics, the availability of spare parts, and the frequency at which maintenance is required. Any equipment that has been overloaded, mishandled, gives suspect results, or has been determined to be defective will be taken out of service, tagged with the discrepancy noted, and stored in a designated area until the equipment has been repaired. After repair, the equipment will be tested to ensure that it is in proper operational condition. The client will be promptly notified in writing if defective equipment casts doubt on the validity of analytical data. The client will also be notified immediately regarding any delays due to instrument malfunctions that could impact holding times or turnaround times.

Laboratories will be responsible for the preparation, documentation, and implementation of the preventative maintenance program. Maintenance records will be checked according to the schedule on an annual basis and recorded by laboratory personnel. The laboratory QA/QC manager or designee shall be responsible for verifying compliance.

5.5.2.1 Laboratory Instrument/Equipment Calibration

As part of their quality control program, laboratories perform two types of calibrations. A periodic calibration is performed at prescribed intervals (e.g., balances, drying ovens, refrigerators, and thermometers), and operational calibrations are performed daily at a specified frequency or prior to analysis (i.e., initial calibrations) according to method requirements. Calibration procedures and frequency are discussed in the laboratory QA Plan. Calibrations are discussed in the laboratory standard operating procedures (SOPs) for analyses.

The laboratory QA/QC manager will be responsible for ensuring that the laboratory instrumentation is calibrated in accordance with specifications. Implementation of the calibration program will be the responsibility of the respective laboratory Group Supervisors. Recognized procedures (EPA, ASTM, or manufacturer's instructions) will be used when available.

Physical standards (i.e., weights or certified thermometers) will be traceable to nationally recognized standards such as the National Institute of Standards and Technology (NIST). Chemical reference standards will be NIST standard reference materials or vendor-certified materials traceable to these standards.

The calibration requirements for each method and respective corrective actions will be accessible either in the laboratory SOPs or in the laboratory's QA Plan for each instrument or analytical method in use. All calibrations will be preserved on electronic media.

5.6 Inspection/Acceptance of Supplies and Consumables

Inspection and acceptance of field supplies, including laboratory-supplied sampling bottles, will be performed by the FC. All primary chemical standards and standard solutions used for this project, either in the field or laboratory, will be traceable to documented, reliable commercial sources. Standards will be validated to determine their accuracy by comparison with an independent standard. Any impurities found in the standard will be documented.

5.7 Data Management

Field data sheets will be checked for completeness and accuracy by the FC prior to delivery to the data manager. Data generated in the field will be documented on electronic or hard copy and provided to the data manager, who is responsible for the data entry into the database. All manually entered data will be verified by a second party. Field documentation will be filed in the main project folder after data entry and verification are complete.

Laboratory data will be provided to the data manager in the EQuIS electronic format. Laboratory data that is electronically provided and loaded into the database will undergo a check against laboratory hard copy data. Data will be validated or reviewed manually, and qualifiers, if assigned, will be entered manually. The accuracy of all manually entered data will be verified. Data tables and reports will be exported from EQuIS to Microsoft Excel tables.

6 Assessments and Response Actions

Once data are received from the laboratory, several quality control procedures will be followed to provide an accurate evaluation of data quality. Specific procedures will be followed to assess data precision, accuracy, and completeness.

6.1 Compliance Assessments

Laboratory and field performance audits consist of on-site reviews of QA systems and equipment for sampling, calibration, and measurement. Laboratory audits will not be conducted as part of this study. However, all laboratory audit reports will be made available to the project QA/QC manager upon request. The laboratory is required to have written procedures addressing internal QA/QC. These procedures have been submitted, and the project QA/QC manager will review them to ensure compliance with this SQAPP. The laboratory must ensure that personnel engaged in analytical tasks have appropriate and sufficient training. The laboratory will provide written details of any method modifications planned prior to project commencement.

6.2 Response and Corrective Actions

The following paragraphs identify the responsibilities of key project team members and actions to be taken in the event of an error, problem, or non-conformance of protocols identified in this document.

6.2.1 Field Activities

The FC will be responsible for correcting equipment malfunctions during the field sampling effort. The project QA/QC manager will be responsible for resolving situations identified by the FC that may result in non-compliance with this SQAPP. All corrective measures will be immediately documented in the field logbook.

6.2.2 Laboratory

The laboratory is required to comply with its SOPs. The laboratory PM will be responsible for ensuring that appropriate corrective actions are initiated as required for conformance with this SQAPP. All laboratory personnel will be responsible for reporting problems that may compromise the quality of the data.

The laboratory PM will be notified if any quality control sample exceeds the project-specified control limits and corrective action does not improve results. The analyst will identify and correct the anomaly before continuing with sample analyses. If the laboratory internal corrective action does not resolve the non-conformance, the laboratory PM will notify the QA/QC manager. A narrative describing the anomaly, the steps taken to identify and correct the anomaly, and the treatment of

the relevant sample batch (i.e., recalculation, re-analysis, and repreparation) will be submitted with the data package in the form of a cover letter.

6.3 Reports to Management

QA reports to management include verbal status reports, data validation reports, and final project reports. These reports shall be the responsibility of the QA/QC manager.

7 Data Validation, Usability, and Reporting

This section describes the processes that will be used to review project data quality.

7.1 Data Review, Validation, and Verification

During the validation process, analytical data will be evaluated for project, method, and laboratory quality control compliance, and their validity and applicability for program purposes will be determined. Based on the findings of the validation process, data validation qualifiers may be assigned. The validated project data, including qualifiers, will be entered into the project database, and all exports generated will include validation qualifiers.

7.2 Validation and Verification Methods

Data validation includes signed entries by the field and laboratory technicians on field data sheets and laboratory datasheets, respectively; review for completeness and accuracy by the FC and laboratory manager; review by the QA manager for outliers and omissions; and the use of quality control criteria to accept or reject specific data. All data will be entered into the EQuIS database and verified manually and electronically. A second data manager or designee will perform a cursory verification of the database raw data file. If errors are found, further verification will be performed to ensure that all data are accurate. Any errors found will be corrected in the database, and the laboratory will be notified of the errors.

All laboratory data will be reviewed and verified to determine whether DQOs have been met and that appropriate corrective actions have been taken when necessary. The project QA/QC manager or designee will be responsible for the final review of data generated from analyses of samples.

The first level of review will take place in the laboratory as the data are generated. The laboratory department manager or designee will be responsible for ensuring that the data generated meet minimum QA/QC requirements and that the instruments were operating under acceptable conditions during generation of data. DQOs will also be assessed at this point by comparing the results of quality control measurements with pre-established criteria as a measure of data acceptability.

The analysts or laboratory department manager will prepare a preliminary quality control checklist for each parameter and for each sample delivery group as soon as analysis of a sample batch has been completed. Any deviations from the DQOs listed on the checklist will be brought to the attention of the laboratory PM to determine whether corrective action is needed and to determine the impact on the reporting schedule.

Data packages will be checked for completeness upon receipt from the laboratory to ensure that data and QA/QC information requested are present. Stage 2B validations (EPA 2009) will be

conducted on all data packages. Data validation will be conducted by a reviewer using current National Functional Guidelines for Data Review (EPA 2020a, 2020b, 2020c), the analytical methods, this SQAPP, and best professional judgment by considering the following information, as applicable:

- Chain-of-custody documentation and sample receipt condition
- Holding times
- Instrument performance checks
- Initial calibrations
- Continuing calibrations
- Method blanks
- Surrogate recoveries
- Internal standard area counts
- Labeled compound recoveries
- Detection limits
- RLs
- Laboratory control samples
- MS/MSD samples
- Field and laboratory duplicates
- Rinsate blanks
- Standard reference material results

The data will be validated in accordance with the project-specific DQOs described previously and listed in Table 5, analytical method criteria, and the laboratory's internal performance standards based on their SOPs.

7.3 Reconciliation with User Requirements

The QA/QC manager will review data after each event to determine whether DQOs have been met. If data do not meet the project's specifications, the QA/QC manager will review the errors and determine whether the problem is due to calibration, maintenance, sampling techniques, or other factors and will suggest corrective action. Retraining, revision of techniques, or replacement of supplies/equipment should correct the problem; if not, the DQOs will be reviewed for feasibility. If specific DQOs are not achievable, the QA/QC manager will recommend appropriate modifications.

7.4 Data Summary Report

Anchor QEA will prepare a data summary report. The report will include the following:

- Site background and project objectives
- A summary of field activities
- Deviations from this SQAPP

- A summary of analytical results as compared to SMS and Dredged Material Management Program criteria (DMMP 2021)
- A summary of field and laboratory QA/QC findings
- A figure showing actual sampling locations
- Data results tables, which will include:
  - Coordinates for all sampling locations. All geographical coordinates submitted will be in the Washington State Plane South NAD 83, U.S. feet
  - Chemical, physical, and conventional results compared to applicable regulatory criteria
- Copies of laboratory data packages included as appendices or attachments
- Copies of field logs included as appendices or attachments
- Copies of validation reports and findings

All Tru-Grit analytical data will also be entered into the Environmental Information Management database.

8 References

Anchor QEA, 2019. *Sediment Characterization Data Report*. Dredged Material Characterization – Tacoma Harbor Deepening Study. Prepared for Northwest Seaport Alliance. April 2019.

ASTM (ASTM International), 2002. *Standard Practices for Use of the Term Precision and Bias in ASTM Test Methods*. 177-90a. ASTM International.

DMMP (Dredged Material Management Program), 2021. *Dredged Material Evaluation and Disposal Procedures User Manual*. Prepared by the Dredged Material Management Office, U.S. Army Corps of Engineers, Seattle District. July 2021.

Ecology (Washington State Department of Ecology), 2012. Agreed Order No. DE-8978. May 2012.

Ecology, 2021a. *Sediment Cleanup User's Manual (SCUM): Guidance for Implementing the Cleanup Provisions of the Sediment Management Standards*, *Chapter 173–204 WAC*. Third Revision. Pub. No. 12-09-057. Toxics Cleanup Program, Washington State Department of Ecology, Olympia, Washington. December 2021.

Ecology, 2021b. Biological Testing Methods 80-12 for the Designation of Dangerous Waste. Static Acute Fish Toxicity Test. Publication 80-12. Hazardous Waste and Toxics Reduction Program, Washington State Department of Ecology, Olympia, Washington. Revised March 2024.

EPA (U.S. Environmental Protection Agency), 2009. *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use*. U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response. USEPA 540-R-08-005. January 2009.

EPA, 2020a. *National Functional Guidelines for Organic Superfund Methods Data Review*. Office of Superfund Remediation and Technology Innovation. U.S. Environmental Protection Agency. EPA-540-R-20-005. November 2020.

EPA, 2020b. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. Office of Superfund Remediation and Technology Innovation. U.S. Environmental Protection Agency. EPA-542-R-20-006. November 2020.

EPA, 2020c. *National Functional Guidelines for High Resolution Superfund Methods Data Review*. Office of Superfund Remediation and Technology Innovation. U.S. Environmental Protection Agency. EPA-542-R-20-007. November 2020.

Landau (Landau Associates, Inc.), 2009. *Tru-Grit Facility Sediment Sampling and Analysis Results, Tacoma, Washington*. July 2009.

Landau, 2019. *Agency Review Draft Feasibility Study, Tru-Grit Facility, Tacoma, Washington*. Prepared for CanAm Minerals, Inc. December 2019.

Landau, 2021. *Remedial Investigation Report, Tru-Grit Abrasives, Inc.* Prepared for CanAm Minerals, Inc. December 2021.

PSEP (Puget Sound Estuary Program), 1997. *Recommended Guidelines for Measuring Organic Compounds in Puget Sound Water, Sediment, and Tissue Samples*. Final Report. Prepared for the U.S. Environmental Protection Agency.

Tetra Tech, 1985. *Commencement Bay Near-Shore/Tideflats Remedial Investigation*. Final Report. Prepared for the Washington State Department of Ecology and U.S. Environmental Protection Agency. August 1985.

Tables

Table 1
Sample Locations, Coordinates, Intervals, and Analyses Summary

Location/Purpose	Location ID	Station Coordinates (Washington SP NAD 83 South Zone) Easting (feet)	Station Coordinates (Washington SP NAD 83 South Zone) Northing (feet)	Mudline Elevation (feet MLLW)	Sample[1] Upper Depth (feet)	Sample[1] Lower Depth (feet)	Sample ID[1]	Analyses[2,3]
Tier 1 Testing								
Upper Slope	TG-SC01	1168411.4	712815.4	2.9*, **	00	02	TG-SC01-00-02-YYMMDD	Metals, archive
					02	04	TG-SC01-02-04-YYMMDD	Metals, archive
					04	06	TG-SC01-04-06-YYMMDD	Metals, archive
					06	08	TG-SC01-06-08-YYMMDD	Metals, archive
					08	10	TG-SC01-08-10-YYMMDD	Metals, archive
					10	12	TG-SC01-10-12-YYMMDD	Metals, archive
					12	14	TG-SC01-12-14-YYMMDD	Archive
					14	16	TG-SC01-14-16-YYMMDD	Archive
	TG-SC02	1168503.4	712727.1	-3.6	00	02	TG-SC02-00-02-YYMMDD	Metals, archive
					02	04	TG-SC02-02-04-YYMMDD	Metals, archive
					04	06	TG-SC02-04-06-YYMMDD	Metals, archive
					06	08	TG-SC02-06-08-YYMMDD	Metals, archive
					08	10	TG-SC02-08-10-YYMMDD	Metals, archive
					10	12	TG-SC02-10-12-YYMMDD	Metals, archive
					12	14	TG-SC02-12-14-YYMMDD	Archive
					14	16	TG-SC02-14-16-YYMMDD	Archive
	TG-SC03	1168595.4	712638.8	-2.1	00	02	TG-SC03-00-02-YYMMDD	Metals, archive
					02	04	TG-SC03-02-04-YYMMDD	Metals, archive
					04	06	TG-SC03-04-06-YYMMDD	Metals, archive
					06	08	TG-SC03-06-08-YYMMDD	Metals, archive
					08	10	TG-SC03-08-10-YYMMDD	Metals, archive
					10	12	TG-SC03-10-12-YYMMDD	Metals, archive
					12	14	TG-SC03-12-14-YYMMDD	Archive
					14	16	TG-SC03-14-16-YYMMDD	Archive
	TG-SC04	1168687.4	712550.4	-0.9	00	02	TG-SC04-00-02-YYMMDD	Metals, archive
					02	04	TG-SC04-02-04-YYMMDD	Metals, archive
					04	06	TG-SC04-04-06-YYMMDD	Metals, archive
	TG-SC05	1168779.4	712462.1	-0.4**	00	02	TG-SC05-00-02-YYMMDD	Metals, archive
					02	04	TG-SC05-02-04-YYMMDD	Metals, archive
					04	06	TG-SC05-04-06-YYMMDD	Metals, archive
					06	08	TG-SC05-06-08-YYMMDD	Metals, archive
					08	10	TG-SC05-08-10-YYMMDD	Metals, archive
					10	12	TG-SC05-10-12-YYMMDD	Metals, archive
					12	14	TG-SC05-12-14-YYMMDD	Archive
					14	16	TG-SC05-14-16-YYMMDD	Archive
	TG-SC06	1168871.4	712373.8	-9.8	00	02	TG-SC06-00-02-YYMMDD	Metals, archive
					02	04	TG-SC06-02-04-YYMMDD	Metals, archive
					04	06	TG-SC06-04-06-YYMMDD	Metals, archive
					06	08	TG-SC06-06-08-YYMMDD	Metals, archive
					08	10	TG-SC06-08-10-YYMMDD	Metals, archive
					10	12	TG-SC06-10-12-YYMMDD	Metals, archive
					12	14	TG-SC06-12-14-YYMMDD	Archive
					14	16	TG-SC06-14-16-YYMMDD	Archive
	TG-SC07	1168369.5	712771.7	-12.4	00	02	TG-SC07-00-02-YYMMDD	Metals, archive
					02	04	TG-SC07-02-04-YYMMDD	Metals, archive
					04	06	TG-SC07-04-06-YYMMDD	Metals, archive
					06	08	TG-SC07-06-08-YYMMDD	Metals, archive
					08	10	TG-SC07-08-10-YYMMDD	Metals, archive
					10	12	TG-SC07-10-12-YYMMDD	Metals, archive
					12	14	TG-SC07-12-14-YYMMDD	Archive
					14	16	TG-SC07-14-16-YYMMDD	Archive
	TG-SC08	1168461.5	712683.4	-26.0	00	02	TG-SC08-00-02-YYMMDD	Metals, archive
					02	04	TG-SC08-02-04-YYMMDD	Metals, archive
					04	06	TG-SC08-04-06-YYMMDD	Metals, archive
					06	08	TG-SC08-06-08-YYMMDD	Metals, archive
					08	10	TG-SC08-08-10-YYMMDD	Metals, archive
					10	12	TG-SC08-10-12-YYMMDD	Metals, archive
					12	14	TG-SC08-12-14-YYMMDD	Archive
					14	16	TG-SC08-14-16-YYMMDD	Archive
	TG-SC09	1168553.5	712595.1	-26.7	00	02	TG-SC09-00-02-YYMMDD	Metals, archive
					02	04	TG-SC09-02-04-YYMMDD	Metals, archive
					04	06	TG-SC09-04-06-YYMMDD	Metals, archive
					06	08	TG-SC09-06-08-YYMMDD	Metals, archive
					08	10	TG-SC09-08-10-YYMMDD	Metals, archive
					10	12	TG-SC09-10-12-YYMMDD	Metals, archive
					12	14	TG-SC09-12-14-YYMMDD	Archive
					14	16	TG-SC09-14-16-YYMMDD	Archive

Table 1
Sample Locations, Coordinates, Intervals, and Analyses Summary

Location/Purpose	Location ID	Station Coordinates (Washington SP NAD 83 South Zone)		Mudline Elevation (feet MLLW)	Sample[1] Upper Depth (feet)	Sample[1] Lower Depth (feet)	Sample ID[1]	Analyses[2,3]
		Easting (feet)	Northing (feet)					
Upper Slope	TG-SC10	1168645.5	712506.7	-22.6	00	02	TG-SC10-00-02-YYMMDD	Metals, archive
					02	04	TG-SC10-02-04-YYMMDD	Metals, archive
					04	06	TG-SC10-04-06-YYMMDD	Metals, archive
					06	08	TG-SC10-06-08-YYMMDD	Metals, archive
					08	10	TG-SC10-08-10-YYMMDD	Metals, archive
					10	12	TG-SC10-10-12-YYMMDD	Metals, archive
					12	14	TG-SC10-12-14-YYMMDD	Archive
					14	16	TG-SC10-14-16-YYMMDD	Archive
	TG-SC11	1168737.5	712418.4	-19.1	00	02	TG-SC11-00-02-YYMMDD	Metals, archive
					02	04	TG-SC11-02-04-YYMMDD	Metals, archive
					04	06	TG-SC11-04-06-YYMMDD	Metals, archive
					06	08	TG-SC11-06-08-YYMMDD	Metals, archive
					08	10	TG-SC11-08-10-YYMMDD	Metals, archive
					10	12	TG-SC11-10-12-YYMMDD	Metals, archive
					12	14	TG-SC11-12-14-YYMMDD	Archive
					14	16	TG-SC11-14-16-YYMMDD	Archive
	TG-SC12	1168829.5	712330.1	-20.2	00	02	TG-SC12-00-02-YYMMDD	Metals, archive
					02	04	TG-SC12-02-04-YYMMDD	Metals, archive
					04	06	TG-SC12-04-06-YYMMDD	Metals, archive
					06	08	TG-SC12-06-08-YYMMDD	Metals, archive
					08	10	TG-SC12-08-10-YYMMDD	Metals, archive
					10	12	TG-SC12-10-12-YYMMDD	Metals, archive
					12	14	TG-SC12-12-14-YYMMDD	Archive
					14	16	TG-SC12-14-16-YYMMDD	Archive
Lower Slope	TG-SC13	1168327.5	712728.0	-35.5	00	02	TG-SC13-00-02-YYMMDD	Metals, archive
					02	04	TG-SC13-02-04-YYMMDD	Metals, archive
					04	06	TG-SC13-04-06-YYMMDD	Metals, archive
					06	08	TG-SC13-06-08-YYMMDD	Metals, archive
					08	10	TG-SC13-08-10-YYMMDD	Metals, archive
					10	12	TG-SC13-10-12-YYMMDD	Metals, archive
					12	14	TG-SC13-12-14-YYMMDD	Archive
					14	16	TG-SC13-14-16-YYMMDD	Archive
	TG-SC14	1168419.5	712639.7	-29.4	00	02	TG-SC14-00-02-YYMMDD	Metals, archive
					02	04	TG-SC14-02-04-YYMMDD	Metals, archive
					04	06	TG-SC14-04-06-YYMMDD	Metals, archive
					06	08	TG-SC14-06-08-YYMMDD	Metals, archive
					08	10	TG-SC14-08-10-YYMMDD	Metals, archive
					10	12	TG-SC14-10-12-YYMMDD	Metals, archive
					12	14	TG-SC14-12-14-YYMMDD	Archive
					14	16	TG-SC14-14-16-YYMMDD	Archive
	TG-SC15	1168511.5	712551.4	-30.6	00	02	TG-SC15-00-02-YYMMDD	Metals, archive
					02	04	TG-SC15-02-04-YYMMDD	Metals, archive
					04	06	TG-SC15-04-06-YYMMDD	Metals, archive
					06	08	TG-SC15-06-08-YYMMDD	Metals, archive
					08	10	TG-SC15-08-10-YYMMDD	Metals, archive
					10	12	TG-SC15-10-12-YYMMDD	Metals, archive
					12	14	TG-SC15-12-14-YYMMDD	Archive
					14	16	TG-SC15-14-16-YYMMDD	Archive
	TG-SC16	1168603.5	712463.0	-34.0	00	02	TG-SC16-00-02-YYMMDD	Metals, archive
					02	04	TG-SC16-02-04-YYMMDD	Metals, archive
					04	06	TG-SC16-04-06-YYMMDD	Metals, archive
					06	08	TG-SC16-06-08-YYMMDD	Metals, archive
					08	10	TG-SC16-08-10-YYMMDD	Metals, archive
					10	12	TG-SC16-10-12-YYMMDD	Metals, archive
					12	14	TG-SC16-12-14-YYMMDD	Archive
					14	16	TG-SC16-14-16-YYMMDD	Archive
	TG-SC17	1168695.5	712374.7	-37.2	00	02	TG-SC17-00-02-YYMMDD	Metals, archive
					02	04	TG-SC17-02-04-YYMMDD	Metals, archive
					04	06	TG-SC17-04-06-YYMMDD	Metals, archive
					06	08	TG-SC17-06-08-YYMMDD	Metals, archive
					08	10	TG-SC17-08-10-YYMMDD	Metals, archive
					10	12	TG-SC17-10-12-YYMMDD	Metals, archive
					12	14	TG-SC17-12-14-YYMMDD	Archive
					14	16	TG-SC17-14-16-YYMMDD	Archive

Table 1
Sample Locations, Coordinates, Intervals, and Analyses Summary

Location/Purpose	Location ID	Station Coordinates (Washington SP NAD 83 South Zone) Easting (feet)	Station Coordinates (Washington SP NAD 83 South Zone) Northing (feet)	Mudline Elevation (feet MLLW)	Sample[1] Upper Depth (feet)	Sample[1] Lower Depth (feet)	Sample ID[1]	Analyses[2,3]
Lower Slope	TG-SC18	1168787.5	712286.4	-33.7	00	02	TG-SC18-00-02-YYMMDD	Metals, archive
					02	04	TG-SC18-02-04-YYMMDD	Metals, archive
					04	06	TG-SC18-04-06-YYMMDD	Metals, archive
					06	08	TG-SC18-06-08-YYMMDD	Metals, archive
					08	10	TG-SC18-08-10-YYMMDD	Metals, archive
					10	12	TG-SC18-10-12-YYMMDD	Metals, archive
					12	14	TG-SC18-12-14-YYMMDD	Archive
					14	16	TG-SC18-14-16-YYMMDD	Archive
	TG-SC19	1168285.6	712684.3	-49.9	00	02	TG-SC19-00-02-YYMMDD	Metals, archive
					02	04	TG-SC19-02-04-YYMMDD	Metals, archive
					04	06	TG-SC19-04-06-YYMMDD	Metals, archive
					06	08	TG-SC19-06-08-YYMMDD	Metals, archive
					08	10	TG-SC19-08-10-YYMMDD	Metals, archive
					10	12	TG-SC19-10-12-YYMMDD	Metals, archive
					12	14	TG-SC19-12-14-YYMMDD	Archive
					14	16	TG-SC19-14-16-YYMMDD	Archive
	TG-SC20	1168377.6	712596.0	-50.6	00	02	TG-SC20-00-02-YYMMDD	Metals, archive
					02	04	TG-SC20-02-04-YYMMDD	Metals, archive
					04	06	TG-SC20-04-06-YYMMDD	Metals, archive
					06	08	TG-SC20-06-08-YYMMDD	Metals, archive
					08	10	TG-SC20-08-10-YYMMDD	Metals, archive
					10	12	TG-SC20-10-12-YYMMDD	Metals, archive
					12	14	TG-SC20-12-14-YYMMDD	Archive
					14	16	TG-SC20-14-16-YYMMDD	Archive
	TG-SC21	1168469.6	712507.7	-50.7	00	02	TG-SC21-00-02-YYMMDD	Metals, archive
					02	04	TG-SC21-02-04-YYMMDD	Metals, archive
					04	06	TG-SC21-04-06-YYMMDD	Metals, archive
					06	08	TG-SC21-06-08-YYMMDD	Metals, archive
					08	10	TG-SC21-08-10-YYMMDD	Metals, archive
					10	12	TG-SC21-10-12-YYMMDD	Metals, archive
					12	14	TG-SC21-12-14-YYMMDD	Archive
					14	16	TG-SC21-14-16-YYMMDD	Archive
	TG-SC22	1168561.6	712419.3	-50.4	00	02	TG-SC22-00-02-YYMMDD	Metals, archive
					02	04	TG-SC22-02-04-YYMMDD	Metals, archive
					04	06	TG-SC22-04-06-YYMMDD	Metals, archive
					06	08	TG-SC22-06-08-YYMMDD	Metals, archive
					08	10	TG-SC22-08-10-YYMMDD	Metals, archive
					10	12	TG-SC22-10-12-YYMMDD	Metals, archive
					12	14	TG-SC22-12-14-YYMMDD	Archive
					14	16	TG-SC22-14-16-YYMMDD	Archive
	TG-SC23	1168653.6	712331.0	-50.7	00	02	TG-SC23-00-02-YYMMDD	Metals, archive
					02	04	TG-SC23-02-04-YYMMDD	Metals, archive
					04	06	TG-SC23-04-06-YYMMDD	Metals, archive
					06	08	TG-SC23-06-08-YYMMDD	Metals, archive
					08	10	TG-SC23-08-10-YYMMDD	Metals, archive
					10	12	TG-SC23-10-12-YYMMDD	Metals, archive
					12	14	TG-SC23-12-14-YYMMDD	Archive
					14	16	TG-SC23-14-16-YYMMDD	Archive
	TG-SC24	1168745.6	712242.7	-51.2	00	02	TG-SC24-00-02-YYMMDD	Metals, archive
					02	04	TG-SC24-02-04-YYMMDD	Metals, archive
					04	06	TG-SC24-04-06-YYMMDD	Metals, archive
					06	08	TG-SC24-06-08-YYMMDD	Metals, archive
					08	10	TG-SC24-08-10-YYMMDD	Metals, archive
					10	12	TG-SC24-10-12-YYMMDD	Metals, archive
					12	14	TG-SC24-12-14-YYMMDD	Archive
					14	16	TG-SC24-14-16-YYMMDD	Archive
Tier 2 Testing								
TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS
Waste Characterization								
Waste Characterization[4]	TG-WC-01	--	--	--	--	--	TG-WC-01-YYMMDD	TCLP metals, SPLP metals, fish toxicity bioassay
	TG-WC-02	--	--	--	--	--	TG-WC-02-YYMMDD	
	TG-WC-03	--	--	--	--	--	TG-WC-03-YYMMDD	
	TG-WC-04	--	--	--	--	--	TG-WC-04-YYMMDD	
	TG-WC-05	--	--	--	--	--	TG-WC-05-YYMMDD	

Table 1
Sample Locations, Coordinates, Intervals, and Analyses Summary

Notes:

1. Actual sample depths and IDs may vary based on evidence of contamination, observed depth to native alluvium, and sample recovery depth.

2. The shallowest bounded interval sample from each core that does not exceed metals screening criteria will be triggered for Tier 2 analyses (SVOCs, pesticides, PCBs, butyltins, dioxin/furans,

3. Grain size and Atterberg limits will be analyzed on two and one representative sample per core, respectively.

4. Up to five composites will be generated for waste characterization from archive material pending results of Tier 1 testing.

* Elevation for this location is approximated due to lack of bathymetric data in this area.

** Sample collection at this location should be targeted during high tide.

--: not applicable

ID: identification

MLLW: mean lower low water

PCB: polychlorinated biphenyl

SVOC: semivolatile organic compound

SPLP: synthetic precipitation leaching procedure

TBD: to be determined

TCLP: toxicity characteristic leaching procedure

TOC: total organic carbon

TVS: total volatile solids

Washington SP NAD 83: Washington State Plane North American Datum 1983

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		RCRA	CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	TCLP/SPLP Screening Criteria	Surface Water Cleanup Level
Tier 1 Analyses												
Conventional Parameters (%)												
Total solids	SM2540G/PSEP	--	0.1	--	--	--	--	--	--	--	--	--
Metals (mg/kg dry weight)												
Antimony	EPA 6020B	0.10	0.20	150	--	200	--	--	--	--	--	--
Arsenic	EPA 6020B	0.038	0.20	57	507.1	700	57	93	57	93	--	--
Cadmium	EPA 6020B	0.040	0.10	5.1	--	14	5.1	6.7	5.1	6.7	--	--
Chromium (total)	EPA 6020B	0.26	0.50	260	--	--	260	270	260	270	--	--
Chromium (VI)[a]	EPA 7196A	0.40	0.40	--	--	--	--	--	--	--	--	--
Copper	EPA 6020B	0.35	0.50	390	--	1,300	390	390	390	390	--	--
Lead	EPA 6020B	0.052	0.10	450	975	1,200	450	530	450	530	--	--
Mercury	EPA 7471B	0.0053	0.025	0.41	1.5	2.3	0.41	0.59	0.41	0.59	--	--
Selenium[b]	EPA 6020B	0.18	0.50	--	3	--	--	--	--	--	--	--
Silver	EPA 6020B	0.022	0.20	6.1	--	8.4	6.1	6.1	6.1	6.1	--	--
Zinc	EPA 6020B	2.9	6.0	410	--	3,800	410	960	410	960	--	--
Geotechnical Analyses[c]												
Grain size	PSEP/ASTM Mod	--	0.1	--	--	--	--	--	--	--	--	--
Atterberg limits	ASTM D4318	--	--	--	--	--	--	--	--	--	--	--
Tier 2 Analyses												
Conventional Parameters (%)												
Total volatile solids	SM2540G/PSEP	--	0.1	--	--	--	--	--	--	--	--	--
Total organic carbon	EPA 9060A Mod	--	0.1	--	--	--	--	--	--	--	--	--
Butyltins (µg/kg dry weight)												
Tributyltin ion	Krone/8270E-SIM	0.5	3.9	--	73	--	--	--	--	--	--	--
Semivolatile Organic Compounds (µg/kg dry weight)												
Polycyclic Aromatic Hydrocarbons							**mg/kg OC**		**µg/kg dry weight**		--	--
1-Methylnaphthalene	EPA 8270E	5.3	20	2,100	--	2,400	--	--	--	--	--	--
2-Methylnaphthalene	EPA 8270E	4.5	20	560	--	1,300	38	64	670	670	--	--
Acenaphthene	EPA 8270E	5.2	20	500	--	2,000	16	57	500	500	--	--
Acenaphthylene	EPA 8270E	6.2	20	540	--	3,600	66	66	1,300	1,300	--	--
Anthracene	EPA 8270E	7.2	20	1,500	--	21,000	220	1,200	960	960	--	--
Benzo(a)anthracene	EPA 8270E	6.0	20	960	--	13,000	110	270	1,300	1,600	--	--
Benzo(a)pyrene	EPA 8270E	4.2	20	670	--	1,900	99	210	1,600	1,600	--	--
Benzo(b,j,k)fluoranthenes	EPA 8270E	10	40	670	--	3,200	230	450	3,200	3,600	--	--
Benzo(g,h,i)perylene	EPA 8270E	14	20	5,200	--	29,000	31	78	670	720	--	--
Chrysene	EPA 8270E	6.1	20	1,700	4,600	30,000	110	460	1,400	2,800	--	--
Dibenz(a,h)anthracene	EPA 8270E-SIM	0.91	5.0	2,600	11,980	16,000	12	33	230	230	--	--
Fluoranthene	EPA 8270E	6.1	20	1,300	--	5,100	160	1,200	1,700	2,500	--	--
Fluorene	EPA 8270E	15	20	1,400	--	21,000	23	79	540	540	--	--
Indeno(1,2,3-cd)pyrene	EPA 8270E	15	20	3,200	--	9,900	34	88	600	690	--	--
Naphthalene	EPA 8270E	4.2	20	1,600	--	3,600	99	170	2,100	2,100	--	--

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		RCRA	CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	TCLP/SPLP Screening Criteria	Surface Water Cleanup Level
Phenanthrene	EPA 8270E	8.7	20	600	--	4,400	100	480	1,500	1,500	--	--
Pyrene	EPA 8270E	5.7	20	230	--	1,900	1,000	1,400	2,600	3,300	--	--
Total LPAH (U = 0)[d]	EPA 8270E	--	--	12,000	--	69,000	370	780	5,200	5,200	--	--
Total HPAHs (U = 0)[e]	EPA 8270E	--	--	--	--	--	960	5,300	12,000	17,000	--	--
Total PAHs (U = 0)[f]	Calculated	--	--	--	--	--	--	--	--	--		
Chlorinated Hydrocarbons							**mg/kg OC**		**µg/kg dry weight**		--	--
1,4-Dichlorobenzene	EPA 8270E-SIM	0.6	5.0	110	--	120	3.1	9	110	110	--	--
1,2-Dichlorobenzene	EPA 8270E-SIM	0.7	5.0	35	--	110	2.3	2.3	35	50	--	--
1,2,4-Trichlorobenzene	EPA 8270E-SIM	2.7	5.0	31	--	64	0.81	1.8	31	51	--	--
Hexachlorobenzene	EPA 8270E-SIM	0.7	5.0	22	168	230	0.38	2.3	22	70	--	--
Phthalates							**mg/kg OC**		**µg/kg dry weight**		--	--
Dimethyl phthalate	EPA 8270E-SIM	1.0	5.0	71	--	1,400	53	53	71	160	--	--
Diethyl phthalate	EPA 8270E-SIM	4.8	20	200	--	1,200	61	110	200	>1,200	--	--
Di-n-butyl phthalate	EPA 8270E	5.6	20	1,400	--	5,100	220	1,700	1,400	1,400	--	--
Butyl benzyl phthalate	EPA 8270E-SIM	0.68	5.0	63	--	970	4.9	64	63	900	--	--
Bis(2-ethylhexyl) phthalate	EPA 8270E	5.5	50	1,300	--	8,300	47	78	1300	1900	--	--
Di-n-octyl phthalate	EPA 8270E	4.4	20	6,200	--	6,200	58	4,500	6,200	6,200	--	--
Phenols (µg/kg dry weight)							**µg/kg dry weight**		**µg/kg dry weight**			
Phenol	EPA 8270E-SIM	2.2	5.0	420	--	1,200	420	1,200	420	1,200	--	--
2-Methylphenol	EPA 8270E-SIM	1.1	5.0	63	--	77	63	63	63	63	--	--
4-Methylphenol	EPA 8270E-SIM	0.9	5.0	670	--	3,600	670	670	670	670	--	--
2,4-Dimethylphenol	EPA 8270E-SIM	2.2	20	29	--	210	29	29	29	29	--	--
Pentachlorophenol	EPA 8270E-SIM	2.1	20	400	504	690	360	690	360	690	--	--
Miscellaneous Extractables (µg/kg dry weight)							**mg/kg OC (unless noted)**		**µg/kg dry weight**			--
Benzyl Alcohol	EPA 8270E-SIM	2.5	20	57	--	870	57 dry weight	73 dry weight	57	73	--	--
Benzoic Acid	EPA 8270E-SIM	13	100	650	--	760	650 dry weight	650 dry weight	650	650	--	--
Dibenzofuran	EPA 8270E	14	20	540	--	1,700	15	58	540	540	--	--
Hexachlorobutadiene	EPA 8270E-SIM	0.72	5.0	11	--	270	3.9	6.2	11	120	--	--
N-Nitrosodiphenylamine	EPA 8270E-SIM	1.3	5.0	28	--	--	11	11	28	40	--	--
Carbazole	EPA 8270E	4.3	20	--	--	--	3.9	6.2	11	120	--	--
Pesticides (µg/kg dry weight)												
2,4'-DDD	EPA 8081B	0.20	1.0	--	--	--	--	--	--	--	--	--
2,4'-DDE	EPA 8081B	0.25	1.0	--	--	--	--	--	--	--	--	--
2,4'-DDT	EPA 8081B	0.19	1.0	--	--	--	--	--	--	--	--	--
4,4'-DDD	EPA 8081B	0.32	1.0	16	--	--	--	--	--	--	--	--
4,4'-DDE	EPA 8081B	0.14	1.0	9	--	--	--	--	--	--	--	--
4,4'-DDT	EPA 8081B	0.32	1.0	12	--	--	--	--	--	--	--	--
2,4'-DDD and 4,4'-DDD	Calculated	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE and 4,4'-DDE	Calculated	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT and 4,4'-DDT	Calculated	--	--	--	--	--	--	--	--	--	--	--
Total DDT (U = 0)[g]	Calculated	--	--	--	50	69	--	--	--	--	--	--
Aldrin	EPA 8081B	--	--	9.5	--	--	--	--	--	--	--	--

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		RCRA	CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	TCLP/SPLP Screening Criteria	Surface Water Cleanup Level
beta-HCH	EPA 8081B	0.09	0.50	--	--	--	--	--	--	--	--	--
Dieldrin	EPA 8081B	0.12	1.0	1.9	--	1,700	--	--	--	--	--	--
Endrin ketone	EPA 8081B	0.28	1.0	--	--	--	--	--	--	--	--	--
Heptachlor	EPA 8081B	0.05	0.50	1.5	--	270	--	--	--	--	--	--
cis-chlordane	EPA 8081B	0.1	0.5	--	--	--	--	--	--	--	--	--
trans-chlordane	EPA 8081B	0.3	0.5	--	--	--	--	--	--	--	--	--
cis-nonchlor	EPA 8081B	0.2	0.5	--	--	--	--	--	--	--	--	--
trans-nonachlor	EPA 8081B	0.2	0.5	--	--	--	--	--	--	--	--	--
oxychlordane	EPA 8081B	0.1	0.5	--	--	--	--	--	--	--	--	--
Total Chlordane (U = 0)[h]	EPA 8081B	--	--	2.8	37	--	--	--	--	--	--	--
PCBs (µg/kg dry weight)												
Aroclor 1016	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1221	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1232	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1242	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1248	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1254	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1260	EPA 8082A	9.3	20	--	--	--	**mg/kg OC**		**µg/kg dry weight**		--	--
Total Aroclor PCBs (U = 0)	EPA 8082A	9.3	20	130	38 mg/kg OC	3,100	12	65	130	1,000	--	--
Dioxin/Furans (ng/kg dry weight)[i]												
Dioxins												
2,3,7,8-TCDD	EPA 1613B	0.15	1.0	--	--	--	--	--	--	--	--	--
1,2,3,7,8-PeCDD	EPA 1613B	0.17	1.0	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-HxCDD	EPA 1613B	0.17	1.0	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-HxCDD	EPA 1613B	0.18	1.0	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-HxCDD	EPA 1613B	0.22	1.0	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-HpCDD	EPA 1613B	0.56	2.5	--	--	--	--	--	--	--	--	--
OCDD	EPA 1613B	4.60	10	--	--	--	--	--	--	--	--	--
Furans												
2,3,7,8-TCDF	EPA 1613B	0.06	1.0	--	--	--	--	--	--	--	--	--
1,2,3,7,8-PeCDF	EPA 1613B	0.24	1.0	--	--	--	--	--	--	--	--	--
2,3,4,7,8,-PeCDF	EPA 1613B	0.22	1.0	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-HxCDF	EPA 1613B	0.28	1.0	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-HxCDF	EPA 1613B	0.20	1.0	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-HxCDF	EPA 1613B	0.19	1.0	--	--	--	--	--	--	--	--	--
2,3,4,6,7,8-HxCDF	EPA 1613B	0.17	1.0	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-HpCDF	EPA 1613B	0.21	1.0	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8,9-HpCDF	EPA 1613B	0.24	1.0	--	--	--	--	--	--	--	--	--
OCDF	EPA 1613B	1.10	2.5	--	--	--	--	--	--	--	--	--
Total TEQ (U = 0)	--	--	--	4.0	--	--	--	--	--	--	--	--
Total TEQ (U = 1/2 EDL)	--	--	--	4.0	--	--	--	--	--	--	--	--

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		RCRA	CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	TCLP/SPLP Screening Criteria	Surface Water Cleanup Level
Waste Characterization												
TCLP Metals (mg/L)												
Arsenic	EPA 1311/6010D	0.014	0.25	--	--	--	--	--	--	--	5.0	--
Barium	EPA 1311/6010D	0.0075	0.015	--	--	--	--	--	--	--	100	--
Cadmium	EPA 1311/6010D	0.0006	0.010	--	--	--	--	--	--	--	1.0	--
Chromium	EPA 1311/6010D	0.0024	0.025	--	--	--	--	--	--	--	8.0	--
Copper												--
Lead	EPA 1311/6010D	0.007	0.10	--	--	--	--	--	--	--	5.0	--
Mercury	EPA 1311/6010D	0.0000070	0.0001	--	--	--	--	--	--	--	0.20	--
Selenium	EPA 1311/6010D	0.041	0.25	--	--	--	--	--	--	--	1.0	--
Silver	EPA 1311/6010D	0.0022	0.015	--	--	--	--	--	--	--	5.0	--
SPLP Metals (mg/L)												
Antimony	EPA 1312/6020B	0.0005	0.00075	--	--	--	--	--	--	--	--	0.0900
Arsenic	EPA 1312/6020B	0.00019	0.0005	--	--	--	--	--	--	--	--	0.0080
Barium	EPA 1312/6020B	0.0006	0.001	--	--	--	--	--	--	--	--	--
Beryllium	EPA 1312/6020B	0.00009	0.0005	--	--	--	--	--	--	--	--	0.270
Cadmium	EPA 1312/6020B	0.0002	0.0002	--	--	--	--	--	--	--	--	0.0079
Chromium	EPA 1312/6020B	0.001	0.002	--	--	--	--	--	--	--	--	240[j]
Copper	EPA 1312/6020B	0.002	0.002	--	--	--	--	--	--	--	--	--
Lead	EPA 1312/6020B	0.00026	0.00034	--	--	--	--	--	--	--	--	0.0081
Mercury	EPA 1312/7470A	0.000007	0.00005	--	--	--	--	--	--	--	--	0.000025
Nickel	EPA 1312/6020B	0.0004	0.001	--	--	--	--	--	--	--	--	0.0082
Selenium	EPA 1312/6020B	0.0009	0.002	--	--	--	--	--	--	--	--	0.0710
Silver	EPA 1312/6020B	0.0001	0.0005	--	--	--	--	--	--	--	--	0.0019
Thallium	EPA 1312/6020B	0.00012	0.0005	--	--	--	--	--	--	--	--	0.00022
Zinc	EPA 1312/6020B	0.015	0.022	--	--	--	--	--	--	--	--	0.0810
Bioassay												
Static Acute Fish Toxicity Test	Ecology Biological Testing Methods 80-12	--	--	--	--	--	--	--	--	--	--	--

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Notes:
Greater than (>) values indicate that the upper bound of toxicity level is unknown but that it is known to be above the concentration shown.
a. Chromium VI will be analyzed on a subset of eight samples collected from known areas of grit. Actual sample locations and depths will be determined based on field observations.
b. Because no screening level value exists for toxicity testing, selenium will only be evaluated for its bioaccumulation potential.
c. Grain size will be analzyed on two representative samples per core, and Atterberg limits will be analyzed on one representative sample per core.
d. Total LPAH consists of the sum of naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, and anthracene.
e. Total HPAH consists of the sum of fluoranthene, pyrene, benz(a)anthracene, chrysene, benzo(b,j,k)fluoranthenes, benzo(a)pyrene, indeno(1,2,3,-c,d)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene.
f. Total PAHs consists of the sum of all PAHs listed.
g. Total DDT consists of the sum of 4,4'-DDD; 4,4'-DDE; and 4,4'-DDT.
h. Chlordane includes cis-chlordane, trans-chlordane, cis-nonaclor, trans-nonaclor, and oxychlordane.
i. Dioxin/furan results will be reported to sample and analysis-specific estimated detection limits.
j. Value for chromium III.
µg/kg: microgram per kilogram
AET: Apparent Effects Threshold
ASTM: ASTM International
CLARC: Ecology MTCA Cleanup Levels and Risk Calculation
Ecology: Washington State Department of Ecology
DDD: dichlorodiphenyldichloroethane
DDE: dichlorodiphenyldichloroethylene
DDT: dichlorodiphenyltrichloroethane
EPA: U.S. Environmental Protection Agency
HPAH: high-molecular-weight PAHs
LPAH: low-molecular-weight PAHs
MTCA: Model Toxics Control Act
mg/kg: milligram per kilogram
mg/L: milligram per liter
ng/kg: nanograms per kilogram
OC: organic carbon-normalized
PAH: polycyclic aromatic hydrocarbon
PCB: polychlorinated bipheynl
PSEP: Puget Sound Estuary Program
SMS: Sediment Management Standards
TEQ: toxic equivalency

Table 3
Sample Handling and Storage Guidelines

Parameter	Sample Size	Container Size and Type[a]	Holding Time	Preservative
Tier 1 Analyses				
Total metals	10 g	4-oz glass	6 months; 28 days for mercury	4°C ± 2°C
			2 years; 1 year for mercury	-18°C ± 2°C
Total solids	30 g		14 days	4°C ± 2°C
			6 months	-18°C ± 10°C
Chemistry archive for untested intervals	500 g	16-oz glass	varies	-18°C ± 2°C
Dioxin/furan archive for untested intervals	10 g	4-oz amber glass	1 year	-18°C ± 2°C
Archive for Static Acute Fish Toxicity Test	20 g	2-oz glass	45 days	Ambient
Geotechnical Analyses				
Grain size	300 g	16-oz glass or HDPE or zip-top bag	6 months	4°C ± 2°C
Atterberg limits	100 g		None	
Tier 2 Analyses				
Total organic carbon, total solids, total volatile solids	30 g	From chemistry archive jar	14 days	4°C ± 2°C
			6 months	-18°C ± 10°C
SVOCs, PCBs, pesticides, butyltins	200 g		14 days until extraction	4°C ± 2°C
			1 year until extraction	-18°C ± 2°C
			40 days after extraction	4°C ± 2°C
Dioxins/furans	10 g	From dioxin/furan archive jar	1 year until extraction	-18°C ± 2°C
			1 year after extraction	
Waste Characterization Analyses				
TCLP and SPLP metals	200 g	16-oz glass (composite from chemistry archives)	180 days to elutriate prep	4°C ± 2°C
			180 days to analysis	4°C ± 2°C; HNO3 to pH <2
Archive for Static Acute Fish Toxicity Test	200 g	8-oz glass (lab to composite from 2-oz aliquots above)	45 days	Ambient

Table 3
Sample Handling and Storage Guidelines

Notes:
a. Sample containers may vary based on availability at the time of sample collection.
g: grams
mL: milliliters
HDPE: high-density polyethylene
mL: milliliter
oz: ounce
PCB: polychlorinated biphenyl
SVOC: semivolatile organic compound

Table 4
Field and Laboratory Quality Assurance/Quality Control Requirements

Parameter	Field Quality Control Elements		Laboratory Quality Control Elements								
	Field Duplicates	Equipment Rinsate Blanks	Initial Calibration	Continuing Calibration	Duplicates	Triplicates	Laboratory Control Sample	Matrix Spikes	Matrix Spike Duplicates	Method Blanks	Surrogates/Labeled Compounds
Metals	1 per 20 samples	1 per sampling event	Daily	1 per 10 samples	Per batch	NA	1 per 20 samples	1 per 20 samples	1 per 20 samples	1 per 20 samples	NA
Grain size/Atterberg limits	1 per 20 samples	NA	Each batch[a]	NA	NA	Per batch	NA	NA	NA	NA	NA
Total solids/total volatile solids	1 per 20 samples	NA	Each batch[a]	NA	NA	Per batch	NA	NA	NA	NA	NA
Total organic carbon	1 per 20 samples	NA	Daily or each batch	1 per 10 samples	NA	Per batch	1 per 20 samples	NA	NA	1 per 20 samples	NA
Butyltins	1 per 20 samples	1 per sampling event	As needed[b]	Every 12 hours[c]	NA	NA	1 per 20 samples	1 per 20 samples	1 per 20 samples	1 per 20 samples	Every sample
SVOCs	1 per 20 samples	1 per sampling event	As needed[b]	Every 12 hours	NA	NA	1 per 20 samples	1 per 20 samples	1 per 20 samples	1 per 20 samples	Every sample
Pesticides	1 per 20 samples	1 per sampling event	As needed[b]	1 per 10 samples[c]	NA	NA	1 per 20 samples	1 per 20 samples	1 per 20 samples	1 per 20 samples	Every sample
PCBs	1 per 20 samples	1 per sampling event	As needed[b]	1 per 10 samples[c]	NA	NA	1 per 20 samples	1 per 20 samples	1 per 20 samples	1 per 20 samples	Every sample
Dioxins/furans	1 per 20 samples	1 per sampling event	As needed[b]	Every 12 hours	1 per 20 samples	NA	1 per 20 samples	NA	NA	1 per 20 samples	Every sample[d]

Notes:

a. Calibration and certification of drying ovens and weighing scales are conducted bi-annually.

b. Initial calibrations are considered valid until the continuing calibration no longer meets method specifications. At that point, a new initial calibration is performed.

c. Continuing calibrations at the beginning and end of each batch and every 10 samples.

d. Isotope dilution with labeled compounds required in every sample.

NA: not applicable

PCB: polychlorinated biphenyl

SVOC: semivolatile organic compound

Table 5
Field and Laboratory Data Quality Objectives

Parameter	Field Duplicate Precision[1]	Laboratory Duplicate Precision[1,2]	Accuracy	Surrogates/Labeled Compounds	Completeness
Grain size/Atterberg limits	± 50% RPD	± 20% RSD	NA	NA	95%
Total solids/total volatile solids	± 50% RPD	± 20% RSD	NA	NA	95%
Total organic carbon	± 50% RPD	± 20% RSD	75%–125% R	NA	95%
Total metals	± 50% RPD	± 20% RPD	75%–125% R	NA	95%
Butyltins	± 50% RPD	± 35% RPD	50%–150% R	Laboratory limits	95%
SVOCs	± 50% RPD	± 35% RPD	50%–150% R	Laboratory limits	95%
Pesticides	± 50% RPD	± 35% RPD	50%–150% R	Laboratory limits	95%
PCBs	± 50% RPD	± 35% RPD	50%–150% R	Laboratory limits	95%
Dioxins/furans	± 50% RPD	± 30% RPD	50%–150% R	Method limits	95%

Notes:

1. Parent and/or duplicate results that are less than five times reporting limits will be evaluated by using the difference between results using a control limit of ±2x RL.

2. Laboratory duplicate precision control limits apply to laboratory duplicates, LCS/LCSD, and MS/MSD precision results.

LCS: laboratory control sample

LCSD: laboratory control sample duplicate

MS: matrix spike

MSD: matrix spike duplicate

NA: not applicable

PAH: polycyclic aromatic hydrocarbon

PCB: polychlorinated biphenyl

R: recovery

RL: reporting limit

RPD: relative percent difference

RSD: relative standard deviation

SVOC: semivolatile organic compound

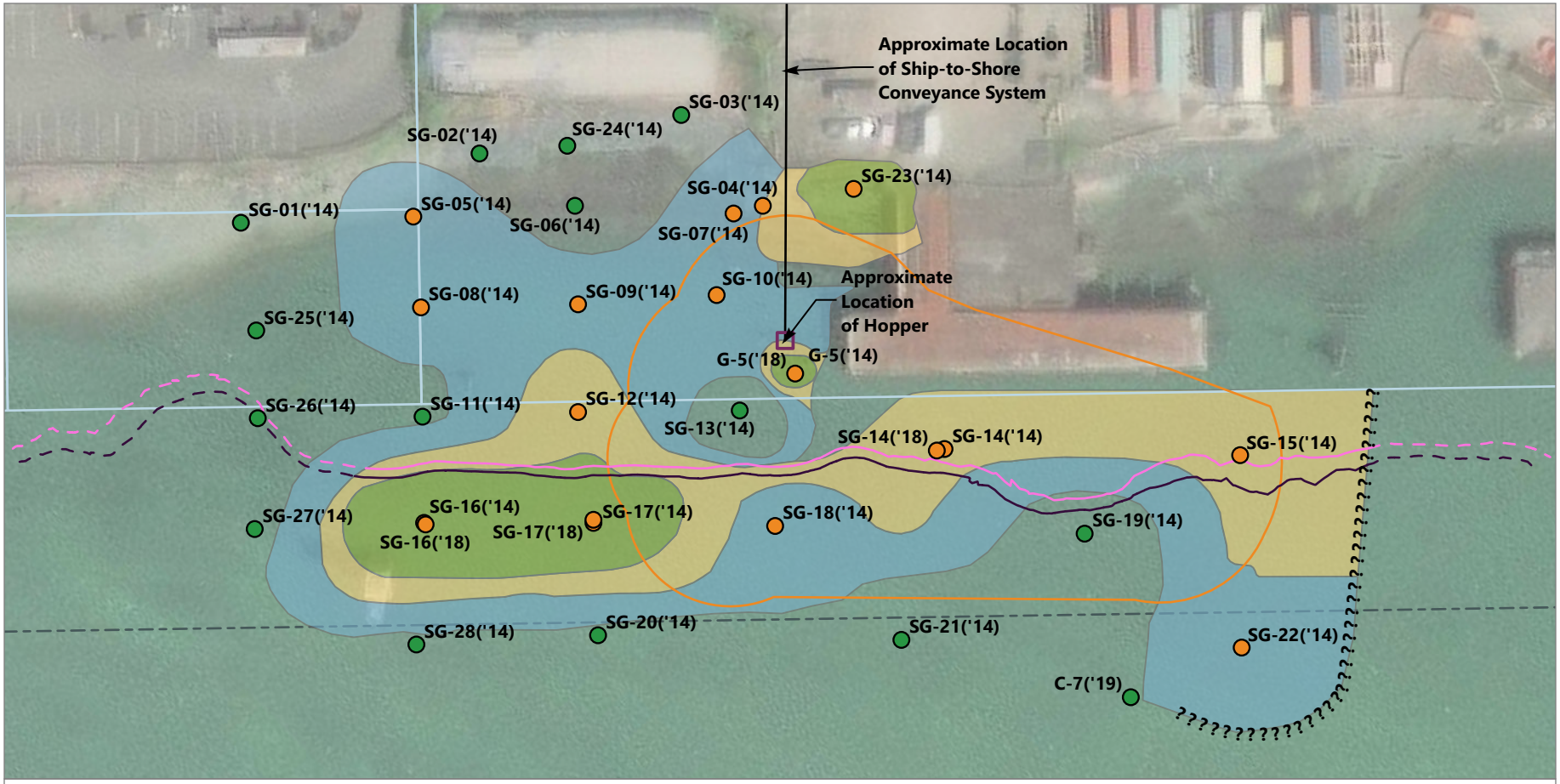
Figures



Publish Date: 2024/07/10, 11:45 AM | User: emueller
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPP_Fig1_VicinityMap

ANCHOR QEA

Figure 1
Vicinity Map
Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary

Surface Sediment Sample

- Grit Present
- No Grit Present

- Proposed Design Target Daylight Extent (-57.0' MLLW)
- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- Approximate Barge Offloading Area
- Hopper

Grit Content

- < 5%
- 5% - 15%
- > 15%

NOTES:

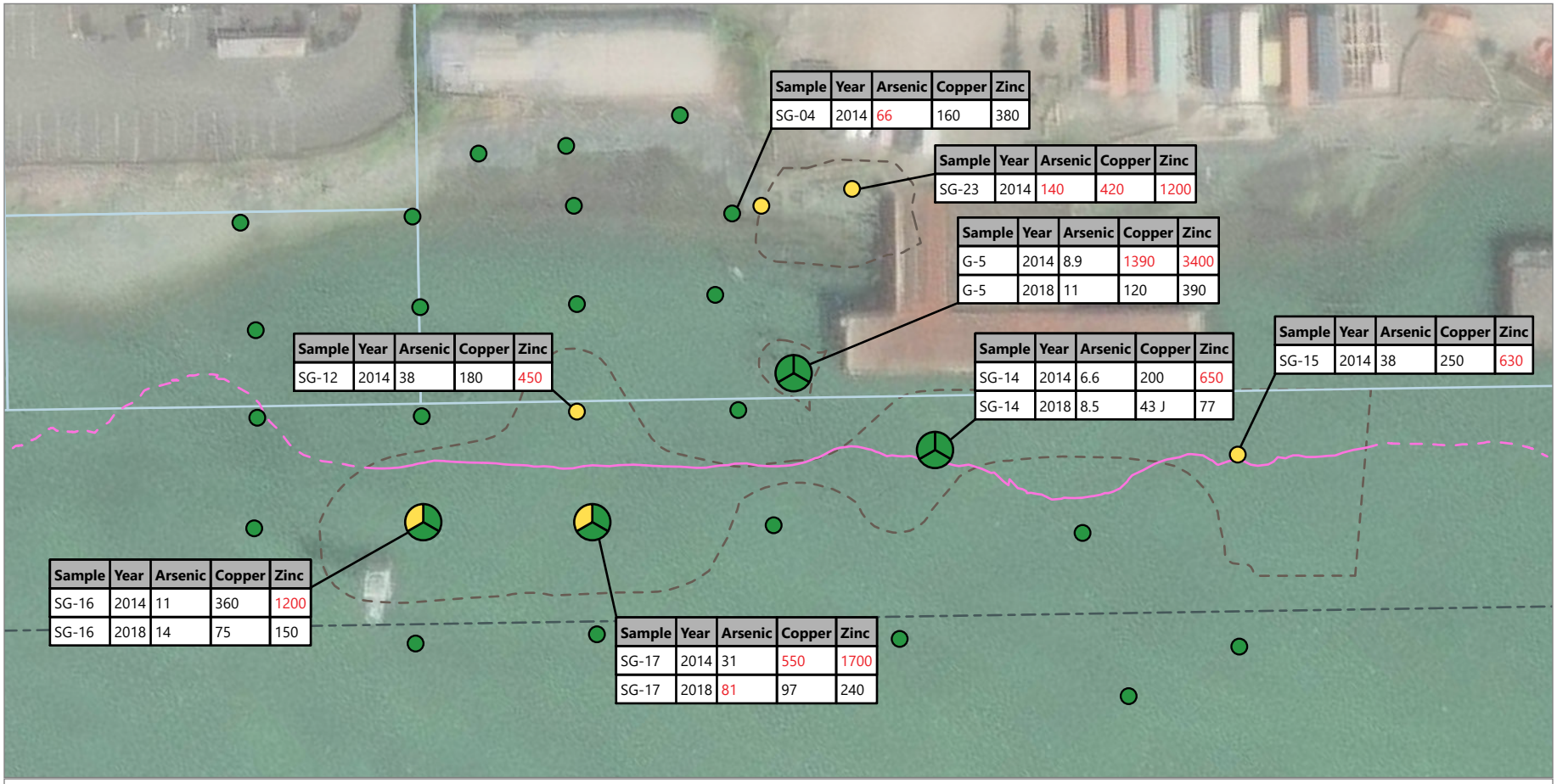
1. Aerial imagery: Esri (2022)
2. Grit interpolation from Landau 2021
3. Sample year is provided in parentheses after sample location ID

0 100
Feet

Publish Date: 2024/07/17, 11:43 AM | User: eiverson
Filepath: \\gstfile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPP_Fig2_SurfaceGrit

ANCHOR QEA

Figure 2
Surface Sediment and Approximate Grit Content
Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation



LD AM PG

Surface Sediment Sample with Bioassay Analysis

LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary
- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- > 5% Grit Boundary

Screening Results

- Pass SCO and CSL
- SCO Fail

NOTES:

1. Aerial imagery: Esri (2022)
2. The arsenic, copper, and zinc values are in mg/kg dry weight
3. Values in red exceeded the Sediment Management Standards Marine Sediment Cleanup Objectives (Ecology 2021)
4. PG: Polychaete Growth
5. AM: Amphipod Mortality
6. LD: Larval Development
7. J: Estimated Concentration
8. SCO: Sediment Cleanup Objective
9. CSL: Cleanup Screening Level

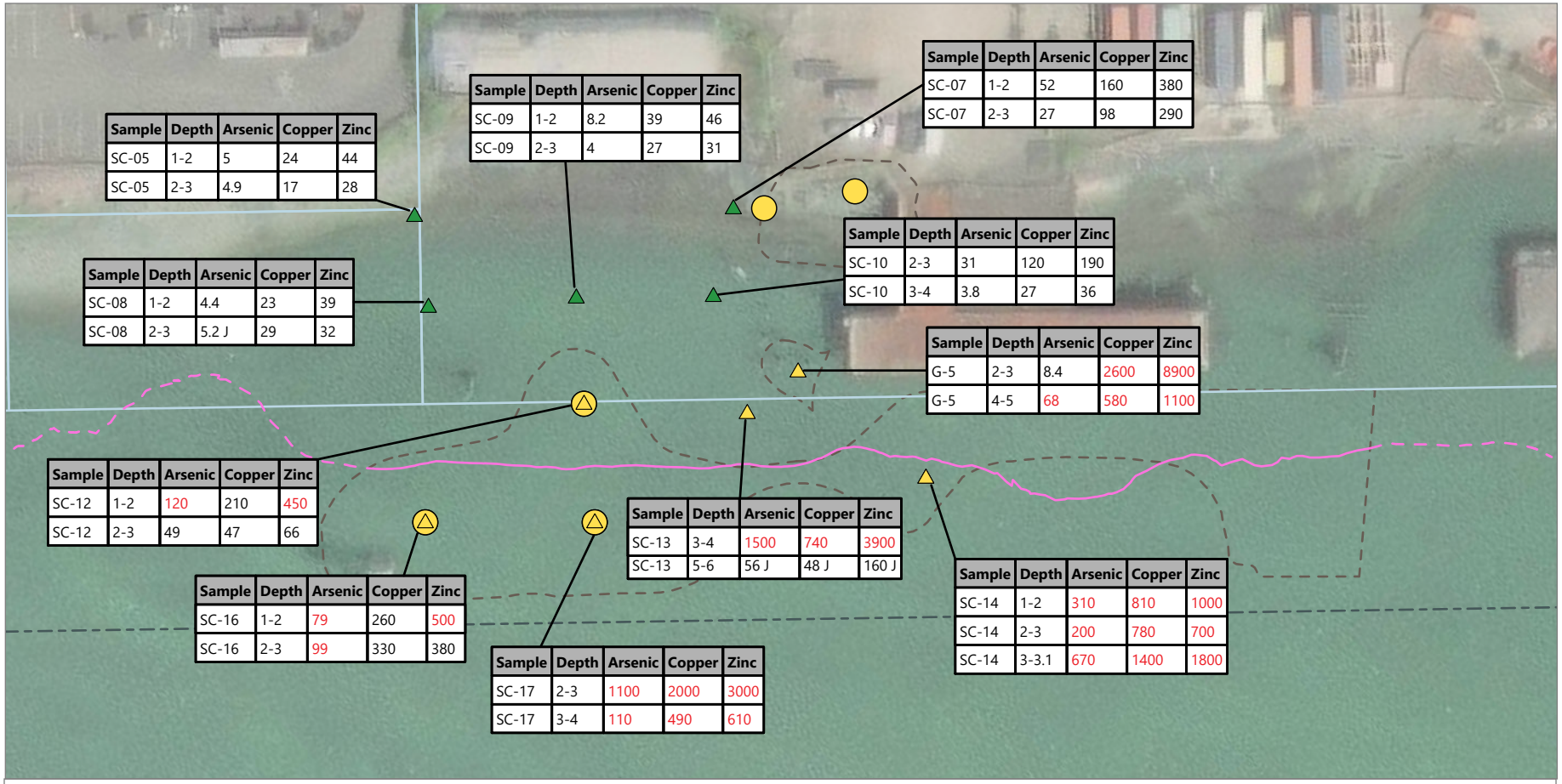
0 100

Feet

Publish Date: 2024/07/17, 11:48 AM | User: eiverson
Filepath: \\gstfile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPP_Fig3_SurfaceBioassay

ANCHOR QEA

Figure 3
Surface Sediment Analytical and Bioassay Results
Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary

Subsurface Screening Results

- Pass SCO and CSL
- SCO Fail
- Surface SCO Exceedance
- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- > 5% Grit Boundary

NOTES:

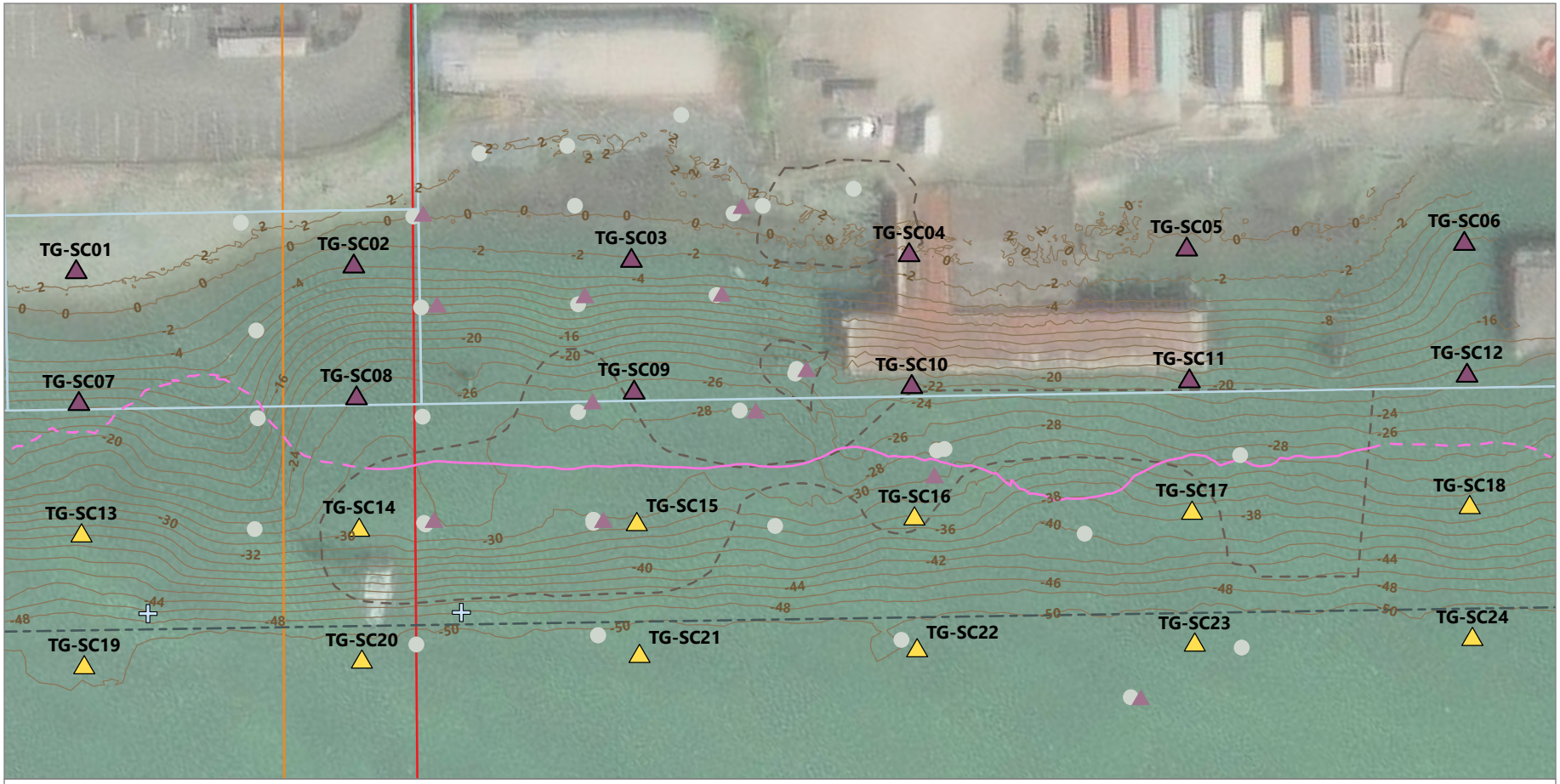
1. Aerial imagery: Esri (2022)
2. Depth values are in feet
3. The arsenic, copper, and zinc values are in mg/kg dry weight
4. Values in red exceeded the Sediment Management Standards Marine Sediment Cleanup Objectives (Ecology 2021)
5. J: Estimated Concentration
8. SCO: Sediment Cleanup Objective
9. CSL: Cleanup Screening Level

0 100
Feet

Publish Date: 2024/07/17, 11:48 AM | User: eiverson
Filepath: \\gstfile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPP_Fig4_Subsurface

ANCHOR QEA

Figure 4
Subsurface Sediment Analytical Results
Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary

Proposed Sample Location

- Upper Slope Core Sample Location
- Lower Slope Core Sample Location

- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- > 5% Grit Boundary

Previous Sample Location

- Surface Sediment
- Subsurface Sediment

- Navigational Aid
- Underwater Communications Crossing
- Underwater Watermain Crossing
- Existing Contour (USACE 2' Interval)

NOTE:
1. Aerial imagery: Esri (2022)
2. Contour Source: Survey by USACE, dated October 27, 2021 and David Evans Associates Inc., dated May 27, 2022, with data gaps filled from survey by USACE dated November 14, 2022

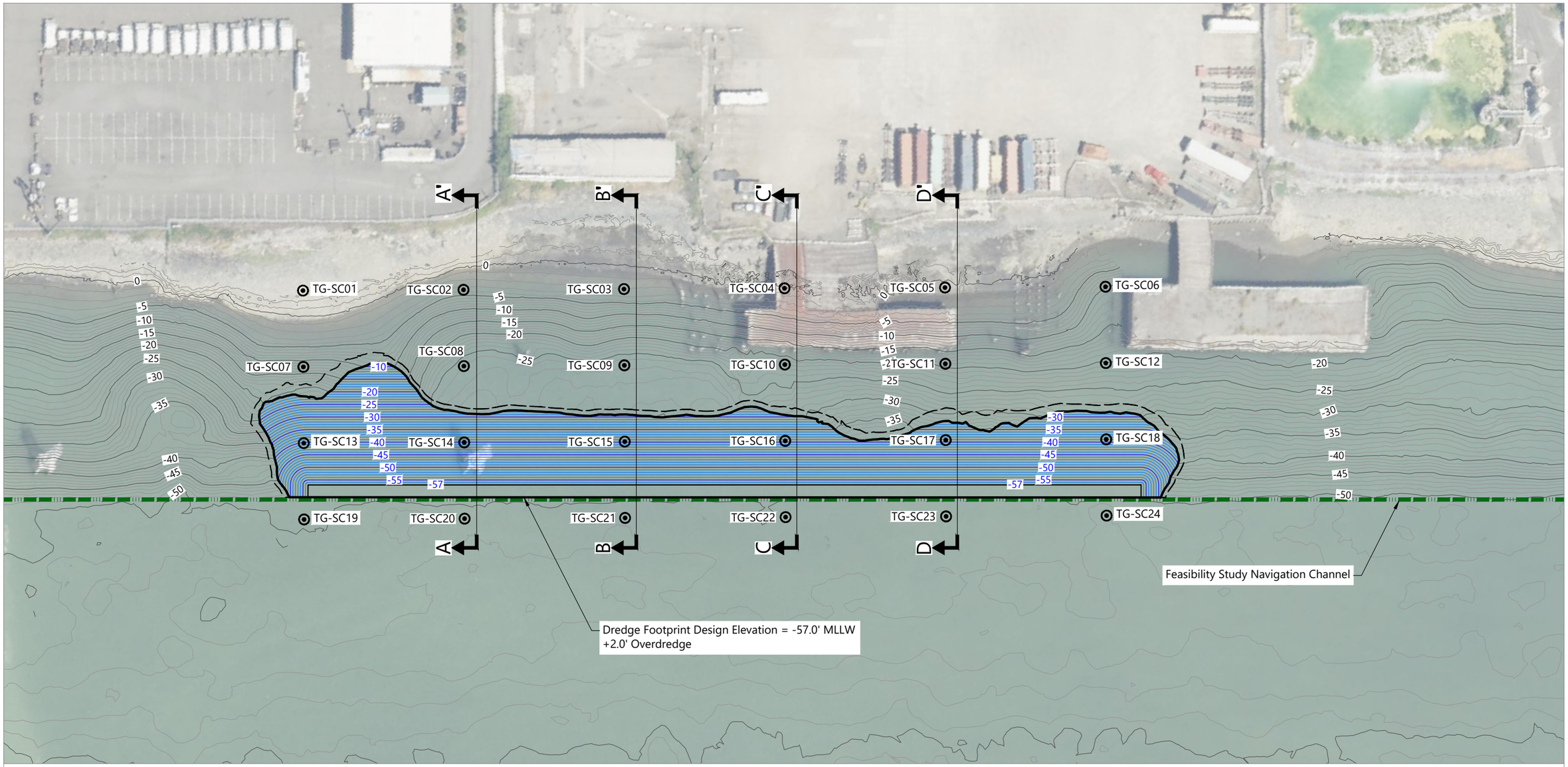
0 100
Feet

Publish Date: 2024/07/17, 11:48 AM | User: eiverson
Filepath: \\gstfile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPP_Fig5_ProposedSampling

ANCHOR QEA

Figure 5
Proposed Sampling Locations
Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation

FINAL



SOURCE: Bathymetric survey by eHydro dated 11/14/22.
Aerial from World Imagery: Esri, Maxar, Earthstar Geographics, and the GIS User community.
HORIZONTAL DATUM: Washington State Plane South Zone, NAD83, U.S. Survey Feet
VERTICAL DATUM: MLLW

LEGEND:

- Existing Contours (DEA 2022/USACE 2021, 1' and 5' Interval)
- Existing Contours (USACE 2022, 1' and 5' Interval)
- Proposed Design Target Daylight Extent (-57.0' MLLW)
- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- Feasibility Study Navigation Channel
- Proposed Core Sampling Location

0 80
Feet

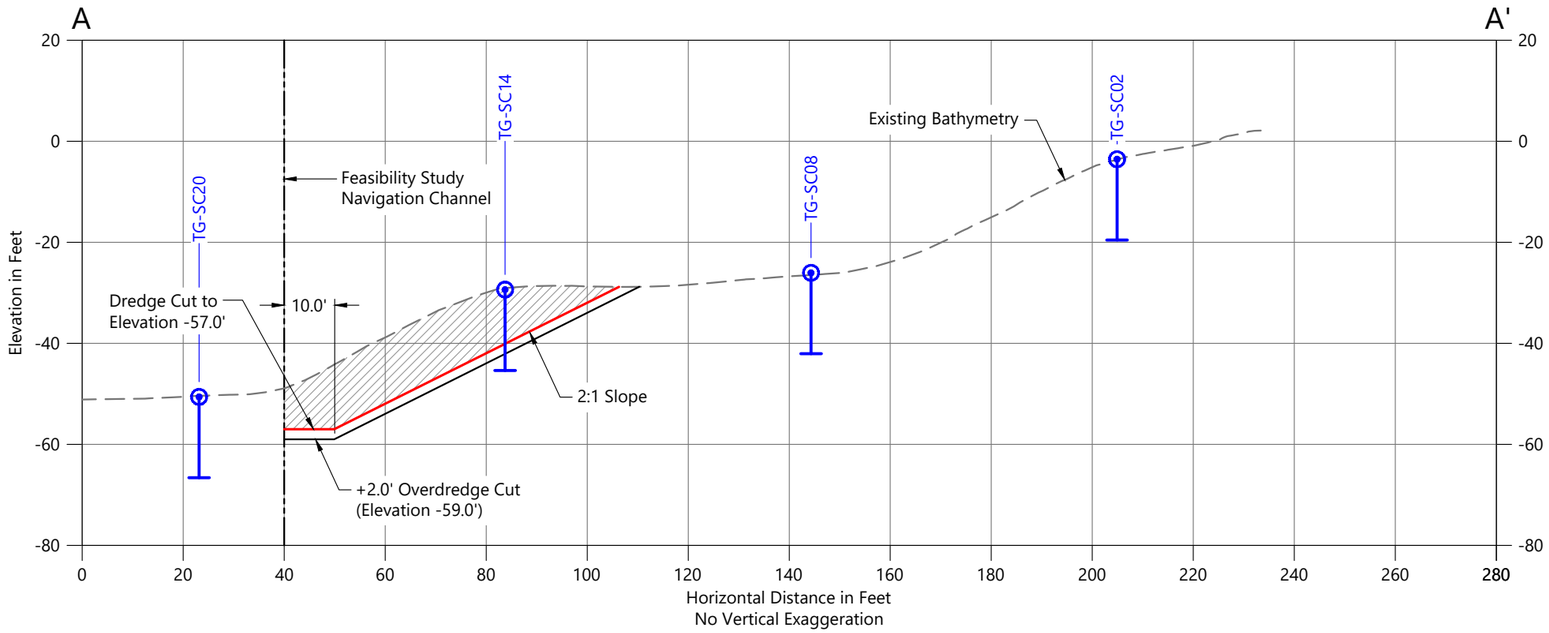
Publish Date: 2024/05/17 3:23 PM | User: jbigsby
Filepath: K:\Projects\0092 - Port of Tacoma\Tru-Grit Site Data Gaps Assessment\0092-RP-004 (Site Plan-SAP).dwg Figure 6a

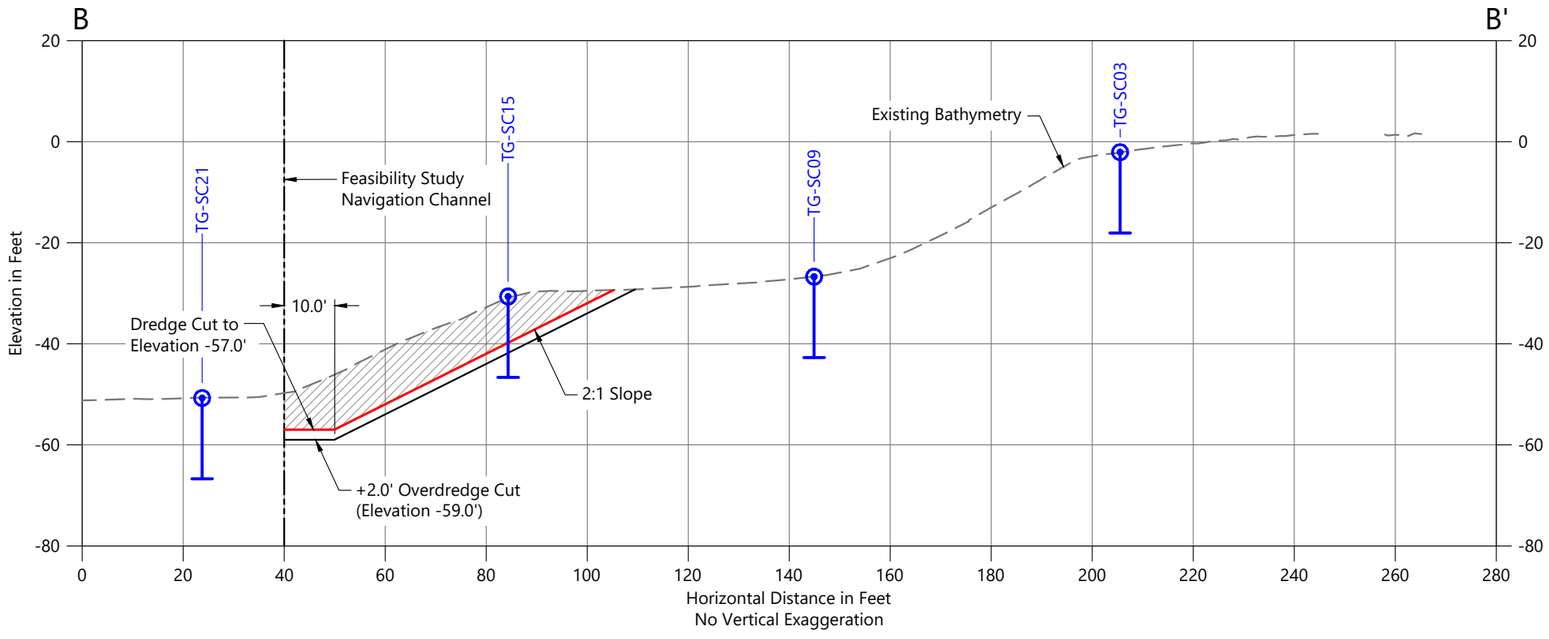
ANCHOR QEA

Figure 6a
Site Plan

Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation

FINAL





LEGEND:

Proposed Core Sampling Location

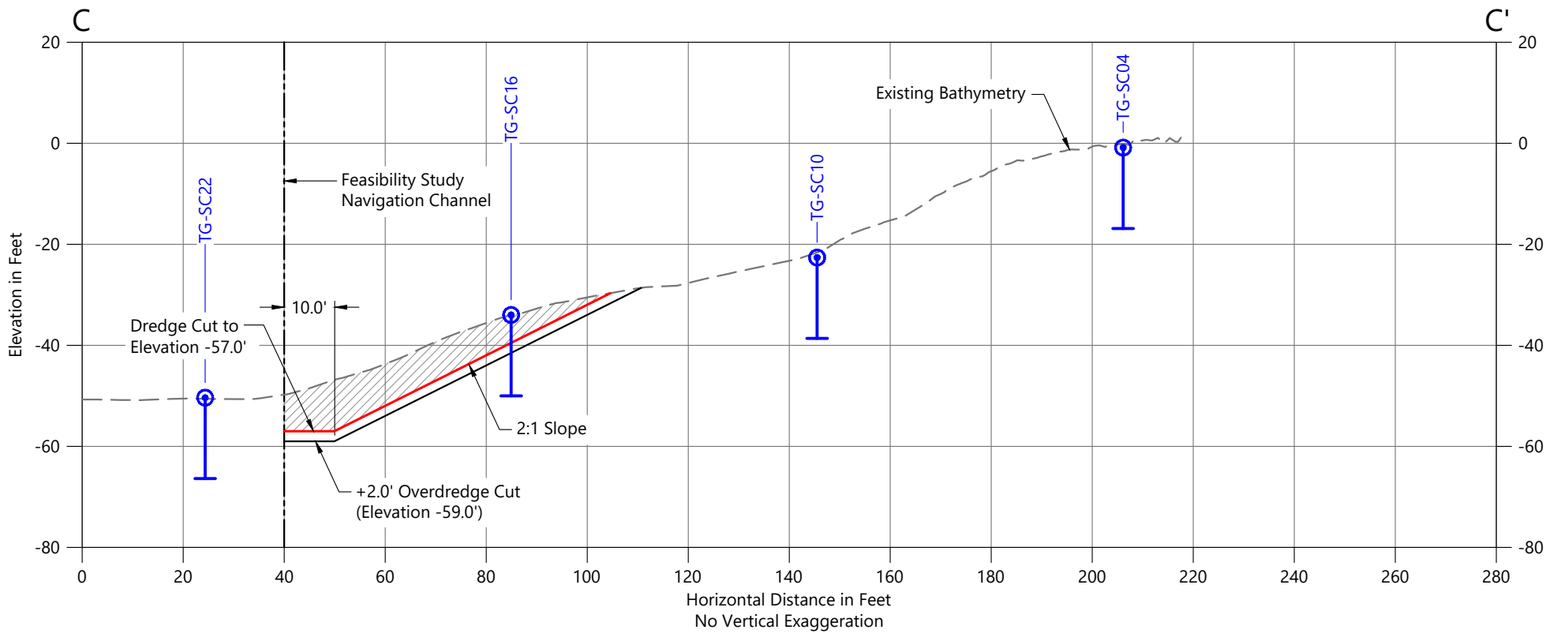
0 30
Feet

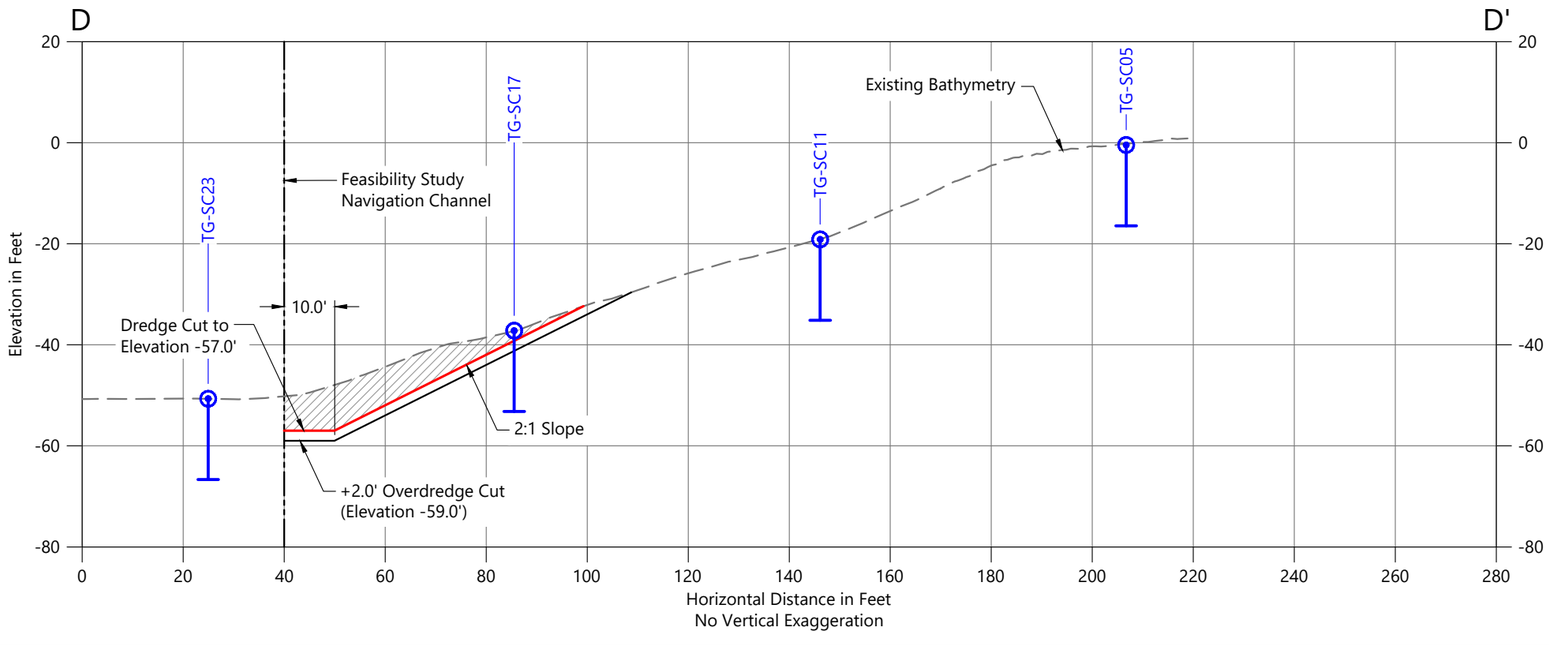
Publish Date: 2024/05/17 3:24 PM | User: jbigsby
Filepath: K:\Projects\0092 - Port of Tacoma\Tru-Grit Site Data Gaps Assessment\0092-RP-005 (Sections-SAP).dwg Figure 6b

ANCHOR QEA

Figure 6b
Cross Sections A-A' and B-B'

Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation





LEGEND:

Proposed Core Sampling Location

0 30
Feet

Publish Date: 2024/05/17 3:24 PM | User: jbigsby
Filepath: K:\Projects\0092 - Port of Tacoma\Tru-Grit Site Data Gaps Assessment\0092-RP-005 (Sections-SAP).dwg Figure 6c

ANCHOR QEA

Figure 6c
Cross Sections C-C' and D-D'

Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation

Appendix A
Field Forms

Daily Log

ANCHOR QEA

PROJECT NAME: **DATE:**

SITE ADDRESS: **PERSONNEL:**

WEATHER: **WIND FROM:**

N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY

SUNNY	CLOUDY	RAIN	?

TEMPERATURE: ° F . ° C

[Circle appropriate units]

TIME	COMMENTS

Signature: _____

Sediment Core Collection Log

Job:	**Station ID:**
Job No:	**Attempt No.**
Field Staff:	**Date:**
Contractor:	**Logged By:**
Vertical Datum:	**Horizontal Datum: NAD83 WA State Plane North, feet**

Field Collection Coordinates:

Lat/Northing:	Long/Easting:

A. Water Depth

DTM Depth Sounder:

DTM Lead Line:

B. Water Level Measurements

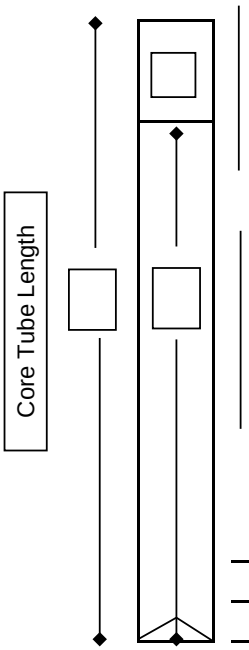
Time:

Height:

Source:

C. Mudline Elevation

Recovery Measurements (prior to cuts)



Core Collection Recovery Details:

Core Accepted: Yes / No

Core Tube Length:

Drive Penetration:

Headspace Measurement:

Recovery Measurement:

Recovery Percentage:

Total Length of Core To Process:

Sections To Process:

A:

B:

C:

D:

Drive Notes:

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Notes:

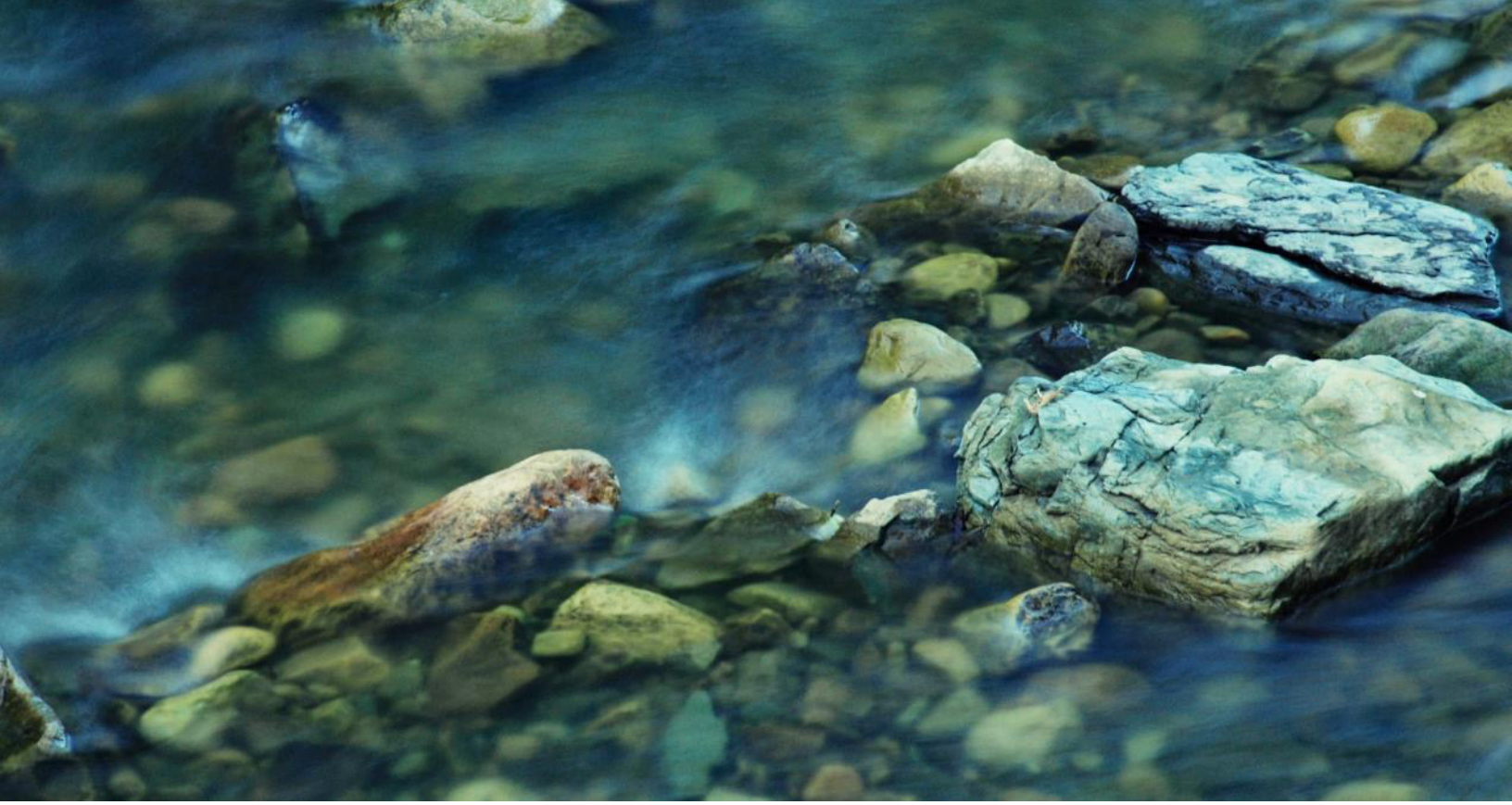
Sediment Core Processing Log

ANCHOR QEA

Job:	Station ID:
Job No.	Date/Time:
No. of Sections:	Core Logged By:
Drive Length:	Attempt #:
Recovery:	Type of Core ☐ Mudmole ☐ Vibracore ☐ Diver Core
% Recovery:	Diameter of Core (inches)
Notes:	

Recovered Length (ft)	Size % Gravel	Size % Sand	Size % Fines	**Classification and Remarks** (Density, Moisture, Color, Minor Constituent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Recovered Length (ft)	PID	Sample	Summary Sketch

Appendix A-2
SQAPP Addendum #1



March 2025
Tru-Grit Site Data Gaps Field Investigation

ANCHOR QEA

Sampling and Quality Assurance Project Plan Addendum

Prepared for Port of Tacoma

March 2025
Tru-Grit Site Data Gaps Field Investigation

Sampling and Quality Assurance Project Plan Addendum

Prepared for
Port of Tacoma
One Sitcum Plaza
Tacoma, Washington 98401

Prepared by
Anchor QEA
949 Market Street, Suite 700
Tacoma, Washington 98402

Project Number: 240092-03.06

TABLE OF CONTENTS

1 Introduction 1

1.1 Site History 2

1.2 Document Organization 2

2 Existing Data and Data Gaps 3

3 Project Management 4

3.1 Project and Task Organization 4

4 Sample Collection Modifications 5

4.1 Sampling Design Modifications 5

4.1.1 Reoccupied Locations 6

4.1.2 New Locations 6

4.2 Sampling Methods 7

4.2.1 Sample Identification 7

4.2.2 Subsurface Sediment Collection 8

4.3 Sample Handling Requirements 8

4.4 Laboratory Methods 8

5 Quality Assurance/Quality Control 9

6 Assessments and Response Actions 10

7 Data Validation, Usability, and Reporting 11

8 References 12

TABLES

Table 1 Sample Locations, Coordinates, Intervals, and Analyses Summary
Table 2 Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

FIGURE

Figure 1 Proposed Sampling Locations

ABBREVIATIONS

CanAm	CanAm Minerals, Inc.
CSL	Cleanup Screening Level
Ecology	Washington State Department of Ecology
FNC	federal navigation channel
FS	feasibility study
H:V	horizontal to vertical
MLLW	mean lower low water
MSS	Marine Sampling Systems, LLC
PM	project manager
Port	Port of Tacoma
QA/QC	quality assurance/quality control
SCO	Sediment Cleanup Objective
Site	Tru-Grit site
SMS	Sediment Management Standards
SQAPP	Sampling and Quality Assurance Project Plan
Tru-Grit	Tru-Grit Abrasives, Inc.
USACE	U.S. Army Corps of Engineers

1 Introduction

On behalf of the Port of Tacoma (Port), Anchor QEA has prepared this Sampling and Quality Assurance Project Plan Addendum (SQAPP) that details sample collection methods and analytical protocols for additional subsurface sediment data collection in the Tru-Grit Abrasives, Inc. (Tru-Grit) site (Site) at 1110 East Alexander Avenue, Tacoma, Washington.

Investigation of the Site was conducted under an Agreed Order (No. DE-8978; Ecology 2012) executed between the Washington State Department of Ecology (Ecology) and CanAm Minerals, Inc. (CanAm; parent company of Tru-Grit). CanAm was identified by Ecology as a potentially liable party under the Washington State Model Toxics Control Act due to releases of an ore-derived grit material containing elevated concentrations of copper and zinc. Work completed to date by CanAm includes a remedial investigation (Landau 2021) and draft feasibility study (FS; Landau 2019). Cleanup of Site-related contaminated sediments has not yet been implemented.

The U.S. Army Corps of Engineers (USACE) is planning to deepen the federal navigation channel (FNC) in the Blair Waterway. In 2024, further sampling was conducted to delineate the extent of Site-associated contaminated sediments that could be impacted by the deepening project (Anchor QEA 2024). The Port plans to remove those contaminated sediments prior to the FNC deepening conducted by USACE. Based on review of the 2024 data and limited core penetration and associated sample recovery, further investigation is needed to evaluate the vertical extent of contamination and further delineate the eastern boundary of the Site. This SQAPP Addendum expands the objective of the original SQAPP (Anchor QEA 2024) and includes the reoccupation of six previous subsurface sediment sampling locations and the addition of two to four new locations near the eastern boundary of the Site, which will be tested in a tiered manner (Figure 1). Sampling is anticipated to occur in March 2025.

This SQAPP Addendum was prepared based on Anchor QEA's understanding of USACE's plan to deepen the FNC to -57 mean lower low water (MLLW), plus a 2-foot overdredge (final elevation to -59 feet MLLW). The side slopes for the dredging were calculated using a 10-foot buffer landward of the FNC boundary identified by USACE in the FS phase (feasibility boundary) and a 2 horizontal to 1 vertical (2H:1V) slope ratio.[1] Two cores are proposed to characterize material contained within the Lower Slope areas adjacent to the side slopes of the FNC deepening program—one reoccupation core at location TG-SC15RE, one new location at TG-SC26, and potentially one additional new location at TG-SCX28 that is contingent on results from TG-SC26 (Figure 1). Six cores will also be collected in the Upper Slope areas—five reoccupation locations (TG-SC05RE, TG-SC09RE, TG-SC10RE,

[1] The feasibility boundary is a conservative boundary that assumes a wider navigation channel closer to the Site, but the preliminary engineering and design evaluations by USACE may result in a narrower FNC boundary farther from the Site. The 2H:1V side slope line is also conservative because deepening the FNC is expected to result in side slopes outside the FNC that are steeper than 2H:1V.

TG-SC11RE, and TG-SC12RE), one new location (TG-SC25), and potentially one additional new location at TG-SC27 that is contingent on results from TG-SC25—to provide additional information useful to future final cleanup of those Site areas (Figure 1). The Upper Slope areas are not expected to be impacted by the FNC deepening program.

1.1 Site History

For a detailed summary of Site history, please see the original SQAPP (Anchor QEA 2024).

1.2 Document Organization

This SQAPP Addendum was prepared in accordance with Ecology guidance, as described in the *Sediment Cleanup User's Manual* (Ecology 2021). This SQAPP Addendum is organized into the following sections:

- Section 2: Existing Data and Data Gaps
- Section 3: Project Management
- Section 4: Sample Collection Modifications
- Section 5: Quality Assurance/Quality Control
- Section 6: Assessments and Response Actions
- Section 7: Data Validation, Usability, and Reporting
- Section 8: References

2 Existing Data and Data Gaps

Refer to the original SQAPP (Anchor QEA 2024) for a detailed summary of the previous in-water and upland investigations conducted at the Site.

3 Project Management

This section discusses updates from the original SQAPP (Anchor QEA 2024) to the proposed project team and team member responsibilities for conducting the field investigation. Refer to the original SQAPP (Anchor QEA 2024) for the training and certification requirements for sampling personnel and documentation and recordkeeping procedures.

3.1 Project and Task Organization

Quality Assurance/Quality Control (QA/QC) Manager Ali Judkins will provide QA/QC oversight for both the field sampling and laboratory programs, ensure samples are collected and documented appropriately, coordinate with the analytical laboratories, ensure data quality, oversee data validation, and supervise project QA coordination and data validation.

4 Sample Collection Modifications

The rationale for the sample collection modifications for the SQAPP Addendum is provided in this section. The original SQAPP (Anchor QEA 2024) includes design assumptions for locating and selecting samples, as well as methods and procedures for the collection of field samples. Sampling will be conducted following standard procedures documented in the original SQAPP (Anchor QEA 2024). In general, all sampling procedures will also comply with previously approved sample collection standards established for the study area. Sampling for this addendum will be conducted with Marine Sampling Systems, LLC (MSS).

4.1 Sampling Design Modifications

Preliminary Tier 1 data from the 2024 field investigation were screened against Washington State Sediment Management Standards Sediment Cleanup Objectives (SCOs) and Cleanup Screening Levels (CSLs; Ecology 2021). Based on screening results, additional sampling and testing are needed to delineate the extent of SCO and CSL exceedances. The sampling for this SQAPP Addendum includes the collection of subsurface sediment core samples using MSS's vibracorer, which is expected to have greater penetration and recovery compared to the previous collection equipment. In the Lower Slope, one location will be reoccupied (TG-SC15RE), one new location will be added (TG-SC26), and one additional location will potentially be added (TG-SC28), pending results of TG-SC26 (Figure 1). In the Upper Slope, five locations will be reoccupied (TG-SC05RE, TG-SC09RE, TG-SC10RE, TG-SC11RE, and TG-SC12RE), one new location will be added (TG-SC25), and one additional location will potentially be added (TG-SC27), pending results of TG-SC25 (Figure 1). Cores TG-SC27 and TG-SC28 will be collected as part of a later mobilization, if necessary, after results of TG-SC25 and TG-SC26 are received.

The target core penetration depth is 14 feet below the mudline, using 15-foot core tubes or until refusal. Core samples will be sectioned into 2-foot intervals to the bottom of the core. Tier 1 testing of metals and total solids with the collection of archives for potential Tier 2 testing and waste characterization will be conducted as described in the original SQAPP (Anchor QEA 2024). Table 1 summarizes the sample locations, coordinates, sample intervals, and planned analyses. Figure 1 shows target sample locations. Rationale for reoccupying or adding new locations is described in Section 4.1.1.

4.1.1 Reoccupied Locations

The following locations have SCO or CSL exceedances for metals that have not been bounded vertically due to refusal during core collection. Therefore, some locations sampled in 2024 will be reoccupied and tested based on the following rationale (Table 1):

- TG-SC05: Limited penetration resulted in one interval from 0 to 1.6 feet below the mudline. Intervals from 0 to 12 feet will be analyzed for Tier 1 analyses.
- TG-SC09: The deepest sampled interval (6 to 6.7 feet below the mudline) exceeds the SCO for zinc and CSL for arsenic. Intervals from 6 to 12 feet will be analyzed for Tier 1 analyses.
- TG-SC10: The deepest sampled interval (4 to 5.2 feet below the mudline) exceeds the SCO for arsenic and CSL for chromium and copper. Intervals from 4 to 12 feet will be analyzed for Tier 1 analyses.
- TG-SC11: The deepest sampled interval (2 to 4.4 feet below the mudline) did not exceed the SCO for metals; however, deeper SCO and CSL exceedances at neighboring locations, TG-SC10 and TG-SC12, warrant reoccupying this location to confirm the depth of contamination. Intervals from 4 to 12 feet will be analyzed for Tier 1 analyses.
- TG-SC12: The deepest sampled interval (2 to 4.5 feet below the mudline) exceeds the SCO for arsenic. Intervals from 4 to 12 feet will be analyzed for Tier 1 analyses.
- TG-SC15: The deepest sampled interval (2 to 3.2 feet below the mudline) exceeds the CSL for arsenic, copper, lead, and zinc. Intervals from 2 to 12 feet will be analyzed for Tier 1 analyses.

Sample intervals may be modified in the field based on lithology, total depth collected, native interval contact, or other factors. The field coordinator will consult with the project manager (PM) for sample interval modifications.

4.1.2 New Locations

Preliminary Tier 1 data from the 2024 field investigation indicate elevated concentrations for metals that have not been bounded on the eastern edge of the Site. Therefore, the following two new locations will be sampled and tested based on the following rationale (Table 1):

- TG-SC25: This location has been added to laterally delineate SCO exceedances at TG-SC12 from 0 to 4.5 feet below the mudline. All intervals from 0 to 12 feet will be analyzed for Tier 1 analyses.
- TG-SC26: This location has been added to laterally delineate elevated arsenic concentrations (31.9 milligrams per kilogram) at TG-SC18 from 2 to 4 feet below the mudline. All intervals from 0 to 12 feet will be analyzed for Tier 1 analyses.

If these locations contain elevated concentrations, additional cores will be collected as part of a separate coring effort to collect cores from TG-SC27 and TG-SC28. These two new contingent locations may be sampled and tested based on the results of TG-SC25 and TG-SC26 (Table 1):

- TG-SC27: If necessary, this location has been added to laterally delineate elevated concentrations measured in TG-SC25. All intervals from 0 to 12 feet will be analyzed for Tier 1 analyses, pending results of TG-SC25.
- TG-SC28: If necessary, this location has been added to laterally delineate elevated concentrations measured in TG-SC26. All intervals from 0 to 12 feet will be analyzed for Tier 1 analyses, pending results of TG-SC25.

4.2 Sampling Methods

This section describes updates to the sampling methods from the original SQAPP (Anchor QEA 2024) and includes sample identification and subsurface sediment collection. Refer to the original SQAPP (Anchor QEA 2024) for the methods related to station positioning, subsurface sediment processing, and archaeological observations.

4.2.1 Sample Identification

Each sediment and water sample will be assigned a unique alphanumeric identifier according to the following method:

- Each sample ID will be identified by the overall Site ("TG") and location within the Site, as well as the sample collection method.
  - The sample collection method will be identified by "SC" for subsurface sediment core samples.
  - Station numbers will be added after the collection method identifier and are listed in Table 1 and shown in Figure 1.
  - The depth of the sediment sample will be added using four digits separated by a dash to represent the upper and lower interval in feet.
  - The date in YYMMDD format will be appended to the end of the sample ID.
  - Reoccupation locations will have "RE" appended to the end of the station number.
- An example sample identification nomenclature is TG-SC05RE-02-04-250324, which designates a subsurface core sample collected from the 2- to 4-foot interval from reoccupation location SC05 on March 24, 2025. A field duplicate will be identified by the addition of "100" to the sample station number. A duplicate sample collected from this example would be TG-SC105RE-02-04-250324 collected on March 24, 2025.
- Rinsate blank samples will use the overall Site identifier and collection method, followed by "RB" and the date. The resulting nomenclature of a rinsate blank of the decontaminated core sample processing equipment collected on March 24, 2025, would be TG-SC-RB-250324.

4.2.2 Subsurface Sediment Collection

Subsurface sediment cores will be collected from a sufficiently outfitted marine sampling vessel. Core samples will be collected using a vibracore advanced to 14 feet or refusal depth. Samples will be collected from target locations shown in Figure 1. Refer to the original SQAPP (Anchor QEA 2024) for vibracore sediment sample collection methods.

Cores will be evaluated to determine whether they meet acceptability requirements for the project. Acceptance criteria for sediment core samples are as follows:

- Overlying water is present, and the surface is intact.
- The core tube appears intact without obstruction or blocking.
- Recovery is greater than 75% of the drive length.
- Penetration is deep enough to collect all target depth intervals, unless refusal is encountered based on substrate conditions that consistently limit penetration.

If sample acceptance criteria are not achieved, the sample will be rejected unless modified acceptance criteria (i.e., lower percent recovery after multiple attempts) are approved by the field coordinator in consultation with the PM. Locations may be adjusted within up to a 10-foot radius. If there is little to no penetration at a location, or recovery is less than 75% of the drive length, up to three attempts will be made before abandoning the sample location and selecting a new location in coordination with the PM.

Refer to the original SQAPP (Anchor QEA 2024) for field log procedures.

4.3 Sample Handling Requirements

Refer to the original SQAPP (Anchor QEA 2024) for sample handling requirements.

4.4 Laboratory Methods

Refer to the original SQAPP (Anchor QEA 2024) for laboratory methods. Table 2 is included in this SQAPP Addendum to correct data entry errors in method detection limits, reporting limits, and marine screening levels from the original SQAPP.

5 Quality Assurance/Quality Control

Refer to the original SQAPP (Anchor QEA 2024) for QA/QC procedures.

6 Assessments and Response Actions

Refer to the original SQAPP (Anchor QEA 2024) for assessments and response actions.

7 Data Validation, Usability, and Reporting

Refer to the original SQAPP (Anchor QEA 2024) for data validation, usability, and reporting. Data validation will be conducted either by Anchor QEA or Laboratory Data Consultants.

8 References

Anchor QEA, 2024. *Sampling and Quality Assurance Project Plan*. Tru-Grit Site Data Gaps Field Investigation. Prepared for Port of Tacoma. July 2024.

Ecology (Washington State Department of Ecology), 2012. Agreed Order No. DE-8978. May 2012.

Ecology, 2021. *Sediment Cleanup User's Manual (SCUM): Guidance for Implementing the Cleanup Provisions of the Sediment Management Standards*, *Chapter 173–204 WAC*. Third Revision. Olympia, Washington: Washington State Department of Ecology.

Landau (Landau Associates, Inc.), 2019. *Agency Review Draft Feasibility Study, Tru-Grit Facility, Tacoma, Washington*. Prepared for CanAm Minerals, Inc. December 2019.

Landau, 2021. *Remedial Investigation Report, Tru-Grit Abrasives, Inc.* Prepared for CanAm Minerals, Inc. December 2021.

Tables

Table 1
Sample Locations, Coordinates, Intervals, and Analyses Summary

Location/Purpose	Location ID	Station Coordinates (Washington SP NAD83 South Zone) Easting (feet)	Station Coordinates (Washington SP NAD83 South Zone) Northing (feet)	Mudline Elevation (feet MLLW)	Sample[1] Upper Depth (feet)	Sample[1] Lower Depth (feet)	Sample ID[1]	Analyses[2,3]
Tier 1 Testing								
Upper Slope	TG-SC05RE	1168779.4	712462.1	-0.4*	00	02	TG-SC05RE-00-02-YYMMDD	Total solids, metals, archive
					02	04	TG-SC05RE-02-04-YYMMDD	Total solids, metals, archive
					04	06	TG-SC05RE-04-06-YYMMDD	Total solids, metals, archive
					06	08	TG-SC05RE-06-08-YYMMDD	Total solids, metals, archive
					08	10	TG-SC05RE-08-10-YYMMDD	Total solids, metals, archive
					10	12	TG-SC05RE-10-12-YYMMDD	Total solids, metals, archive
					12	14	TG-SC05RE-12-14-YYMMDD	Archive
	TG-SC09RE	1168553.5	712595.1	-26.7	00	02	TG-SC09RE-00-02-YYMMDD	Archive
					02	04	TG-SC09RE-02-04-YYMMDD	Archive
					04	06	TG-SC09RE-04-06-YYMMDD	Archive
					06	08	TG-SC09RE-06-08-YYMMDD	Total solids, metals, archive
					08	10	TG-SC09RE-08-10-YYMMDD	Total solids, metals, archive
					10	12	TG-SC09RE-10-12-YYMMDD	Total solids, metals, archive
					12	14	TG-SC09RE-12-14-YYMMDD	Archive
	TG-SC10RE	1168645.5	712506.7	-22.6	00	02	TG-SC10RE-00-02-YYMMDD	Archive
					02	04	TG-SC10RE-02-04-YYMMDD	Archive
					04	06	TG-SC10RE-04-06-YYMMDD	Total solids, metals, archive
					06	08	TG-SC10RE-06-08-YYMMDD	Total solids, metals, archive
					08	10	TG-SC10RE-08-10-YYMMDD	Total solids, metals, archive
					10	12	TG-SC10RE-10-12-YYMMDD	Total solids, metals, archive
					12	14	TG-SC10RE-12-14-YYMMDD	Archive
	TG-SC11RE	1168737.5	712418.4	-19.1	00	02	TG-SC11RE-00-02-YYMMDD	Archive
					02	04	TG-SC11RE-02-04-YYMMDD	Total solids, metals, archive
					04	06	TG-SC11RE-04-06-YYMMDD	Total solids, metals, archive
					06	08	TG-SC11RE-06-08-YYMMDD	Total solids, metals, archive
					08	10	TG-SC11RE-08-10-YYMMDD	Total solids, metals, archive
					10	12	TG-SC11RE-10-12-YYMMDD	Total solids, metals, archive
					12	14	TG-SC11RE-12-14-YYMMDD	Archive
	TG-SC12RE	1168829.5	712330.1	-20.2	00	02	TG-SC12RE-00-02-YYMMDD	Archive
					02	04	TG-SC12RE-02-04-YYMMDD	Archive
					04	06	TG-SC12RE-04-06-YYMMDD	Total solids, metals, archive
					06	08	TG-SC12RE-06-08-YYMMDD	Total solids, metals, archive
					08	10	TG-SC12RE-08-10-YYMMDD	Total solids, metals, archive
					10	12	TG-SC12RE-10-12-YYMMDD	Total solids, metals, archive
					12	14	TG-SC12RE-12-14-YYMMDD	Archive
	TG-SC25	1168921.5	712241.8	-19.7	00	02	TG-SC25-00-02-YYMMDD	Total solids, metals, archive
					02	04	TG-SC25-02-04-YYMMDD	Total solids, metals, archive
					04	06	TG-SC25-04-06-YYMMDD	Total solids, metals, archive
					06	08	TG-SC25-06-08-YYMMDD	Total solids, metals, archive
					08	10	TG-SC25-08-10-YYMMDD	Total solids, metals, archive
					10	12	TG-SC25-10-12-YYMMDD	Total solids, metals, archive
					12	14	TG-SC25-12-14-YYMMDD	Archive
	TG-SC27[4]	1169013.5	712153.5	-24.6	00	02	TG-SC27-00-02-YYMMDD	Total solids, metals, archive
					02	04	TG-SC27-02-04-YYMMDD	Total solids, metals, archive
					04	06	TG-SC27-04-06-YYMMDD	Total solids, metals, archive
					06	08	TG-SC27-06-08-YYMMDD	Total solids, metals, archive
					08	10	TG-SC27-08-10-YYMMDD	Total solids, metals, archive
					10	12	TG-SC27-10-12-YYMMDD	Total solids, metals, archive
					12	14	TG-SC27-12-14-YYMMDD	Archive
Lower Slope	TG-SC15RE	1168511.5	712551.4	-30.6	00	02	TG-SC15RE-00-02-YYMMDD	Archive
					02	04	TG-SC15RE-02-04-YYMMDD	Total solids, metals, archive
					04	06	TG-SC15RE-04-06-YYMMDD	Total solids, metals, archive
					06	08	TG-SC15RE-06-08-YYMMDD	Total solids, metals, archive
					08	10	TG-SC15RE-08-10-YYMMDD	Total solids, metals, archive
					10	12	TG-SC15RE-10-12-YYMMDD	Total solids, metals, archive
					12	14	TG-SC15RE-12-14-YYMMDD	Archive
	TG-SC26	1168879.5	712198.1	-36.2	00	02	TG-SC26-00-02-YYMMDD	Total solids, metals, archive
					02	04	TG-SC26-02-04-YYMMDD	Total solids, metals, archive
					04	06	TG-SC26-04-06-YYMMDD	Total solids, metals, archive
					06	08	TG-SC26-06-08-YYMMDD	Total solids, metals, archive
					08	10	TG-SC26-08-10-YYMMDD	Total solids, metals, archive
					10	12	TG-SC26-10-12-YYMMDD	Total solids, metals, archive
					12	14	TG-SC26-12-14-YYMMDD	Archive
	TG-SC28[4]	1168971.5	712109.8	-36.8	00	02	TG-SC28-00-02-YYMMDD	Total solids, metals, archive
					02	04	TG-SC28-02-04-YYMMDD	Total solids, metals, archive
					04	06	TG-SC28-04-06-YYMMDD	Total solids, metals, archive
					06	08	TG-SC28-06-08-YYMMDD	Total solids, metals, archive
					08	10	TG-SC28-08-10-YYMMDD	Total solids, metals, archive
					10	12	TG-SC28-10-12-YYMMDD	Total solids, metals, archive
					12	14	TG-SC28-12-14-YYMMDD	Archive
Tier 2 Testing								
TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS
Waste Characterization								
TBD[3]	TBD[3]	TBD[3]	TBD[3]	TBD[3]	TBD[3]	TBD[3]	TBD[3]	TCLP metals, SPLP metals, fish toxicity bioassay

Notes:
1. Actual sample depths and IDs may vary based on evidence of contamination, observed depth to native alluvium, and sample recovery depth.
2. The shallowest-bounded interval sample from each core that does not exceed metals screening criteria will be triggered for Tier 2 analyses (SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, and TVS).
3. Up to five composites will be generated for waste characterization from archive material pending results of Tier 1 testing.
4. TG-SC27 and TG-SC28 will only be collected following receipt of sample test results from TG-SC25 and TG-SC26.
* Sample collection at this location should be targeted during high tide.
--: not applicable
ID: identification
MLLW: mean lower low water
PCB: polychlorinated biphenyl
SPLP: synthetic precipitation leaching procedure
SVOC: semivolatile organic compound
TBD: to be determined
TCLP: toxicity characteristic leaching procedure
TOC: total organic carbon
TVS: total volatile solids
Washington SP NAD83: Washington State Plane North American Datum 1983

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		RCRA	CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	TCLP/SPLP Screening Criteria	Surface Water Cleanup Level
Tier 1 Analyses												
Conventional Parameters (%)												
Total solids	SM 2540G/PSEP	--	0.1	--	--	--	--	--	--	--	--	--
Metals (mg/kg dry weight)												
Antimony	EPA 6020B	0.10	0.20	150	--	200	--	--	--	--	--	--
Arsenic	EPA 6020B	0.038	0.20	57	507.1	700	57	93	57	93	--	--
Cadmium	EPA 6020B	0.040	0.10	5.1	--	14	5.1	6.7	5.1	6.7	--	--
Chromium (total)	EPA 6020B	0.26	0.50	260	--	--	260	270	260	270	--	--
Chromium (VI)[a]	EPA 7196A	0.40	0.40	--	--	--	--	--	--	--	--	--
Copper	EPA 6020B	0.35	0.50	390	--	1,300	390	390	390	390	--	--
Lead	EPA 6020B	0.052	0.10	450	975	1,200	450	530	450	530	--	--
Mercury	EPA 7471B	0.0053	0.025	0.41	1.5	2.3	0.41	0.59	0.41	0.59	--	--
Selenium[b]	EPA 6020B	0.18	0.50	--	3	--	--	--	--	--	--	--
Silver	EPA 6020B	0.022	0.20	6.1	--	8.4	6.1	6.1	6.1	6.1	--	--
Zinc	EPA 6020B	2.9	6.0	410	--	3,800	410	960	410	960	--	--
Tier 2 Analyses												
Conventional Parameters (%)												
Total volatile solids	SM 2540G/PSEP	--	0.1	--	--	--	--	--	--	--	--	--
Total organic carbon	EPA 9060A Mod	--	0.1	--	--	--	--	--	--	--	--	--
Butyltins (µg/kg dry weight)												
Tributyltin ion	Krone/8270E-SIM	0.5	3.9	--	73	--	--	--	--	--	--	--
Semivolatile Organic Compounds (µg/kg dry weight)												
Polycyclic Aromatic Hydrocarbons							**mg/kg OC**		**µg/kg dry weight**		--	--
1-methylnaphthalene	EPA 8270E	5.3	20	--	--	--	--	--	--	--	--	--
2-methylnaphthalene	EPA 8270E	4.5	20	670	--	1,900	38	64	670	670	--	--
Acenaphthene	EPA 8270E	5.2	20	500	--	2,000	16	57	500	500	--	--
Acenaphthylene	EPA 8270E	6.2	20	560	--	1,300	66	66	1,300	1,300	--	--
Anthracene	EPA 8270E	7.2	20	960	--	13,000	220	1,200	960	960	--	--
Benzo(a)anthracene	EPA 8270E	6.0	20	1300	--	5,100	110	270	1,300	1,600	--	--
Benzo(a)pyrene	EPA 8270E	4.2	20	1600	--	3,600	99	210	1,600	1,600	--	--
Benzo(b,j,k)fluoranthenes	EPA 8270E	10	40	3200	--	9,900	230	450	3,200	3,600	--	--
Benzo(g,h,i)perylene	EPA 8270E	14	20	670	--	3,200	31	78	670	720	--	--
Chrysene	EPA 8270E	6.1	20	1400	--	21,000	110	460	1,400	2,800	--	--
Dibenz(a,h)anthracene	EPA 8270E-SIM	0.91	5.0	230	--	1,900	12	33	230	230	--	--
Fluoranthene	EPA 8270E	6.1	20	1700	4,600	30,000	160	1,200	1,700	2,500	--	--
Fluorene	EPA 8270E	15	20	540	--	3,600	23	79	540	540	--	--
Indeno(1,2,3-cd)pyrene	EPA 8270E	15	20	600	--	4,400	34	88	600	690	--	--
Naphthalene	EPA 8270E	4.2	20	2100	--	2,400	99	170	2,100	2,100	--	--
Phenanthrene	EPA 8270E	8.7	20	1500	--	21,000	100	480	1,500	1,500	--	--
Pyrene	EPA 8270E	5.7	20	2600	11,980	16,000	1,000	1,400	2,600	3,300	--	--
Total LPAH (U = 0)[c]	EPA 8270E	--	--	5200	--	29,000	370	780	5,200	5,200	--	--
Total HPAHs (U = 0)[d]	EPA 8270E	--	--	12000	--	69000	960	5,300	12,000	17,000	--	--
Total PAHs (U = 0)[e]	Calculated	--	--	--	--	--	--	--	--	--	--	--

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		RCRA	CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	TCLP/SPLP Screening Criteria	Surface Water Cleanup Level
Chlorinated Hydrocarbons							**mg/kg OC**		**µg/kg dry weight**		--	--
1,4-dichlorobenzene	EPA 8270E-SIM	0.6	5.0	110	--	120	3.1	9	110	110	--	--
1,2-dichlorobenzene	EPA 8270E-SIM	0.7	5.0	35	--	110	2.3	2.3	35	50	--	--
1,2,4-trichlorobenzene	EPA 8270E-SIM	2.7	5.0	31	--	64	0.81	1.8	31	51	--	--
Hexachlorobenzene	EPA 8270E-SIM	0.7	5.0	22	168	230	0.38	2.3	22	70	--	--
Phthalates							**mg/kg OC**		**µg/kg dry weight**		--	--
Dimethyl phthalate	EPA 8270E-SIM	1.0	5.0	71	--	1,400	53	53	71	160	--	--
Diethyl phthalate	EPA 8270E-SIM	4.8	20	200	--	1,200	61	110	200	>1,200	--	--
Di-n-butyl phthalate	EPA 8270E	5.6	20	1,400	--	5,100	220	1,700	1,400	1,400	--	--
Butyl benzyl phthalate	EPA 8270E-SIM	0.68	5.0	63	--	970	4.9	64	63	900	--	--
Bis(2-ethylhexyl) phthalate	EPA 8270E	5.5	50	1,300	--	8,300	47	78	1300	1900	--	--
Di-n-octyl phthalate	EPA 8270E	4.4	20	6,200	--	6,200	58	4,500	6,200	6,200	--	--
Phenols (µg/kg dry weight)							**µg/kg dry weight**		**µg/kg dry weight**			
Phenol	EPA 8270E-SIM	2.2	5.0	420	--	1,200	420	1,200	420	1,200	--	--
2-methylphenol	EPA 8270E-SIM	1.1	5.0	63	--	77	63	63	63	63	--	--
4-methylphenol	EPA 8270E-SIM	0.9	5.0	670	--	3,600	670	670	670	670	--	--
2,4-dimethylphenol	EPA 8270E-SIM	2.2	20	29	--	210	29	29	29	29	--	--
Pentachlorophenol	EPA 8270E-SIM	2.1	20	400	504	690	360	690	360	690	--	--
Miscellaneous Extractables (µg/kg dry weight)							**mg/kg OC (unless noted)**		**µg/kg dry weight**			--
Benzyl alcohol	EPA 8270E-SIM	2.5	20	57	--	870	57 dry weight	73 dry weight	57	73	--	--
Benzoic acid	EPA 8270E-SIM	13	100	650	--	760	650 dry weight	650 dry weight	650	650	--	--
Dibenzofuran	EPA 8270E	14	20	540	--	1,700	15	58	540	540	--	--
Hexachlorobutadiene	EPA 8270E-SIM	0.72	5.0	11	--	270	3.9	6.2	11	120	--	--
N-Nitrosodiphenylamine	EPA 8270E-SIM	1.3	5.0	28	--	--	11	11	28	40	--	--
Carbazole	EPA 8270E	4.3	20	--	--	--	--	--	--	--	--	--
Pesticides (µg/kg dry weight)												
2,4'-DDD	EPA 8081B	0.20	1.0	--	--	--	--	--	--	--	--	--
2,4'-DDE	EPA 8081B	0.25	1.0	--	--	--	--	--	--	--	--	--
2,4'-DDT	EPA 8081B	0.19	1.0	--	--	--	--	--	--	--	--	--
4,4'-DDD	EPA 8081B	0.32	1.0	16	--	--	--	--	--	--	--	--
4,4'-DDE	EPA 8081B	0.14	1.0	9	--	--	--	--	--	--	--	--
4,4'-DDT	EPA 8081B	0.32	1.0	12	--	--	--	--	--	--	--	--
2,4'-DDD and 4,4'-DDD	Calculated	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDE and 4,4'-DDE	Calculated	--	--	--	--	--	--	--	--	--	--	--
2,4'-DDT and 4,4'-DDT	Calculated	--	--	--	--	--	--	--	--	--	--	--
Total DDT (U = 0)[f]	Calculated	--	--	--	50	69	--	--	--	--	--	--
Aldrin	EPA 8081B	--	--	9.5	--	--	--	--	--	--	--	--
beta-HCH	EPA 8081B	0.09	0.50	--	--	--	--	--	--	--	--	--
Dieldrin	EPA 8081B	0.12	1.0	1.9	--	1,700	--	--	--	--	--	--
Endrin ketone	EPA 8081B	0.28	1.0	--	--	--	--	--	--	--	--	--
Heptachlor	EPA 8081B	0.05	0.50	1.5	--	270	--	--	--	--	--	--
cis-chlordane	EPA 8081B	0.1	0.5	--	--	--	--	--	--	--	--	--
trans-chlordane	EPA 8081B	0.3	0.5	--	--	--	--	--	--	--	--	--
cis-nonachlor	EPA 8081B	0.2	0.5	--	--	--	--	--	--	--	--	--
trans-nonachlor	EPA 8081B	0.2	0.5	--	--	--	--	--	--	--	--	--
oxychlordane	EPA 8081B	0.1	0.5	--	--	--	--	--	--	--	--	--
Total chlordane (U = 0)[g]	EPA 8081B	--	--	2.8	37	--	--	--	--	--	--	--

Table 2

Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		RCRA	CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	TCLP/SPLP Screening Criteria	Surface Water Cleanup Level
PCBs (µg/kg dry weight)							**mg/kg OC**		**µg/kg dry weight**			
Aroclor 1016	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1221	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1232	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1242	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1248	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1254	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--	--
Aroclor 1260	EPA 8082A	9.3	20	--	--	--	--	--	--	--	--	--
Total Aroclor PCBs (U = 0)	EPA 8082A	9.3	20	130	38 mg/kg OC	3,100	12	65	130	1,000	--	--
Dioxin/Furans (ng/kg dry weight)[h]												
Dioxins												
2,3,7,8-TCDD	EPA 1613B	0.19	0.5	--	--	--	--	--	--	--	--	--
1,2,3,7,8-PeCDD	EPA 1613B	0.784	2.5	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-HxCDD	EPA 1613B	0.633	2.5	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-HxCDD	EPA 1613B	0.64	2.5	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-HxCDD	EPA 1613B	0.717	2.5	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-HpCDD	EPA 1613B	0.706	2.5	--	--	--	--	--	--	--	--	--
OCDD	EPA 1613B	1.62	5.0	--	--	--	--	--	--	--	--	--
Furans												
2,3,7,8-TCDF	EPA 1613B	0.183	0.5	--	--	--	--	--	--	--	--	--
1,2,3,7,8-PeCDF	EPA 1613B	0.576	2.5	--	--	--	--	--	--	--	--	--
2,3,4,7,8-PeCDF	EPA 1613B	0.686	2.5	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8-HxCDF	EPA 1613B	0.659	2.5	--	--	--	--	--	--	--	--	--
1,2,3,6,7,8-HxCDF	EPA 1613B	0.621	2.5	--	--	--	--	--	--	--	--	--
1,2,3,7,8,9-HxCDF	EPA 1613B	0.661	2.5	--	--	--	--	--	--	--	--	--
2,3,4,6,7,8-HxCDF	EPA 1613B	0.716	2.5	--	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-HpCDF	EPA 1613B	0.649	2.5	--	--	--	--	--	--	--	--	--
1,2,3,4,7,8,9-HpCDF	EPA 1613B	0.818	2.5	--	--	--	--	--	--	--	--	--
OCDF	EPA 1613B	3.84	5.0	--	--	--	--	--	--	--	--	--
Total TEQ (U = 0)	--	--	--	4.0	--	--	--	--	--	--	--	--
Total TEQ (U = 1/2 EDL)	--	--	--	4.0	--	--	--	--	--	--	--	--
Waste Characterization												
TCLP Metals (mg/L)												
Arsenic	EPA 1311/6010D	0.014	0.25	--	--	--	--	--	--	--	5.0	--
Barium	EPA 1311/6010D	0.0075	0.015	--	--	--	--	--	--	--	100	--
Cadmium	EPA 1311/6010D	0.0006	0.010	--	--	--	--	--	--	--	1.0	--
Chromium	EPA 1311/6010D	0.0024	0.025	--	--	--	--	--	--	--	8.0	--
Lead	EPA 1311/6010D	0.007	0.10	--	--	--	--	--	--	--	5.0	--
Mercury	EPA 1311/6010D	0.0000070	0.0001	--	--	--	--	--	--	--	0.20	--
Selenium	EPA 1311/6010D	0.041	0.25	--	--	--	--	--	--	--	1.0	--
Silver	EPA 1311/6010D	0.0022	0.015	--	--	--	--	--	--	--	5.0	--
SPLP Metals (mg/L)												
Antimony	EPA 1312/6020B	0.0005	0.00075	--	--	--	--	--	--	--	--	0.0900
Arsenic	EPA 1312/6020B	0.00019	0.0005	--	--	--	--	--	--	--	--	0.0080
Barium	EPA 1312/6020B	0.0006	0.001	--	--	--	--	--	--	--	--	--
Beryllium	EPA 1312/6020B	0.00009	0.0005	--	--	--	--	--	--	--	--	0.270
Cadmium	EPA 1312/6020B	0.0002	0.0002	--	--	--	--	--	--	--	--	0.0079
Chromium	EPA 1312/6020B	0.001	0.002	--	--	--	--	--	--	--	--	240[i]
Copper	EPA 1312/6020B	0.002	0.002	--	--	--	--	--	--	--	--	--

Table 2

Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		RCRA	CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	TCLP/SPLP Screening Criteria	Surface Water Cleanup Level
Lead	EPA 1312/6020B	0.00026	0.00034	--	--	--	--	--	--	--	--	0.0081
Mercury	EPA 1312/7470A	0.000007	0.00005	--	--	--	--	--	--	--	--	0.000025
Nickel	EPA 1312/6020B	0.0004	0.001	--	--	--	--	--	--	--	--	0.0082
Selenium	EPA 1312/6020B	0.0009	0.002	--	--	--	--	--	--	--	--	0.0710
Silver	EPA 1312/6020B	0.0001	0.0005	--	--	--	--	--	--	--	--	0.0019
Thallium	EPA 1312/6020B	0.00012	0.0005	--	--	--	--	--	--	--	--	0.00022
Zinc	EPA 1312/6020B	0.015	0.022	--	--	--	--	--	--	--	--	0.0810

Notes:

Greater than (>) values indicate that the upper bound of toxicity level is unknown but is known to be above the concentration shown.

a. Chromium VI will be analyzed on a subset of 8 samples collected from known areas of grit. Actual sample locations and depths will be determined based on field observations.

b. Because no screening level value exists for toxicity testing, selenium will only be evaluated for its bioaccumulation potential.

c. Total LPAH consists of the sum of naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, and anthracene.

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

e. Total PAHs consists of the sum of all PAHs listed.

f. Total DDT consists of the sum of 4,4'-DDD; 4,4'-DDE; and 4,4'-DDT.

g. Chlordane includes cis-chlordane, trans-chlordane, cis-nonaclor, trans-nonaclor, and oxychlordane.

h. Dioxin/furan results will be reported to sample and analysis-specific estimated detection limits.

i. Value for chromium III

µg/kg: microgram per kilogram

AET: Apparent Effects Threshold

ASTM: ASTM International

CLARC: Ecology MTCA Cleanup Levels and Risk Calculation

Ecology: Washington State Department of Ecology

DDD: dichlorodiphenyldichloroethane

DDE: dichlorodiphenyldichloroethylene

DDT: dichlorodiphenyltrichloroethane

EDL: estimated detection limit

EPA: U.S. Environmental Protection Agency

HPAH: high-molecular-weight PAHs

LPAH: low-molecular-weight PAHs

MTCA: Model Toxics Control Act

mg/kg: milligram per kilogram

mg/L: milligram per liter

ng/kg: nanogram per kilogram

OC: organic carbon-normalized

OCDD: octachlorodibenzodioxin

OCDF: octachlorodibenzofuran

PAH: polycyclic aromatic hydrocarbon

PCB: polychlorinated bipheynl

PSEP: Puget Sound Estuary Program

RCRA: Resource Conservation and Recovery Act

SM: Standard Method

SMS: Sediment Management Standards

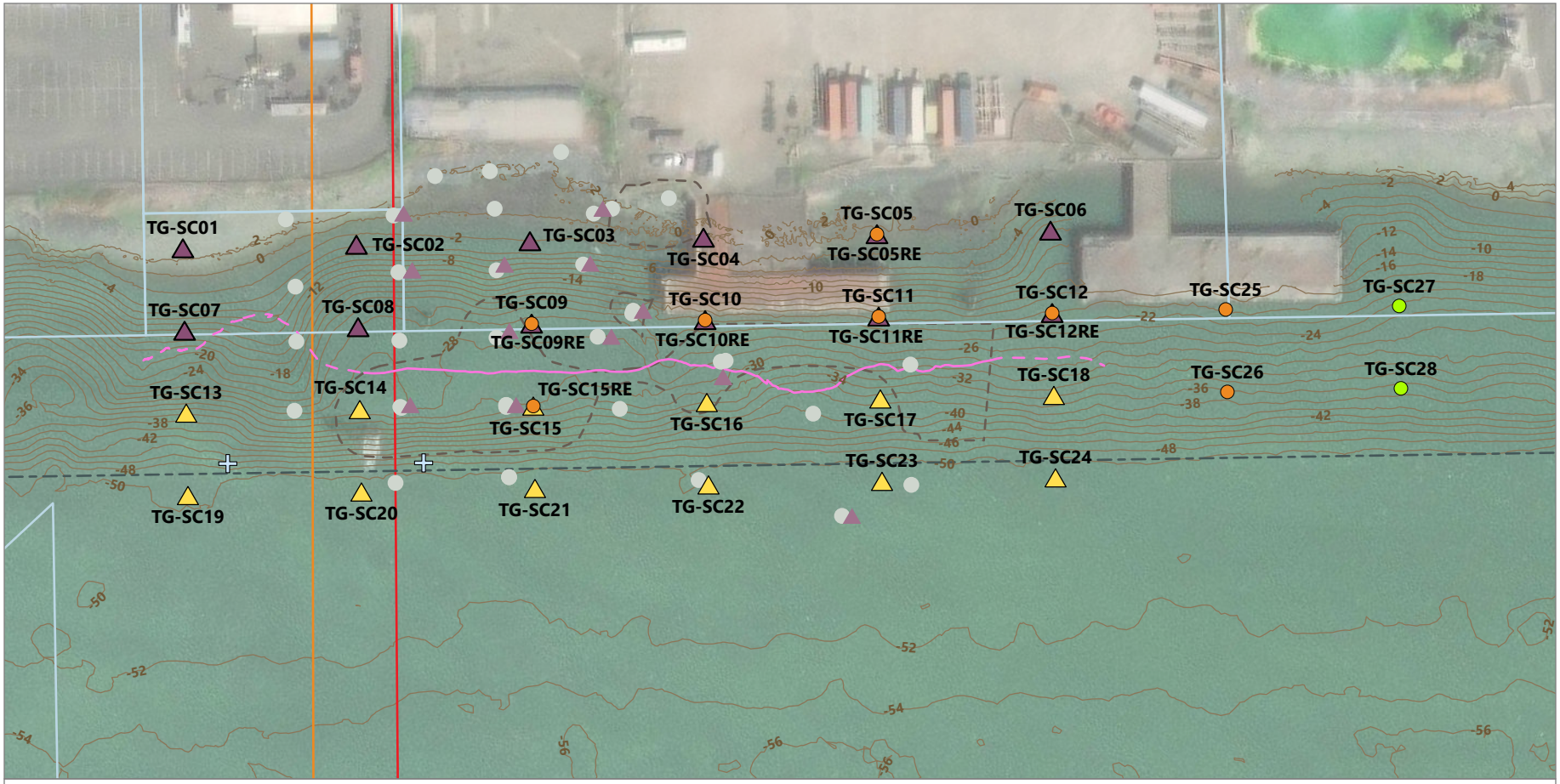
SPLP: Synthetic Precipitation Leaching Procedure

TCLP: toxicity characteristic leaching procedure

TEQ: toxic equivalency

U: undetected

Figure



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary
- Navigational Aid
- Existing Contour (USACE 2' Interval)
- >5% Grit Boundary
- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- Underwater Communications Crossing
- Underwater Watermain Crossing

Previous Sample Location

- Surface Sediment
- Subsurface Sediment

Proposed Sample Location

- Previous Upper Slope Core Sample Location
- Previous Lower Slope Core Sample Location
- Reoccupation or New Sampling Locations (SQAPP Addendum)
- Contingency Sampling Locations (SQAPP Addendum)

NOTES:

1. Aerial imagery: Esri (2022)
2. Contour Source: Survey by USACE, dated October 27, 2021, and David Evans Associates Inc., dated May 27, 2022, with data gaps filled from survey by USACE dated November 14, 2022
3. Horizontal Datum: NAD83 State Plane Washington South, U.S. feet
4. Vertical Datum: MLLW, feet

MLLW: mean lower low water
NAD83: North American Datum of 1983
SQAPP: Sampling and Quality Assurance Project Plan
USACE: U.S. Army Corps of Engineers

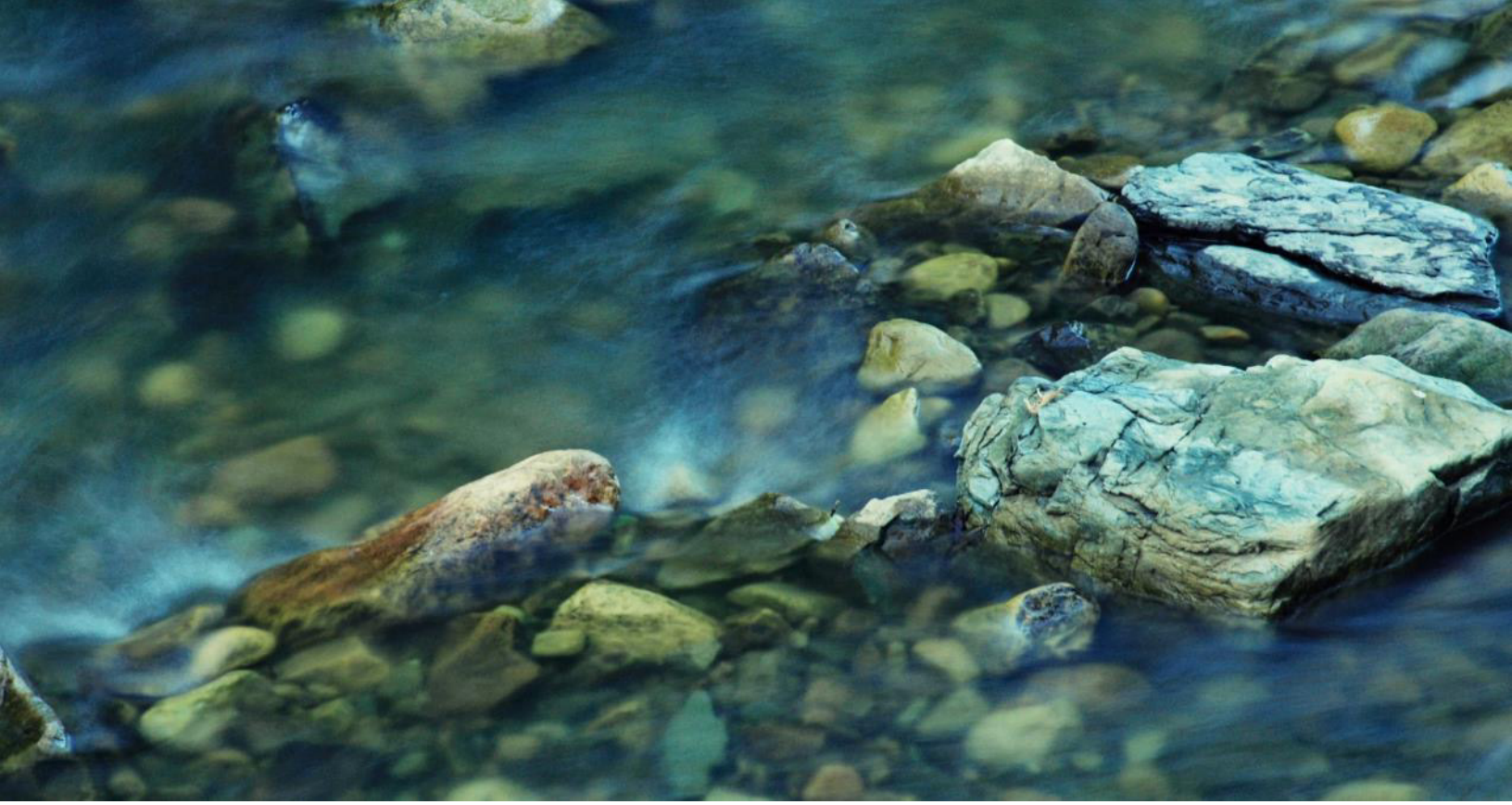
0 120
Feet

Publish Date: 2025/03/21, 11:23 AM | User: eiverson
Filepath: \\gstfile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPPADNM_Fig1_ProposedSampling

ANCHOR QEA

Figure 1
Proposed Sampling Locations
Sampling and Quality Assurance Project Plan Addendum
Tru-Grit Site Data Gaps Field Investigation

Appendix A-3
SQAPP Addendum #2



August 2025
Tru-Grit Site Data Gaps Field Investigation

ANCHOR QEA

Sampling and Quality Assurance Project Plan Addendum #2

Prepared for Port of Tacoma

August 2025
Tru-Grit Site Data Gaps Field Investigation

Sampling and Quality Assurance Project Plan Addendum #2

Prepared for
Port of Tacoma
One Sitcum Plaza
Tacoma, Washington 98401

Prepared by
Anchor QEA
949 Market Street, Suite 700
Tacoma, Washington 98402

Project Number: 240092-03.06

TABLE OF CONTENTS

1 Introduction 1

1.1 Site History 2

1.2 Document Organization 2

2 Existing Data and Data Gaps 4

3 Project Management 5

3.1 Project and Task Organization 5

4 Sample Collection Modifications 6

4.1 Sampling Design Modifications 6

4.1.1 Subsurface Sediment Collection 6

4.1.2 Surface Sediment Collection 7

4.2 Sampling Methods 7

4.2.1 Sample Identification 7

4.2.2 Subsurface Sediment Collection 8

4.2.3 Surface Sediment Sample Collection Procedures 9

4.3 Sample Handling Requirements 12

4.4 Laboratory Methods 13

5 Quality Assurance/Quality Control 14

6 Contingent Biological Testing 15

7 Assessments and Response Actions 20

8 Data Validation, Usability, and Reporting 21

9 References 22

TABLES

Table 1	Sample Locations, Coordinates, Intervals, and Analyses Summary
Table 2	Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits
Table 3	Sample Handling and Storage Guidelines
Table 4	Bioassay Performance Standards and Evaluation Guidelines

FIGURE

Figure 1	Proposed Sampling Locations

APPENDIX

Appendix A	Field Forms

ABBREVIATIONS

CanAm	CanAm Minerals, Inc.
CSL	Cleanup Screening Level
Ecology	Washington State Department of Ecology
FNC	federal navigation channel
FS	feasibility study
H:V	horizontal to vertical
IDW	investigation-derived waste
MLLW	mean lower low water
MSS	Marine Sampling Systems, LLC
PCB	polychlorinated biphenyl
PM	project manager
Port	Port of Tacoma
QA/QC	quality assurance/quality control
SCO	Sediment Cleanup Objective
SCUM	*Sediment Cleanup User's Manual*
Site	Tru-Grit site
SMS	Sediment Management Standards
SQAPP	Sampling and Quality Assurance Project Plan
SVOC	semivolatile organic compound
Tru-Grit	Tru-Grit Abrasives, Inc.
USACE	U.S. Army Corps of Engineers

1 Introduction

On behalf of the Port of Tacoma (Port), Anchor QEA has prepared this Sampling and Quality Assurance Project Plan Addendum #2 (Addendum) that details sample collection methods and analytical protocols for additional subsurface sediment data collection in the Tru-Grit Abrasives, Inc. (Tru-Grit) site (Site) at 1110 East Alexander Avenue, Tacoma, Washington.

Investigation of the Site was conducted under an Agreed Order (No. DE-8978; Ecology 2012) executed between the Washington State Department of Ecology (Ecology) and CanAm Minerals, Inc. (CanAm; parent company of Tru-Grit). CanAm was identified by Ecology as a potentially liable person under the Washington State Model Toxics Control Act due to releases of an ore-derived grit material containing elevated concentrations of copper and zinc. Work completed to date by CanAm includes a remedial investigation (Landau 2021) and draft feasibility study (FS; Landau 2019). Cleanup of Site-related contaminated sediments has not yet been implemented.

The U.S. Army Corps of Engineers (USACE) is planning to deepen the federal navigation channel (FNC) in the Blair Waterway. In 2024, further sampling was conducted to delineate the extent of Site-associated contaminated sediments that could be impacted by the deepening project (Anchor QEA 2024). The Port plans to remove those contaminated sediments prior to the FNC deepening conducted by USACE. Based on review of the 2024 data and limited core penetration and associated sample recovery, further investigation was conducted to evaluate the vertical extent of contamination and further delineate the eastern boundary of the Site (Anchor QEA 2025). Based on review of the 2024 and 2025 data, additional investigation is needed to evaluate the horizontal extent of contamination along the eastern Site boundary.

This Addendum expands on the original Sampling and Quality Assurance Project Plan (SQAPP; Anchor QEA 2024) and SQAPP Addendum (Anchor QEA 2025) and includes additional testing along the eastern boundary of the Site in the vicinity of the former A.H. Powers Dock (Powers Dock); Figure 1). Planned testing includes the following:

- Three new subsurface sediment sampling locations for chemical testing
- Eight surface grab sampling locations in the Upper Slope area for chemical testing and contingent bioassay testing

Sampling is anticipated to occur in August 2025.

This Addendum was prepared based on Anchor QEA's understanding of USACE's plan to deepen the FNC to -57 feet mean lower low water (MLLW), plus a 2-foot overdredge (final elevation to -59 feet MLLW). The side slopes for the dredging were calculated using a 10-foot buffer landward of the FNC

boundary identified by USACE in the FS phase (feasibility boundary) and a 2 horizontal to 1 vertical (2H:1V) slope ratio.[1]

- Lower Slope Testing: One new core and grab sample (TG-SC30 and TG-SG30, respectively) are proposed to characterize material contained within the Lower Slope areas adjacent to the side slopes of the FNC deepening program (Figure 1).
- Upper Slope Testing: The remaining samples are to be collected in areas of the Upper Slope that are not expected to be affected by the deepening program. Testing in these Upper Slope areas is being performed to confirm the limits of Site-associated sediment contaminants along the eastern edge of the Tru-Grit Site to inform Port remediation planning.

1.1 Site History

For a detailed summary of Site history, please see the original SQAPP (Anchor QEA 2024).

The additional sampling described in this Addendum #2 extends to the east in the areas surrounding the former Powers Dock. The Powers Dock area was historically used by the former property owner and their tenants for staging of marine construction equipment. The contaminants detected in subsurface testing completed in portions of this area (heavy metals and blasting grit) are similar to those present in the former Tru-Grit operational areas. However, the contamination in these eastern areas may include contributions from other operations that historically occurred around the Powers Dock.

1.2 Document Organization

This SQAPP Addendum was prepared in accordance with Ecology guidance, as described in the *Sediment Cleanup User's Manual* (SCUM; Ecology 2021). This SQAPP Addendum is organized into the following sections:

- Section 2: Existing Data and Data Gaps
- Section 3: Project Management
- Section 4: Sample Collection Modifications
- Section 5: Quality Assurance/Quality Control
- Section 6: Contingent Biological Testing
- Section 7: Assessments and Response Actions
- Section 8: Data Validation, Usability, and Reporting
- Section 9: References

[1] The feasibility boundary is a conservative boundary that assumes a wider navigation channel closer to the Site, but the preliminary engineering and design evaluations by USACE may result in a narrower FNC boundary farther from the Site. The 2H:1V side slope line is also conservative because deepening the FNC is expected to result in side slopes outside the FNC that are steeper than 2H:1V.

Table 1 summarizes the sample locations, coordinates, sample intervals, and planned analyses. Figure 1 shows target sample locations. Table 2 is included in this Addendum to reflect the parameters for analysis updated from the original SQAPP. Table 3 is included in this Addendum to reflect sample handling and storage guidelines for new analyses that were not included in the original SQAPP. Bioassay performance standards and evaluation guidelines are included in Table 4. Field forms are included in Appendix A.

2 Existing Data and Data Gaps

Refer to the original SQAPP (Anchor QEA 2024) for a detailed summary of the previous in-water and upland investigations conducted at the Site.

3 Project Management

This section discusses updates from the original SQAPP (Anchor QEA 2024) to the proposed project team and team member responsibilities for conducting the field investigation. Refer to the original SQAPP (Anchor QEA 2024) for the training and certification requirements for sampling personnel and documentation and recordkeeping procedures.

3.1 Project and Task Organization

Quality Assurance/Quality Control (QA/QC) Manager Ali Judkins will provide QA/QC oversight for both the field sampling and laboratory programs, ensure samples are collected and documented appropriately, coordinate with the analytical laboratories, ensure data quality, oversee data validation, and supervise project QA coordination and data validation.

4 Sample Collection Modifications

The rationale for the sample collection modifications for the SQAPP Addendum is provided in this section. The original SQAPP (Anchor QEA 2024) includes design assumptions for locating and selecting samples, as well as methods and procedures for the collection of field samples. Sampling will be conducted following standard procedures documented in the original SQAPP (Anchor QEA 2024). In general, all sampling procedures will also comply with previously approved sample collection standards established for the study area. Sampling for this addendum will be conducted with Marine Sampling Systems, LLC (MSS). Sediment cores and grab samples will be collected aboard the marine sampling vessel owned and operated by MSS. The marine sampling vessel will operate using a hydraulically actuated vibracore (for collection of subtidal core samples) and a hydraulically powered sediment grab sampler (for collection of intertidal grab samples).

4.1 Sampling Design Modifications

Preliminary Tier 1 data from the 2024 and 2025 field investigations were screened against Washington State Sediment Management Standards (SMS) Sediment Cleanup Objectives (SCOs) and Cleanup Screening Levels (CSLs; Ecology 2021). Based on screening results, additional sampling and testing are needed to delineate the extent of SCO and CSL exceedances. Table 1 summarizes the sample locations, coordinates, sample intervals, and planned analyses. Figure 1 shows target sample locations.

Preliminary Tier 1 data from the 2025 field investigation indicate elevated concentrations for metals that have not been bounded on the eastern edge of the Site. Rationale for adding new locations is described in the following sections.

4.1.1 Subsurface Sediment Collection

The sampling for this Addendum includes the collection of subsurface sediment core samples using MSS's hydraulically actuated vibracorer, which is expected to have greater penetration and recovery compared to the mechanical vibracore collection equipment used in the 2024 field investigation.

The following three new subsurface locations will be sampled and tested: TG-SC29, TG-SC30, and TG-SC31. These locations have been added to laterally delineate arsenic and zinc SCO exceedances measured at TG-SC27, from 0 to 4 feet below the mudline.

The target core penetration depth is 14 feet below the mudline, using 15-foot core tubes or until refusal. Core samples will be sectioned into 2-foot intervals to the bottom of the core. All intervals from 0 to 12 feet will be analyzed for Tier 1 analyses. Tier 1 testing of metals and total solids with the collection of archives for potential Tier 2 testing will be conducted as described in Table 1. Tier 2

analyses will be performed on the shallowest interval from each core that does not exceed metals screening criteria to estimate leave surface (Z-layer) conditions.

4.1.2 Surface Sediment Collection

This Addendum includes the collection of surface sediment samples using a power grab sampler.

Eight surface grabs are proposed in the vicinity of the Powers Dock. Three of the surface grab sample locations (TG-SG29, TG-SG30, and TG-SG31) are colocated with the three new subsurface locations detailed in Section 4.1.1.1.

Three of the surface grab locations (TG-SG06, TG-SG12, and TG-SG25) are also colocated with existing subsurface sampling locations where previous exceedances were identified:

- **TG-SG06**: SCO exceedance of polychlorinated biphenyl (PCB) Aroclors from 0 to 2 feet below the mudline at TG-SC06.
- **TG-SG12**: Zinc SCO exceedance from 0 to 2 feet, and arsenic SCO exceedance from 0 to 4.5 feet below the mudline at TG-SC12.
- **TG-SG25**: Copper SCO and CSL exceedances from 0 to 2 feet and zinc SCO and CSL exceedances from 0 to 4 feet below the mudline at TG-SC25.

One additional surface grab location (TG-SG32) will be positioned on the shoreline side of the Powers Dock. This location is proposed to better characterize sediment conditions adjacent to the Powers Dock area, closer to the bank.

All grab locations will undergo Tier 1 analyses, which includes testing for metals, total solids, semivolatile organic compounds (SVOCs), pesticides, PCBs, butyltins, dioxin/furans, total organic carbon, and total volatile solids. Archive samples will also be collected for potential Tier 2 bioassay testing, which will be triggered pending Tier 1 results.

4.2 Sampling Methods

This section describes updates to the sampling methods from the original SQAPP (Anchor QEA 2024), including sample identification and surface and subsurface sediment collection. Refer to the original SQAPP (Anchor QEA 2024) for the methods related to station positioning, subsurface sediment processing, and archaeological observations.

4.2.1 Sample Identification

Each surface and subsurface sediment sample will be assigned a unique alphanumeric identifier according to the following method:

- Each sample ID will be identified by the overall Site (“TG”) and location within the Site, as well as the sample collection method.

  - "SC" for subsurface sediment core
  - "SG" for surface sediment grabs
- Station numbers will be added after the collection method identifier and are listed in Table 1 and shown in Figure 1.
- Subsurface sample IDs will have the two-digit depth intervals (in feet) below mudline surface added after the station number.
- The date in YYMMDD format will be appended to the end of the sample ID.
- Example sample identification nomenclature includes the following:
  - **Subsurface Core:** TG-SC06-02-04-250826 for the subsurface core sample collected from the 2- to 4-foot interval from location "SC06" on August 26, 2025.
    - A field duplicate will be identified by the addition of "100" to the sample station number. A duplicate sample collected from this example would be TG-SC106-02-04-250826, collected on August 26, 2025.
  - **Surface Grabs:** TG-SG31-250827 for a composited surface grab sample (made up of two discrete samples collected from the 0- to 10-cm [0.3 feet] interval: TG-SG31A-0.0-0.3-250827 and TG-SG31B-0.0-0.3-250827) collected at location "SG31" on August 27, 2025.
    - A duplicate sample collected from this example would be TG-SG131-250827, collected on August 27, 2025.
- Rinsate blank samples will use the overall Site identifier and collection method, followed by "RB" and the date. The resulting nomenclature of a rinsate blank of the decontaminated core sample processing equipment collected on August 26, 2025, would be TG-SC-RB-250826.

4.2.2 Subsurface Sediment Collection

Subsurface sediment cores will be collected from a sufficiently outfitted marine sampling vessel. Core samples will be collected using a vibracore advanced to 14 feet or refusal depth. Samples will be collected from target locations shown in Figure 1, and locations and coordinates are listed in Table 1. Refer to the original SQAPP (Anchor QEA 2024) for vibracore sediment sample collection methods.

4.2.2.1 Sample Acceptance Criteria

Cores will be evaluated to determine whether they meet acceptability requirements for the project. Acceptance criteria for sediment core samples are as follows:

- Overlying water is present, and the surface is intact.
- The core tube appears intact without obstruction or blocking.
- Recovery is greater than 75% of the drive length.
- Penetration is deep enough to collect all target depth intervals, unless refusal is encountered based on substrate conditions that consistently limit penetration.

If sample acceptance criteria are not achieved, the sample will be rejected unless modified acceptance criteria (i.e., lower percent recovery after multiple attempts) are approved by the field coordinator in consultation with the project manager (PM). Locations may be adjusted within up to a 10-foot radius. If there is little to no penetration at a location, or recovery is less than 75% of the drive length, up to three attempts will be made before abandoning the sample location and selecting a new location in coordination with the PM.

Refer to the original SQAPP (Anchor QEA 2024) for field log procedures.

4.2.2.2 Sample Processing Procedures

Refer to the original SQAPP (Anchor QEA 2024) for subsurface sediment processing methods.

4.2.3 Surface Sediment Sample Collection Procedures

At eight target locations, a one- to two-point composite surface grab sample for the 0- to 10-centimeter (cm; 0.3 feet) biologically active zone will be collected for chemical analysis and bioassay testing using a 0.06-cubic meter, hydraulically driven power grab from the boat. The target locations are shown in Figure 1, and locations and coordinates are listed in Table 1. Samples will be collected in the following manner:

- The sampler will be decontaminated prior to use and between each sampling location. The power grab is washed with a cleaning detergent (e.g., Alconox®), and rinsed with Site water. Within a specific sample location, the power grab will simply be rinsed with Site water between individual grab samples.
- Once the boat is in the general proximity of the planned sampling location, the power grab is lowered vertically through the water column until just above the sediment surface. For the first sample attempt, the boat is positioned to within ± 3 feet of the designated target coordinates for the specific station, and the power grab is set on the sediment surface.
- Collection of samples at nearshore locations (e.g., TG-SG06 and TG-SC06, TG-SG31 and TG-SC31, and TG-SG32) should be attempted at high tide to allow vessel access.
- The jaws of the sampler are closed, at that time, the station name, latitude/longitude, time of collection, and water depth-to-mudline are noted in the field log. The water depth-to-mudline will be taken with a lead line or depth sounder.
- Retrieval of the grab should initially occur no faster than 1-foot per second.
- At the water surface, the winch should then be throttled down to slowly bring the grab into the boat with minimal swinging.
- The sediment sample will be retrieved aboard the vessel and evaluated against the acceptability criteria as stated in Section 4.2.3.2.

Anchor QEA personnel will record field conditions and collection notes on a standard surface sediment field log (see Appendix A). If collection occurs from the bank, the bank sample collection and processing log will be used (Appendix A). Logs will include the following information:

- Grab sample recovery depth
- Water depth-to-mudline at each station using lead line or depth sounder at point of sampling station
- Coordinates of each station as determined by differential global positioning system (DGPS)
- Date and time of collection of each sediment grab sample
- Names of field personnel collecting and handling the samples
- Observations made during sample collection, including weather conditions, complications, ship traffic, and other details associated with the grab sampling effort:
  - Jaws closed properly
  - Good seal observed
  - Evidence of winnowing, if present
  - Overlying water present
  - Surface of sample remained intact
- The sample station ID
- Grab sample recovery depth
- Physical soil description in accordance with ASTM procedures (ASTM D 2488 and ASTM D 2487 – Unified Soil Classification System) including soil type, density/consistency of soil, and color
- Odor (e.g., hydrogen sulfide and petroleum)
- Visual stratification, structure, and texture
- Vegetation and debris (e.g., wood chips or fibers, concrete and metal debris, paint chips, sand blast grit, slag, and creosote)
- Biological activity (e.g., detritus, shells, tubes, bioturbation, and live or dead organisms)
- Presence of oily sheen or non-aqueous phase liquids
- Any deviation from the approved SQAPP

If tides preclude vessel access for collection of nearshore target sample locations, surface grab samples will be collected on foot at low tide from the toe of the bank using decontaminated shovels or trowels, as close to the target location as possible without wading.

Additionally, due to volume requirements for the proposed testing program, multiple grab attempts with the grab sampler may be required. See Section 4.2.3.1 for further information on the surface sediment composite procedures.

4.2.3.1 Sample Composite Procedures

Due to volume requirements for the proposed testing program, each surface sediment sample location may be composed of a one- to two-point composite surface sediment grab sample to obtain sufficient volume of 14 liters for both bulk chemistry and bioassay analyses.

For the initial discrete sample collected at each sampling station, the sampling field team will navigate to the target coordinates presented in Table 1. After collecting an accepted grab, the recovery volume will be approximated to determine if a second sample is required. If more volume is necessary, a second discrete sample for the two-point composite sample will be taken with a separation distance less than 10 feet (3 meters) from the original target location.

If sampling locations are restricted due to changing tidal water depths, obstructions (e.g., debris and/or riprap), or other conditions that make sampling unsafe or inaccessible, modifications to the sample compositing and/or positioning approach for two-point composite surface sediment samples will be discussed with the PM.

4.2.3.2 Sample Acceptance Criteria

After the power grab has been secured, the upper access doors of the sampler should be opened, and the sediment sample should be inspected carefully before being accepted. The following acceptability criteria should be satisfied:

- The jaws of the sampler will be fully closed; no protruding rock, branches, or other debris that may prevent a clean and complete closure.
- Grab sampler is not overfilled (i.e., the sediment surface is not against the top of the sampler).
- Sediment surface is relatively flat, indicating minimal disturbance or winnowing during retrieval.
- Overlying water is present, indicating minimal leakage.
- Overlying water has low turbidity, indicating minimal sample disturbance.
- Penetration depth greater than 10 cm is achieved to provide an undisturbed layer of the sample interval.

4.2.3.3 Contingency Plan for Field Condition Impediments to Surface Grab Collection

Grab samples not meeting the acceptance criteria will be rejected and returned as near to the location of sample collection as possible. The vessel will be adjusted so as not to collect from the same exact location. The process will be repeated until criteria have been met or three attempts have been made. Attempts will be repeated within a 10-foot radius of the proposed sample location. If adequate penetration is not achieved after three attempts, the location of the sample station may be adjusted, or a shallower depth of penetration may be accepted in coordination with the PM.

If tides preclude vessel access for collection of nearshore target sample locations, collection using decontaminated shovels/trowels will occur on foot from the toe of the bank at low tide as close to the target location as possible without wading.

4.2.3.4 Surface Sediment Sample Processing Procedures

For sediment grabs collected aboard the sampling vessel, processing will also be conducted aboard the vessel. All working surfaces and instruments will be thoroughly cleaned, decontaminated, and covered with aluminum foil when not in use to minimize potential contamination between sampling stations. Disposable gloves will be discarded after processing each sample and replaced prior to handling decontaminated instruments or work surfaces. Discrete surface grab samples that meet project acceptance criteria will be processed as follows:

- Overlying water will be siphoned off.
- Prior to sampling, color photographs will be taken, and a description of each grab sample will be recorded on a sediment sampling form (Appendix A); this will include observations of texture, odor, presence of vegetation or biota, anthropogenic debris, sheen or other visual evidence of contamination, and any other distinguishing characteristics.
- Equal amounts of material from each discrete grab sample will be combined and homogenized in a separate bowl to represent the composite sample (SG##).
- Using a clean, stainless-steel spoon, sample material from the top 10 cm (0.3 foot) will be placed into a clean, stainless-steel bowl. To avoid cross-contamination, only sediment that has not contacted the sides or bottom of the grab sampler will be removed and processed.
- The sample will be homogenized until a uniform color and consistency are achieved.
- Samples will be spooned into the appropriate, laboratory-supplied sample containers, as identified in Table 3, and submitted to the laboratories identified in Table 3 for analyses or archival. The sample jars should be pre-labeled (with sample ID, date/time, and analysis) prior to filling.
- The screw cap will be placed on the sample containers, and the lids will be tightened.
- All sample containers will be double-checked for proper identification and secure lid closure.
- Each container will be packed carefully to prevent breakage and placed inside a cooler with ice for proper storage (at 4°C ± 2°C).
- A total of 14 liters is required; approximately 2 liters will be required for chemical analysis, and 12 liters are required for bioassays. Sample handling requirements are presented in Table 3.
- Unused surface sediment will be returned to the water (or shoreline, for samples collected from shore); because it was collected from the mudline/shoreline, it does not need to be considered investigation-derived waste (IDW).

4.3 Sample Handling Requirements

Refer to the original SQAPP (Anchor QEA 2024) for sample handling requirements.

IDW samples will use the prefix "IDW" and the overall Site identifier, followed by "ADD2," the drum number (if applicable), material type (e.g., sediment or water), and the date. The resulting nomenclature for an IDW sample collected from a specific drum on August 28, 2025, would be as follows:

- Sediment IDW sample from drums 1 and 2: IDW-TG-ADD2-D1-2-Sediment-250828
- Water IDW sample from drum 3: IDW-TG-ADD2-D3-Water-250828

Analytical testing of IDW samples will be conducted per the IDW analytes listed in Table 2. IDW samples will be submitted to Analytical Resources, LLC, for analysis.

4.4 Laboratory Methods

Refer to the original SQAPP (Anchor QEA 2024) for laboratory methods. Table 2 is included in this Addendum to reflect the parameters for analysis updated from the original SQAPP. Table 3 is included in this Addendum to reflect sample handling and storage guidelines for new analyses that were not included in the original SQAPP.

5 Quality Assurance/Quality Control

Field duplicates will be collected at a frequency of 1 per 20 samples collected per sample collection method, provided sufficient sample mass can be collected. Refer to the original SQAPP (Anchor QEA 2024) for QA/QC procedures.

6 Contingent Biological Testing

Bioassay samples will be collected from surface sediment grab locations and may be triggered for toxicity testing if sediment chemical concentrations exceed the SMS SCOs. Bioassay testing will be performed by EcoAnalysts, Inc., in Port Gamble, Washington. Following SCUM (Ecology 2021), three contingent bioassay tests are planned: the 10-day amphipod mortality test, 20-day juvenile polychaete growth test, and the sediment larval development test.

Bioassay testing will be performed in accordance with *Recommended Protocols for Conducting Laboratory Bioassays on Puget Sound Sediments* (PSEP 1995) and SCUM (Ecology 2021). Modifications from the Seattle District Dredge Material Management Program may also be incorporated as appropriate, including protocols from the *Dredged Material Evaluation and Disposal Procedures User Manual* (DMMP 2021) and white papers published on the USACE Seattle District website. All bioassay analyses, including retests, are required to commence within 56 days after collection to meet holding times.

Twelve liters of sediment for each sample will be collected for contingent bioassay testing. This volume allows for side-by-side unpurged and purged bioassays should they be needed based on pre-test porewater ammonia and sulfide concentrations as further discussed in Sections 6.1.1 to 6.1.3. Bioassay testing volume will be stored in a laboratory-approved plastic bag at approximately 4°C±2°C until analysis, if required. Temperatures will be monitored, and chain-of-custody procedures will be followed throughout sample handling by the laboratory.

Bioassay testing requires that test sediments be matched and conducted simultaneously with reference sediment to factor out sediment grain size effects on bioassay organisms. The selection of the reference sediment will be based on the percent fines determined from wet sieve analyses conducted during sample processing procedures. According to Section 5.4.5.1 of SCUM, the fines content of reference sediments should ideally fall within 20% of the fines content in the test sediments (Ecology 2021). Multiple reference sediments will be used to match sample fines if needed.

This section describes bioassay testing procedures, QA/QC, test result interpretative criteria, and reporting.

6.1 Bioassay Testing Procedures

Specific procedures for each sediment bioassay are summarized in the following sections. As indicated above, the bioassay methodologies will follow those described in PSEP 1995, as modified by DMMP.

6.1.1 Amphipod Bioassay

The acute amphipod survival bioassay will be performed using the amphipod *Eohaustorius estuarius*, *Rhepoxynius abronius*, or *Ampelisca abdita*. The cultured amphipod *Leptocheirus plumulosus* may also be considered when the other species are not available for field collection or not in a healthy condition suitable for testing (Hester et al. 2024). Appropriate negative control sediment must be used for the test species selected. Species selection will be based upon grain size, salinity, and collection season prior to test initiation. Amphipods will be exposed to test, control, and reference sediments for a 10-day period. After 10 days, organisms will be sieved from the sediment and survivorship will be recorded. Test acceptability will be evaluated by mortality in the control, which should be less than or equal to 10%. Additionally, mean mortality for the reference sediment should be less than 25%. If the test does not meet control and reference acceptability criteria, it should be repeated. Ammonia and sulfide concentrations in the exposure medium will be measured on project sediments prior to testing and at test termination. If pre-test ammonia and sulfide concentrations exceed purging triggers identified in the DMMP User Manual (DMMP 2021), EcoAnalysts will contact the Anchor QEA QA/QC Manager prior to setting up the tests to discuss the need for purging. If purging is recommended, bioassays using purged sediment to remove or decrease sulfide and/or ammonia concentrations should be done side-by-side with non-purged sediment bioassays so results can be compared (Ecology 2021).

6.1.2 Larval Bioassay

The acute larval survival and development bioassay will be conducted with the bivalve species *Mytilus galloprovincialis*, echinoderm species *Dendraster excentricus*, or an alternative species such as the bivalve *Crassostrea gigas* based on availability. For the bioassay, adult test organisms will be allowed to spawn and the resulting embryos will be exposed to a seawater control, along with test and reference sediments, until formation into the larval stage occurs in 90% of the control organisms (typically 48 to 60 hours). At the end of the test, larvae from each test sediment exposure are examined to quantify abnormality and mortality. Test acceptability will be evaluated by normal development in the control, which should be at least 70%. Additionally, the reference sediment should have at least 65% of normal individuals as compared to the control. If the test does not meet control and reference acceptability criteria, it should be repeated. Ammonia and sulfide concentrations in the exposure medium will be measured in the overlying water prior to testing and at test termination. If pre-test ammonia and sulfide concentrations exceed purging triggers identified in the DMMP User Manual (DMMP 2021), EcoAnalysts will contact the Anchor QEA QA/QC Manager prior to setting up the tests to discuss the need for purging. If purging is recommended, bioassays using purged sediment to remove or decrease sulfide and/or ammonia concentrations should be done side-by-side with non-purged sediment bioassays so results can be compared (Ecology 2021). The recommended pH range for the

bioassay test is 7.5 to 9. Low pH may be a confounding factor to interpret larval bioassay test results. If pH drops below 7.5 at any point during the test, results may be rejected.

The resuspension protocol (DMMP 2013) may be used in place of the standard PSEP protocol if dredged material encountered has high concentrations of fines, wood waste, or other flocculent material. The standard protocol may result in false positives from normally developing larvae being entrained in the flocculent material. The decision to use the resuspension protocol will be made in coordination with the Anchor QEA QA/QC Manager for approval before use.

6.1.3 Juvenile Polychaete Bioassay

The chronic juvenile polychaete growth bioassay will be conducted with the worm species *Neanthes arenaceodentata*. Polychaetes will be exposed to test, control, and reference sediments for a 20-day period. After 20 days, organisms will be sieved and survivorship will be recorded. The ash-free dry weight of the test organisms, along with the ash-free dry weight of time zero organisms, will be used to calculate the growth rate. Test acceptability will be evaluated by mortality in the control, which should be less than 10%, as well as a growth rate greater than 0.38 milligrams per individual per day (dry weight). Additionally, the mean reference growth rate should be greater than or equal to 80% of the mean negative control growth rate. If the test does not meet control and reference acceptability criteria, it should be repeated. Ammonia and sulfide concentrations in the exposure medium will be measured on project sediments prior to testing and at test termination. If pre-test ammonia and sulfide concentrations exceed purging triggers identified in the DMMP User Manual (DMMP 2021), EcoAnalysts will contact the Anchor QEA QA/QC Manager prior to setting up the tests to discuss the need for purging. If purging is recommended, bioassays using purged sediment to remove or decrease sulfide and/or ammonia concentrations should be done side-by-side with non-purged sediment bioassays so results can be compared (Ecology 2021).

6.2 Test Quality Assurance/Quality Control

Sediment toxicity tests will incorporate standard QA/QC procedures to ensure that the test results are valid. Standard QA/QC procedures include the use of negative controls, positive controls, reference sediment samples, replicates, and measurements of water quality during testing.

6.2.1 Negative Controls

A negative control will be run for each bioassay to estimate the general health of test organisms during the test exposure period. For the amphipod and juvenile polychaete bioassays, the negative control will be sediment from the amphipod collection site and seawater. The negative control for the larval bioassay will be a seawater control. Negative control performance standards for this bioassay program are presented in Table 4 and Table 8-2 of the SCUM (Ecology 2021).

6.2.2 Positive Controls

A positive control will be run for each bioassay to establish the relative sensitivity of the test organisms by exposing the organisms to a reference toxicant. The positive control for sediment tests is typically conducted with diluent freshwater and without sediment. The LC_{50} or the EC_{50} must be within the 95% confidence interval of responses (calculated using a minimum of the most recent 12 monthly positive control tests) expected for the toxicant used.[2] Reference toxicants are typically metals, such as cadmium chloride.

6.2.3 Reference Sediment

Reference sediment will also be included with each bioassay, tested concurrently with test sediments to provide data that can be used to separate toxicant effects from unrelated effects, such as those of sediment grain size. Reference sediment samples should be collected from an area documented to be free from chemical contamination and should represent the range of important natural, physical, and chemical characteristics of the test sediments (e.g., sediment grain size and total organic carbon). For this study, reference sediment samples will be collected from Carr Inlet in Puget Sound, Washington. Reference sediment performance standards for this bioassay program are presented in Table 4 and Table 8-2 of the SCUM (Ecology 2021). Failure to meet these standards may result in the requirement to retest.

6.2.4 Replicates

Five replicate chambers for each test sediment, reference sediment, and negative controls treatment will be run for each bioassay. A water quality replicate will also be run for each treatment.

6.2.5 Water Quality Monitoring

Water quality monitoring will be conducted for the amphipod, larval, and juvenile polychaete bioassays and reference toxicant tests. This monitoring consists of daily measurements in the water quality replicate of salinity, temperature, pH, and dissolved oxygen for the amphipod and larval tests. These measurements will be made at a minimum of every 3 days for the juvenile polychaete bioassay, with the exception of dissolved oxygen, which will be measured daily. Ammonia and sulfides in the overlying water and sediment porewater from a separate beaker will be determined at test initiation and termination for all three tests. Monitoring will be conducted for all test and reference sediments and negative controls (including seawater controls).

[2] LC_{50} is the lethal concentration of toxicant killing 50% of exposed organisms. EC_{50} is the concentration of test substance in dilution water that is calculated to affect 50% of a test population during continuous exposure over a specified time period.

6.3 Interpretation

Test interpretation consists of endpoint comparisons of test sediments to the measurements observed in the controls and in reference sediments on an absolute percentage basis, as well as statistical comparison between the test and reference endpoints, where appropriate. Test interpretation will follow the guidelines established through the SMS review process, which are identified in Table 4 and Table 8-2 of the SCUM (Ecology 2021).

6.4 Bioassay Retest

If there are issues (e.g., positive or negative control failure) with the bioassay QA/QC tests described previously that result in erroneous findings or failure to meet data quality control objectives provided in Table 4, then the bioassay samples will be retested.

6.5 Data Deliverables

The laboratory conducting the bioassay tests will be responsible for internal checks on data reporting and will correct errors identified during the QA review. The bioassay laboratory for this study will be required to provide a biological testing report that includes all information recommended by PSEP protocols for QA review, as follows:

- A description of any deviations from the methodology or problems with the process and procedures of analyses
- Test methods used for bioassay testing and statistical analyses
- Results for survival, growth, abnormalities, water quality parameters, reference toxicant, and statistical analyses
- Original data sheets for water quality, survival, growth, abnormalities, reference toxicant, and statistical analyses
- Chain-of-custody records

Close contact with the laboratory will be maintained to resolve any QA/QC problems in a timely manner.

7 Assessments and Response Actions

Refer to the original SQAPP (Anchor QEA 2024) for assessments and response actions.

8 Data Validation, Usability, and Reporting

Refer to the original SQAPP (Anchor QEA 2024) for data validation, usability, and reporting. Data validation will be conducted either by Anchor QEA or Laboratory Data Consultants.

9 References

Anchor QEA, 2024. *Sampling and Quality Assurance Project Plan*. Tru-Grit Site Data Gaps Field Investigation. Prepared for Port of Tacoma. July 2024.

Anchor QEA, 2025. *Sampling and Quality Assurance Project Plan Addendum.* Tru-Grit Site Data Gaps Field Investigation. Prepared for Port of Tacoma. March 2025.

DMMP (Dredged Material Management Program), 2021. *Dredged Material Evaluation and Disposal Procedures User Manual*. Dredged Material Management Program: U.S. Army Corps of Engineers, Seattle District; Environmental Protection Agency, Region 10; Washington State Department of Natural Resources; and Washington State Department of Ecology. Accessed July 23, 2025. July 2021. Available at: https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/5397.

Ecology (Washington State Department of Ecology), 2012. Agreed Order No. DE-8978. May 2012.

Ecology, 2021. *Sediment Cleanup User's Manual (SCUM): Guidance for Implementing the Cleanup Provisions of the Sediment Management Standards*, *Chapter 173–204 WAC*. Third Revision. Olympia, Washington: Washington State Department of Ecology.

Hester, B., P. Adolphson, and M. Knowlen, 2024. *Adapting to Supply Challenges and Species Substitution for the 10-Day Amphipod Bioassay*. Joint DMMP-Ecology Toxics Cleanup Program Issue Paper. August 2024.

Landau (Landau Associates, Inc.), 2019. *Agency Review Draft Feasibility Study, Tru-Grit Facility, Tacoma, Washington*. Prepared for CanAm Minerals, Inc. December 2019.

Landau, 2021. *Remedial Investigation Report, Tru-Grit Abrasives, Inc.* Prepared for CanAm Minerals, Inc. December 2021.

PSEP (Puget Sound Estuary Program), 1995. *Recommended Protocols for Conducting Laboratory Bioassays in Puget Sound*. Prepared for the Puget Sound Estuary Program, U.S. Environmental Protection Agency Region 10, Office of Puget Sound, Seattle, Washington. July 1995.

Tables

Table 1
Sample Locations, Coordinates, Intervals, and Analyses Summary

Location/Purpose	Location ID	Station Coordinates (Washington SP NAD83 South Zone)		Mudline Elevation (feet MLLW)	Sample[1] Upper Depth (feet)	Sample[1] Lower Depth (feet)	Sample ID[1]	Analyses[2]
		Easting (feet)	Northing (feet)					
Tier 1 Testing								
Surface Sediment Grabs	TG-SG06 *	1168871	712374	-9.8	0	0.3	TG-SG06-YYMMDD	Total solids, metals, SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS, chemistry archive, bioassay archive
	TG-SG12	1168829	712330	-20.2	0	0.3	TG-SG12-YYMMDD	Total solids, metals, SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS, chemistry archive, bioassay archive
	TG-SG25	1168921	712242	-19.7	0	0.3	TG-SG25-YYMMDD	Total solids, metals, SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS, chemistry archive, bioassay archive
	TG-SG27	1169013	712153	-24.6	0	0.3	TG-SG27-YYMMDD	Total solids, metals, SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS, chemistry archive, bioassay archive
	TG-SG29	1169098	712072	-22.9	0	0.3	TG-SG29-YYMMDD	Total solids, metals, SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS, chemistry archive, bioassay archive
	TG-SG30	1169064	712021	-33.3	0	0.3	TG-SG30-YYMMDD	Total solids, metals, SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS, chemistry archive, bioassay archive
	TG-SG31 *	1169055	712197	-10.6	0	0.3	TG-SG31-YYMMDD	Total solids, metals, SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS, chemistry archive, bioassay archive
	TG-SG32 *	1168964	712287	-6.2	0	0.3	TG-SG32-YYMMDD	Total solids, metals, SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS, chemistry archive, bioassay archive
Subsurface Sediment Cores	TG-SC29	1169098	712072	-22.9	00	02	TG-SC29-00-02-YYMMDD	Total solids, metals, chemistry archive
					02	04	TG-SC29-02-04-YYMMDD	Total solids, metals, chemistry archive
					04	06	TG-SC29-04-06-YYMMDD	Total solids, metals, chemistry archive
					06	08	TG-SC29-06-08-YYMMDD	Total solids, metals, chemistry archive
					08	10	TG-SC29-08-10-YYMMDD	Total solids, metals, chemistry archive
					10	12	TG-SC29-10-12-YYMMDD	Total solids, metals, chemistry archive
					12	14	TG-SC29-12-14-YYMMDD	Chemistry archive
	TG-SC30	1169064	712021	-33.3	00	02	TG-SC30-00-02-YYMMDD	Total solids, metals, chemistry archive
					02	04	TG-SC30-02-04-YYMMDD	Total solids, metals, chemistry archive
					04	06	TG-SC30-04-06-YYMMDD	Total solids, metals, chemistry archive
					06	08	TG-SC30-06-08-YYMMDD	Total solids, metals, chemistry archive
					08	10	TG-SC30-08-10-YYMMDD	Total solids, metals, chemistry archive
					10	12	TG-SC30-10-12-YYMMDD	Total solids, metals, chemistry archive
					12	14	TG-SC30-12-14-YYMMDD	Chemistry archive
	TG-SC31	1169055	712197	-10.6	00	02	TG-SC31-00-02-YYMMDD	Total solids, metals, chemistry archive
					02	04	TG-SC31-02-04-YYMMDD	Total solids, metals, chemistry archive
					04	06	TG-SC31-04-06-YYMMDD	Total solids, metals, chemistry archive
					06	08	TG-SC31-06-08-YYMMDD	Total solids, metals, chemistry archive
					08	10	TG-SC31-08-10-YYMMDD	Total solids, metals, chemistry archive
					10	12	TG-SC31-10-12-YYMMDD	Total solids, metals, chemistry archive
					12	14	TG-SC31-12-14-YYMMDD	Chemistry archive
Tier 2 Testing								
Surface Sediment Grabs[3]	TBD[3]	TBD[3]	TBD[3]	TBD[3]	TBD[3]	TBD[3]	TBD[3]	Bioassay[3]
Subsurface Sediment Cores[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	TBD[2]	SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, TVS

Table 1
Sample Locations, Coordinates, Intervals, and Analyses Summary

Notes:
1. Actual sample depths and IDs may vary based on evidence of contamination, observed depth to native alluvium, and sample recovery depth.
2. The shallowest-bounded interval sample from each core that does not exceed metals screening criteria will be triggered for Tier 2 analyses (SVOCs, pesticides, PCBs, butyltins, dioxin/furans, TOC, and TVS) to estimate leave surface (Z-layer) conditions.
3. Bioassay samples will be collected from surface sediment grab locations and may be triggered for toxicity testing if sediment chemical concentrations exceed the SMS SCOs.
* Sample collection at this location should be targeted during high tide.
ID: identification
MLLW: mean lower low water
PCB: polychlorinated biphenyl
SCOs: Sediment Cleanup Objectives
SMS: Sediment Management Standards
SVOC: semivolatile organic compound
TBD: to be determined
TOC: total organic carbon
TVS: total volatile solids
Washington SP NAD83: Washington State Plane North American Datum 1983

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	Surface Water Cleanup Level
Conventional Parameters (%)											
Total solids	SM 2540G/PSEP	--	0.1	--	--	--	--	--	--	--	--
Total volatile solids	SM 2540G/PSEP	--	0.1	--	--	--	--	--	--	--	--
Total organic carbon	EPA 9060A Mod	--	0.1	--	--	--	--	--	--	--	--
Metals (mg/kg dry weight)											
Antimony	EPA 6020B	0.10	0.20	150	--	200	--	--	--	--	--
Arsenic	EPA 6020B	0.038	0.20	57	507.1	700	57	93	57	93	--
Cadmium	EPA 6020B	0.040	0.10	5.1	--	14	5.1	6.7	5.1	6.7	--
Chromium (total)	EPA 6020B	0.26	0.50	260	--	--	260	270	260	270	--
Chromium (VI)[a]	EPA 7196A	0.40	0.40	--	--	--	--	--	--	--	--
Copper	EPA 6020B	0.35	0.50	390	--	1,300	390	390	390	390	--
Lead	EPA 6020B	0.052	0.10	450	975	1,200	450	530	450	530	--
Mercury	EPA 7471B	0.0053	0.025	0.41	1.5	2.3	0.41	0.59	0.41	0.59	--
Selenium[b]	EPA 6020B	0.18	0.50	--	3	--	--	--	--	--	--
Silver	EPA 6020B	0.022	0.20	6.1	--	8.4	6.1	6.1	6.1	6.1	--
Zinc	EPA 6020B	2.9	6.0	410	--	3,800	410	960	410	960	--
Butyltins (µg/kg dry weight)											
Tributyltin ion	Krone/8270E-SIM	0.5	3.9	--	73	--	--	--	--	--	--
Semivolatile Organic Compounds (µg/kg dry weight)											
Polycyclic Aromatic Hydrocarbons							**mg/kg OC**		**µg/kg dry weight**		--
1-methylnaphthalene	EPA 8270E	5.3	20	--	--	--	--	--	--	--	--
2-methylnaphthalene	EPA 8270E	4.5	20	670	--	1,900	38	64	670	670	--
Acenaphthene	EPA 8270E	5.2	20	500	--	2,000	16	57	500	500	--
Acenaphthylene	EPA 8270E	6.2	20	560	--	1,300	66	66	1,300	1,300	--
Anthracene	EPA 8270E	7.2	20	960	--	13,000	220	1,200	960	960	--
Benzo(a)anthracene	EPA 8270E	6.0	20	1300	--	5,100	110	270	1,300	1,600	--
Benzo(a)pyrene	EPA 8270E	4.2	20	1600	--	3,600	99	210	1,600	1,600	--
Benzo(b,j,k)fluoranthenes	EPA 8270E	10	40	3200	--	9,900	230	450	3,200	3,600	--
Benzo(g,h,i)perylene	EPA 8270E	14	20	670	--	3,200	31	78	670	720	--
Chrysene	EPA 8270E	6.1	20	1400	--	21,000	110	460	1,400	2,800	--
Dibenz(a,h)anthracene	EPA 8270E-SIM	0.91	5.0	230	--	1,900	12	33	230	230	--
Fluoranthene	EPA 8270E	6.1	20	1700	4,600	30,000	160	1,200	1,700	2,500	--
Fluorene	EPA 8270E	15	20	540	--	3,600	23	79	540	540	--
Indeno(1,2,3-cd)pyrene	EPA 8270E	15	20	600	--	4,400	34	88	600	690	--
Naphthalene	EPA 8270E	4.2	20	2100	--	2,400	99	170	2,100	2,100	--
Phenanthrene	EPA 8270E	8.7	20	1500	--	21,000	100	480	1,500	1,500	--
Pyrene	EPA 8270E	5.7	20	2600	11,980	16,000	1,000	1,400	2,600	3,300	--
Total LPAH (U = 0)[c]	EPA 8270E	--	--	5200	--	29,000	370	780	5,200	5,200	--

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	Surface Water Cleanup Level
Total HPAHs (U = 0)[d]	EPA 8270E	--	--	12000	--	69000	960	5,300	12,000	17,000	--
Total PAHs (U = 0)[e]	Calculated	--	--	--	--	--	--	--	--	--	--
Chlorinated Hydrocarbons							**mg/kg OC**		**µg/kg dry weight**		--
1,4-dichlorobenzene	EPA 8270E-SIM	0.6	5.0	110	--	120	3.1	9	110	110	--
1,2-dichlorobenzene	EPA 8270E-SIM	0.7	5.0	35	--	110	2.3	2.3	35	50	--
1,2,4-trichlorobenzene	EPA 8270E-SIM	2.7	5.0	31	--	64	0.81	1.8	31	51	--
Hexachlorobenzene	EPA 8270E-SIM	0.7	5.0	22	168	230	0.38	2.3	22	70	--
Phthalates							**mg/kg OC**		**µg/kg dry weight**		--
Dimethyl phthalate	EPA 8270E-SIM	1.0	5.0	71	--	1,400	53	53	71	160	--
Diethyl phthalate	EPA 8270E-SIM	4.8	20	200	--	1,200	61	110	200	>1,200	--
Di-n-butyl phthalate	EPA 8270E	5.6	20	1,400	--	5,100	220	1,700	1,400	1,400	--
Butyl benzyl phthalate	EPA 8270E-SIM	0.68	5.0	63	--	970	4.9	64	63	900	--
Bis(2-ethylhexyl) phthalate	EPA 8270E	5.5	50	1,300	--	8,300	47	78	1300	1900	--
Di-n-octyl phthalate	EPA 8270E	4.4	20	6,200	--	6,200	58	4,500	6,200	6,200	--
Phenols (µg/kg dry weight)							**µg/kg dry weight**		**µg/kg dry weight**		
Phenol	EPA 8270E-SIM	2.2	5.0	420	--	1,200	420	1,200	420	1,200	--
2-methylphenol	EPA 8270E-SIM	1.1	5.0	63	--	77	63	63	63	63	--
4-methylphenol	EPA 8270E-SIM	0.9	5.0	670	--	3,600	670	670	670	670	--
2,4-dimethylphenol	EPA 8270E-SIM	2.2	20	29	--	210	29	29	29	29	--
Pentachlorophenol	EPA 8270E-SIM	2.1	20	400	504	690	360	690	360	690	--
Miscellaneous Extractables (µg/kg dry weight)							**mg/kg OC (unless noted)**		**µg/kg dry weight**		--
Benzyl alcohol	EPA 8270E-SIM	2.5	20	57	--	870	57 dry weight	73 dry weight	57	73	--
Benzoic acid	EPA 8270E-SIM	13	100	650	--	760	650 dry weight	650 dry weight	650	650	--
Dibenzofuran	EPA 8270E	14	20	540	--	1,700	15	58	540	540	--
Hexachlorobutadiene	EPA 8270E-SIM	0.72	5.0	11	--	270	3.9	6.2	11	120	--
N-Nitrosodiphenylamine	EPA 8270E-SIM	1.3	5.0	28	--	--	11	11	28	40	--
Carbazole	EPA 8270E	4.3	20	--	--	--	--	--	--	--	--
Pesticides (µg/kg dry weight)											
2,4'-DDD	EPA 8081B	0.20	1.0	--	--	--	--	--	--	--	--
2,4'-DDE	EPA 8081B	0.25	1.0	--	--	--	--	--	--	--	--
2,4'-DDT	EPA 8081B	0.19	1.0	--	--	--	--	--	--	--	--
4,4'-DDD	EPA 8081B	0.32	1.0	16	--	--	--	--	--	--	--
4,4'-DDE	EPA 8081B	0.14	1.0	9	--	--	--	--	--	--	--
4,4'-DDT	EPA 8081B	0.32	1.0	12	--	--	--	--	--	--	--
2,4'-DDD and 4,4'-DDD	Calculated	--	--	--	--	--	--	--	--	--	--
2,4'-DDE and 4,4'-DDE	Calculated	--	--	--	--	--	--	--	--	--	--
2,4'-DDT and 4,4'-DDT	Calculated	--	--	--	--	--	--	--	--	--	--
Total DDT (U = 0)[f]	Calculated	--	--	--	50	69	--	--	--	--	--
Aldrin	EPA 8081B	--	--	9.5	--	--	--	--	--	--	--
beta-HCH	EPA 8081B	0.09	0.50	--	--	--	--	--	--	--	--
Dieldrin	EPA 8081B	0.12	1.0	1.9	--	1,700	--	--	--	--	--
Endrin ketone	EPA 8081B	0.28	1.0	--	--	--	--	--	--	--	--

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	Surface Water Cleanup Level
Heptachlor	EPA 8081B	0.05	0.50	1.5	--	270	--	--	--	--	--
cis-chlordane	EPA 8081B	0.1	0.5	--	--	--	--	--	--	--	--
trans-chlordane	EPA 8081B	0.3	0.5	--	--	--	--	--	--	--	--
cis-nonachlor	EPA 8081B	0.2	0.5	--	--	--	--	--	--	--	--
trans-nonachlor	EPA 8081B	0.2	0.5	--	--	--	--	--	--	--	--
oxychlordane	EPA 8081B	0.1	0.5	--	--	--	--	--	--	--	--
Total chlordane (U = 0)[g]	EPA 8081B	--	--	2.8	37	--	--	--	--	--	--
PCBs (µg/kg dry weight)							**mg/kg OC**		**µg/kg dry weight**		
Aroclor 1016	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--
Aroclor 1221	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--
Aroclor 1232	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--
Aroclor 1242	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--
Aroclor 1248	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--
Aroclor 1254	EPA 8082A	8.0	20	--	--	--	--	--	--	--	--
Aroclor 1260	EPA 8082A	9.3	20	--	--	--	--	--	--	--	--
Total Aroclor PCBs (U = 0)	EPA 8082A	9.3	20	130	38 mg/kg OC	3,100	12	65	130	1,000	--
Dioxin/Furans (ng/kg dry weight)[h]											
Dioxins											
2,3,7,8-TCDD	EPA 1613B	0.19	0.5	--	--	--	--	--	--	--	--
1,2,3,7,8-PeCDD	EPA 1613B	0.784	2.5	--	--	--	--	--	--	--	--
1,2,3,4,7,8-HxCDD	EPA 1613B	0.633	2.5	--	--	--	--	--	--	--	--
1,2,3,6,7,8-HxCDD	EPA 1613B	0.64	2.5	--	--	--	--	--	--	--	--
1,2,3,7,8,9-HxCDD	EPA 1613B	0.717	2.5	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-HpCDD	EPA 1613B	0.706	2.5	--	--	--	--	--	--	--	--
OCDD	EPA 1613B	1.62	5.0	--	--	--	--	--	--	--	--
Furans											
2,3,7,8-TCDF	EPA 1613B	0.183	0.5	--	--	--	--	--	--	--	--
1,2,3,7,8-PeCDF	EPA 1613B	0.576	2.5	--	--	--	--	--	--	--	--
2,3,4,7,8-PeCDF	EPA 1613B	0.686	2.5	--	--	--	--	--	--	--	--
1,2,3,4,7,8-HxCDF	EPA 1613B	0.659	2.5	--	--	--	--	--	--	--	--
1,2,3,6,7,8-HxCDF	EPA 1613B	0.621	2.5	--	--	--	--	--	--	--	--
1,2,3,7,8,9-HxCDF	EPA 1613B	0.661	2.5	--	--	--	--	--	--	--	--
2,3,4,6,7,8-HxCDF	EPA 1613B	0.716	2.5	--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-HpCDF	EPA 1613B	0.649	2.5	--	--	--	--	--	--	--	--
1,2,3,4,7,8,9-HpCDF	EPA 1613B	0.818	2.5	--	--	--	--	--	--	--	--
OCDF	EPA 1613B	3.84	5.0	--	--	--	--	--	--	--	--
Total TEQ (U = 0)	--	--	--	4.0	--	--	--	--	--	--	--
Total TEQ (U = 1/2 EDL)	--	--	--	4.0	--	--	--	--	--	--	--
Bioassay											
10-day Amphipod Mortality	PSEP	--	--	--	--	--	--	--	--	--	--
Larval Development	PSEP	--	--	--	--	--	--	--	--	--	--
20-day *Neanthes* Growth	PSEP	--	--	--	--	--	--	--	--	--	--
Investigation Derived Waste											
Metals (mg/kg dry weight)											
Arsenic	EPA 6020B	0.038	0.20	--	--	--	--	--	--	--	--
Barium	EPA 6020B	0.250	0.500	--	--	--	--	--	--	--	--
Cadmium	EPA 6020B	0.040	0.10	--	--	--	--	--	--	--	--
Chromium	EPA 6020B	0.26	0.50	--	--	--	--	--	--	--	--

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Parameter	Analytical Method	Method Detection Limit	Reporting Limit	Marine DMMP Guidelines			SMS Marine Sediment		Marine SMS AET		CLARC
				Screening Level	Bioaccumulation Trigger	Maximum Level	Sediment Cleanup Objective	Cleanup Screening Level	Sediment Cleanup Objective	Cleanup Screening Level	Surface Water Cleanup Level
Copper	EPA 6020B	0.35	0.50	--	--	--	--	--	--	--	--
Lead	EPA 6020B	0.052	0.10	--	--	--	--	--	--	--	--
Mercury	EPA 7471B	0.0053	0.025	--	--	--	--	--	--	--	--
Nickel	EPA 6020B	0.250	0.500	--	--	--	--	--	--	--	--
Selenium	EPA 6020B	0.18	0.50	--	--	--	--	--	--	--	--
Silver	EPA 6020B	0.022	0.20	--	--	--	--	--	--	--	--
Zinc	EPA 6020B	2.9	6.0	--	--	--	--	--	--	--	--

Table 2
Parameters for Analysis, Methods, Screening Levels, and Target Quantitation Limits

Notes:
Greater than (>) values indicate that the upper bound of toxicity level is unknown but that it is known to be above the concentration shown.
a. Chromium VI will be analyzed on a subset of eight samples collected from known areas of grit. Actual sample locations and depths will be determined based on field observations.
b. Because no screening level value exists for toxicity testing, selenium will only be evaluated for its bioaccumulation potential.
c. Total LPAH consists of the sum of naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, and anthracene.
d. Total HPAH consists of the sum of fluoranthene, pyrene, benz(a)anthracene, chrysene, benzo(b,j,k)fluoranthenes, benzo(a)pyrene, indeno(1,2,3,-c,d)pyrene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene.
e. Total PAHs consists of the sum of all PAHs listed.
f. Total DDT consists of the sum of 4,4'-DDD; 4,4'-DDE; and 4,4'-DDT.
g. Chlordane includes cis-chlordane, trans-chlordane, cis-nonaclor, trans-nonaclor, and oxychlordane.
h. Dioxin/furan results will be reported to sample and analysis-specific estimated detection limits.
i. Value for chromium III.
-- not applicable
µg/kg: microgram per kilogram
AET: Apparent Effects Threshold
ASTM: ASTM International
CLARC: Ecology MTCA Cleanup Levels and Risk Calculation
Ecology: Washington State Department of Ecology
DDD: dichlorodiphenyldichloroethane
DDE: dichlorodiphenyldichloroethylene
DDT: dichlorodiphenyltrichloroethane
DMMP: Dredged Material Management Program
EDL: estimated detection limit
EPA: U.S. Environmental Protection Agency
HPAH: high-molecular-weight PAHs
LPAH: low-molecular-weight PAHs
MTCA: Model Toxics Control Act
mg/kg: milligram per kilogram
mg/L: milligram per liter
ng/kg: nanograms per kilogram
OC: organic carbon-normalized
PAH: polycyclic aromatic hydrocarbon
PCB: polychlorinated bipheynl
PSEP: Puget Sound Estuary Program
SMS: Sediment Management Standards
TEQ: toxic equivalency
U: undetected

Table 3
Sample Handling and Storage Guidelines

Parameter	Sample Size	Container Size and Type[a]	Holding Time	Preservative	Lab
Total metals	10 g	4-oz glass	6 months; 28 days for mercury	4°C ± 2°C	ARL
			2 years; 1 year for mercury	-18°C ± 2°C	
Total solids	30 g		14 days	4°C ± 2°C	
			6 months	-18°C ± 10°C	
Chemistry archive for untested intervals	500 g	16-oz glass	varies	-18°C ± 2°C	
Dioxin/furan archive for untested intervals	10 g	4-oz amber glass	1 year	-18°C ± 2°C	
Total organic carbon, total solids, total volatile solids	30 g	From chemistry archive jar	14 days	4°C ± 2°C	ARL
			6 months	-18°C ± 10°C	
SVOCs, PCBs, pesticides, butyltins	200 g		14 days until extraction	4°C ± 2°C	
			1 year until extraction	-18°C ± 2°C	
			40 days after extraction	4°C ± 2°C	
Dioxins/furans	10 g	From dioxin/furan archive jar	1 year until extraction	-18°C ± 2°C	
			1 year after extraction		
PSEP bioassay archive	12 L[b]	Plastic bag, no headspace	8 weeks	4°C ± 2°C	EA

Notes:

a. Sample containers may vary based on availability at the time of sample collection.

b. 12 L bioassay volume is being collected to allow for side-by-side purged and unpurged testing if needed.

ARL: Analytical Resources, LLC

EA: EcoAnalysts Inc.

g: grams

L: liter

oz: ounce

PCB: polychlorinated biphenyl

PSEP: Puget Sound Estuary Program

SVOC: semivolatile organic compound

Table 4

Bioassay Performance Standards and Evaluation Guidelines

Bioassay	Negative Control Performance Standard	Reference Sediment Performance Standard	SCO/SQS[a]	CSL[a]
Amphipod Mortality	$M_C \leq 10\%$	$M_R \leq 25\%$	$M_T > 25\%$ Absolute and M_T vs. M_R SD ($p < 0.05$)	$M_T - M_R \geq 30\%$ and M_T vs. M_R SD ($p < 0.05$)
Larval Development	$N_C / I \geq 0.70$	$N_R / N_C \geq 0.65$	$N_T / N_R < 0.85$ and N_T vs. N_R SD ($p < 0.10$)	$N_T / N_R < 0.70$ and N_T vs. N_R SD ($p < 0.10$)
Neanthes Growth	$M_C \leq 10\%$ and $MIG_C \geq 0.38$	$MIG_R / MIG_C \geq 0.80$	$MIG_T / MIG_R < 0.70$ and MIG_T vs. MIG_R SD ($p < 0.05$)	$MIG_T / MIG_R < 0.50$ and MIG_T vs. MIG_R SD ($p < 0.05$)

Notes:

a. Marine biological criteria (SCO & CSL and performance standards) for each biological test. Adverse effects are defined when any of the biological tests show the results in the table.

C: negative control

CSL: cleanup screening level

I: initial count

M: mortality

MIG: mean individual growth rate (milligrams/individual/day)

N: normal larvae

R: reference sediment

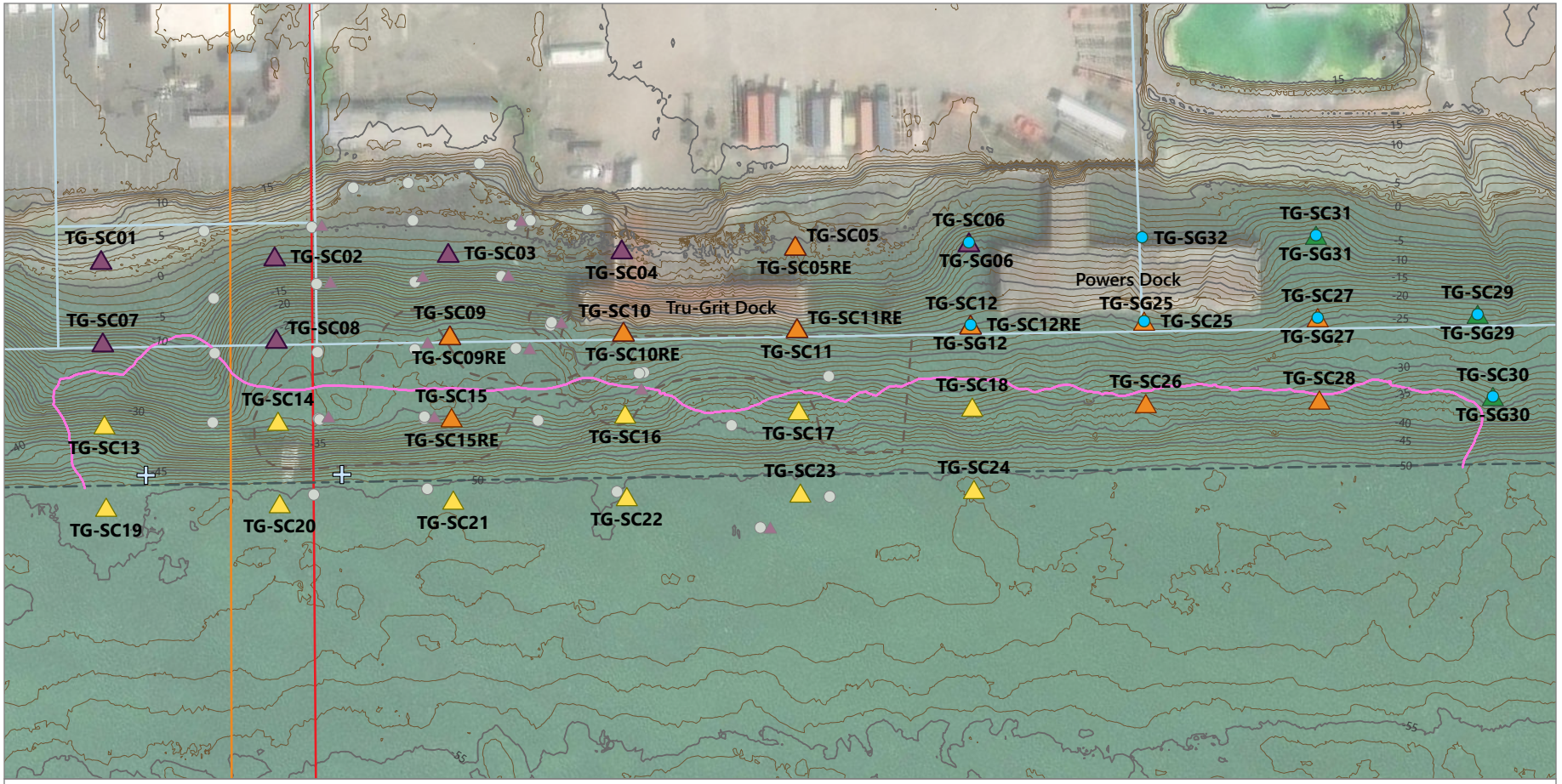
SCO: sediment cleanup objective

SD: statistically significant difference

SQS: Sediment Quality Standard

T: test sediment

Figure



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary
- Navigational Aid
- Elevation (MLLW, 5-Foot Interval)
- >5% Grit Boundary
- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- Underwater Communications Crossing
- Underwater Watermain Crossing

Previous Sample Location

- Surface Sediment
- Subsurface Sediment

Proposed Sample Location

- Previous Upper Slope Core Sample Location
- Previous Lower Slope Core Sample Location
- Previous SQAPP Addendum Sampling Locations
- New Subsurface Sampling Locations (SQAPP Addendum #2)
- New Surface Sampling Locations (SQAPP Addendum #2)

NOTES:

1. Aerial imagery: Esri (2022)
2. Contour Source: Survey by USACE, dated October 27, 2021, and David Evans Associates Inc., dated May 27, 2022, with data gaps filled from survey by USACE dated November 14, 2022
3. Horizontal Datum: NAD83 State Plane Washington South, U.S. feet
4. Vertical Datum: MLLW, feet

MLLW: mean lower low water
NAD83: North American Datum of 1983
SQAPP: Sampling and Quality Assurance Project Plan
USACE: U.S. Army Corps of Engineers

0 120
Feet

Publish Date: 2025/08/04, 5:43 PM | User: eiverson
Filepath: \\gstfile01\gis\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPPADNM2_Fig1_ProposedSampling

ANCHOR QEA

Figure 1
Proposed Sampling Locations
Sampling and Quality Assurance Project Plan Addendum #2
Tru-Grit Site Data Gaps Field Investigation

Appendix A
Field Forms

Surface Sediment Collection Log

Job: Station:

Job No: Date:

Field Staff: Sample Method:

Contractor: Proposed Coordinates: Lat.

Long.

Water Height

DTM Depth Sounder: _____

DTM Lead Line: _____

Mudline Elevation (datum): calculated after sampling

Tide Measurements

Time: _____

Height: _____

Sample Acceptability Criteria:

1) Overlying water is present
2) Water has low turbidity
3) Sampler is not overfilled
4) Surface is flat
5) Desired penetration depth

Notes: _____

Grab #	Time	Confirmed Coordinates (datum)		Sample Accept (Y/N)	Recovery Depth (in)	Comments: jaws close, good seal, winnowing, overlying water, surface intact, etc
		NAD 83 (N)	NAD 83 (E)			

Sample Description: MAJOR CONSTITUENT GROUP NAME. Moisture content, density/consistency, color, major constituent (%), minor constituents (%), plasticity. Amount and shape of minor constituents (e.g., wood, shells). Biota. Sheen, odor. Structure descriptions

Sample Depth:

Field Measurements: temperature: °C; pH: std units; electrical conductivity (salinity): dS/m

Sample Containers:

Analyses:

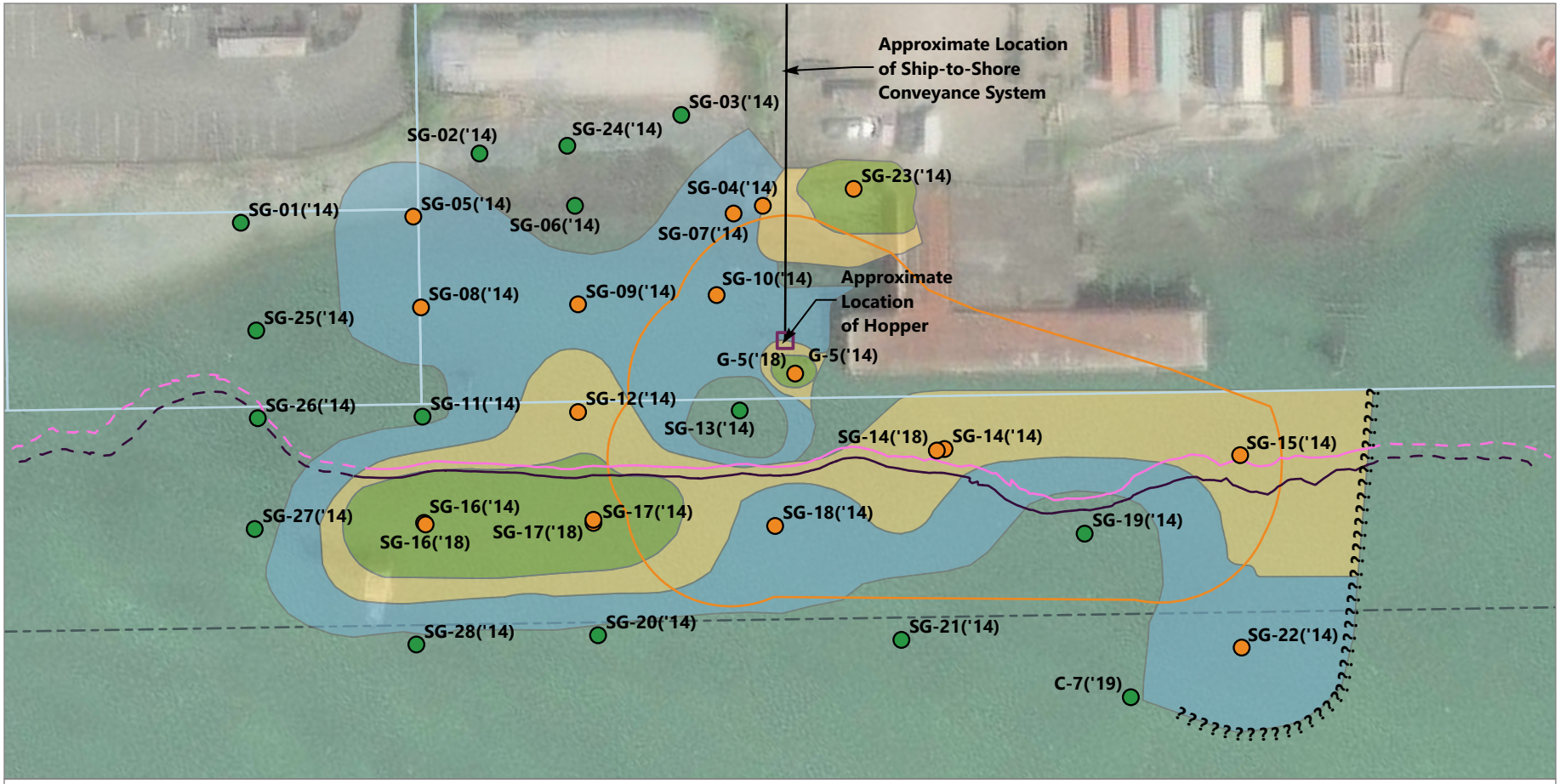
BANK SAMPLE COLLECTION AND PROCESSING LOG

Job Name:	Station:
Job No:	Date:
Field Staff:	Time:
Attempt No:	Total Depth:
Excavation Method: Hand Trowel / Hand Auger	NORTHING: EASTING:

DEPTH SAMPLED (cm)	SAMPLE	CLASSIFICATION AND REMARKS (MAJOR Constituent, Minor Constituent, Moisture, Density, Color, Additional Constituents, Sheen, Odor)
10		
20		
30		
40		
50		
60		
70		
80		
90		

Notes

Appendix B
Historical Sediment Chemistry



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary

Surface Sediment Sample

- Grit Present
- No Grit Present

- Proposed Design Target Daylight Extent (-57.0' MLLW)
- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- Approximate Barge Offloading Area
- Hopper

Grit Content

- < 5%
- 5% - 15%
- > 15%

NOTES:

1. Aerial imagery: Esri (2022)
2. Grit interpolation from Landau 2021
3. Sample year is provided in parentheses after sample location ID

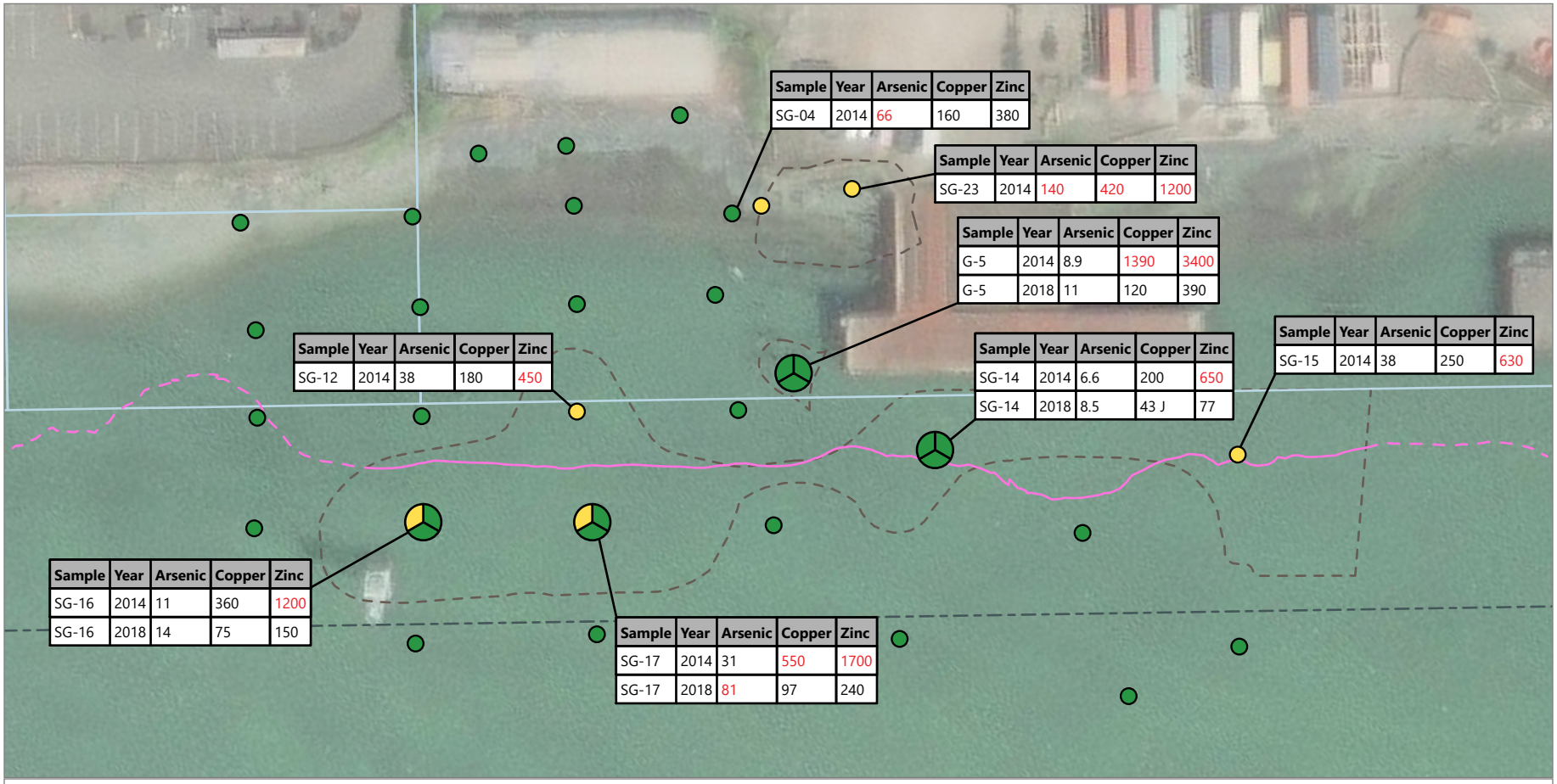
0 100

Feet

Publish Date: 2024/07/17, 11:43 AM | User: eiverson
Filepath: \\gstfile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPP_Fig2_SurfaceGrit

ANCHOR QEA

Figure 2
Surface Sediment and Approximate Grit Content
Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation



LD AM PG

Surface Sediment Sample with Bioassay Analysis

LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary

Screening Results

- Pass SCO and CSL
- SCO Fail
- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- > 5% Grit Boundary

NOTES:

1. Aerial imagery: Esri (2022)
2. The arsenic, copper, and zinc values are in mg/kg dry weight
3. Values in red exceeded the Sediment Management Standards Marine Sediment Cleanup Objectives (Ecology 2021)
4. PG: Polychaete Growth
5. AM: Amphipod Mortality
6. LD: Larval Development
7. J: Estimated Concentration
8. SCO: Sediment Cleanup Objective
9. CSL: Cleanup Screening Level

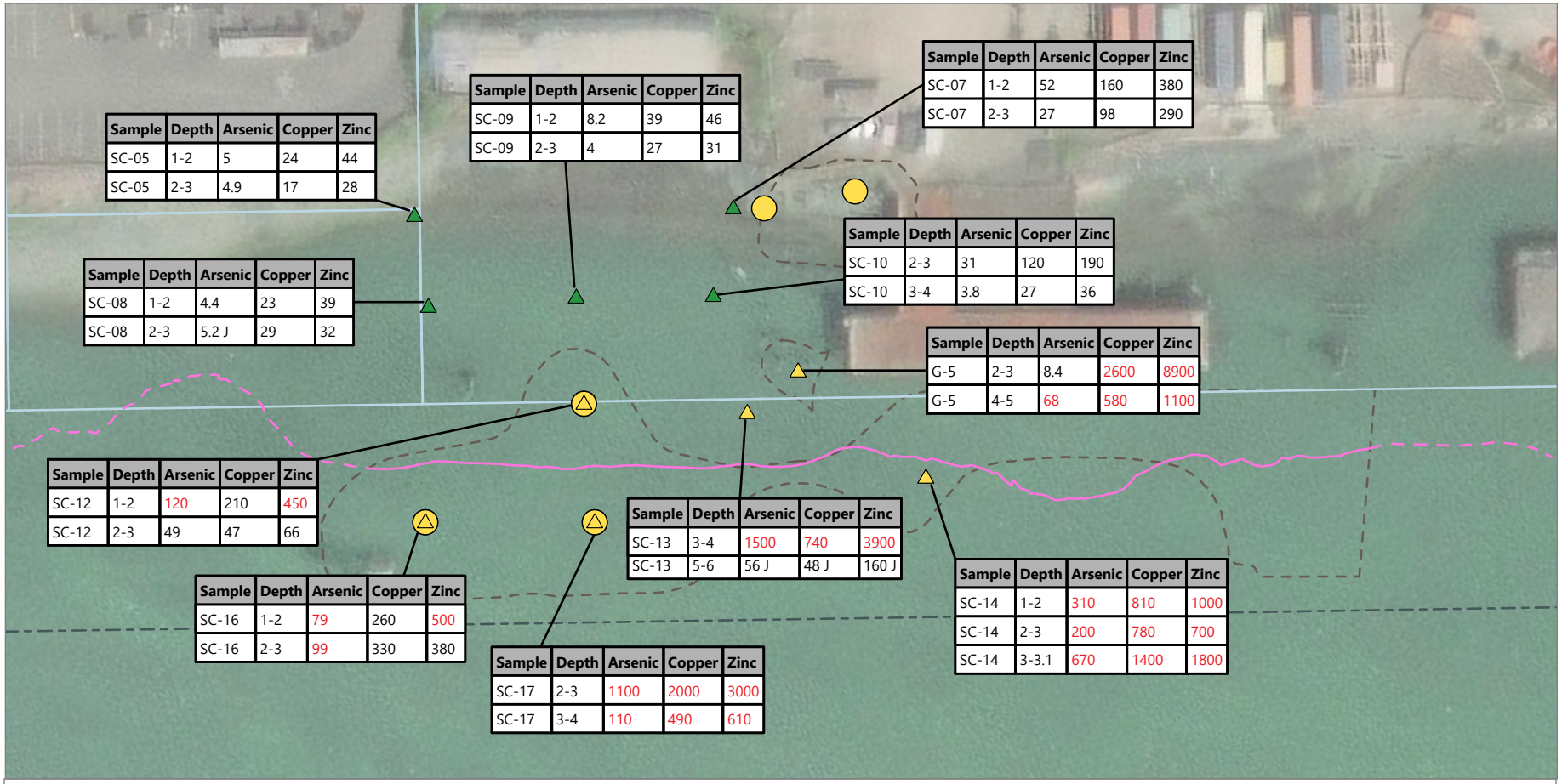
0 100

Feet

Publish Date: 2024/07/17, 11:48 AM | User: eiverson
Filepath: \\gstfile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPP_Fig3_SurfaceBioassay

ANCHOR QEA

Figure 3
Surface Sediment Analytical and Bioassay Results
Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary

Subsurface Screening Results

- Pass SCO and CSL
- SCO Fail
- Surface SCO Exceedance
- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- > 5% Grit Boundary

NOTES:

1. Aerial imagery: Esri (2022)
2. Depth values are in feet
3. The arsenic, copper, and zinc values are in mg/kg dry weight
4. Values in red exceeded the Sediment Management Standards Marine Sediment Cleanup Objectives (Ecology 2021)
5. J: Estimated Concentration
8. SCO: Sediment Cleanup Objective
9. CSL: Cleanup Screening Level

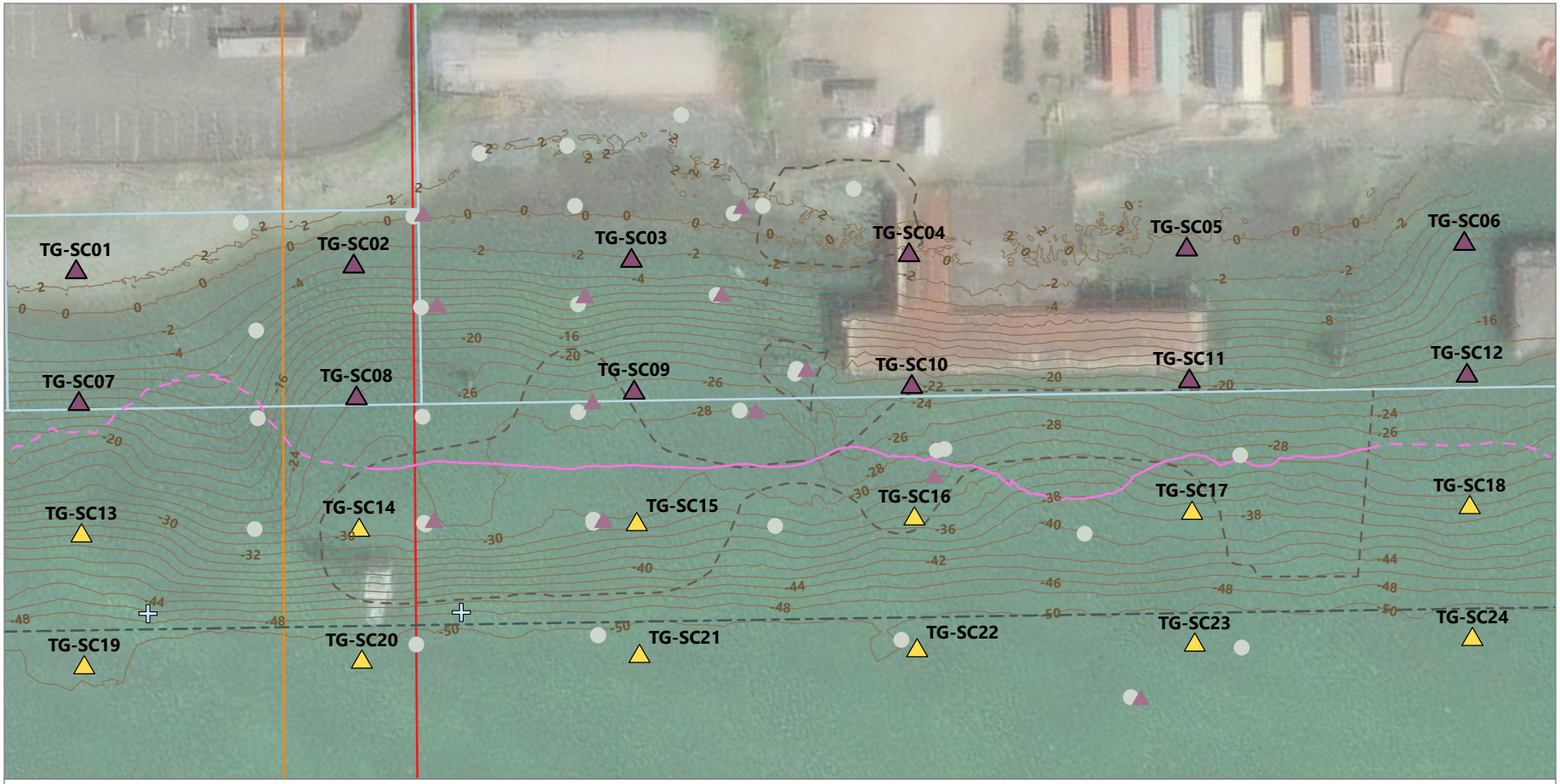
0 100

Feet

Publish Date: 2024/07/17, 11:48 AM | User: eiverson
Filepath: \\gstfile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPP_Fig4_Subsurface

ANCHOR QEA

Figure 4
Subsurface Sediment Analytical Results
Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Parcel Boundary

Proposed Sample Location

- Upper Slope Core Sample Location
- Lower Slope Core Sample Location

- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- > 5% Grit Boundary

Previous Sample Location

- Surface Sediment
- Subsurface Sediment

- Navigational Aid
- Underwater Communications Crossing
- Underwater Watermain Crossing
- Existing Contour (USACE 2' Interval)

NOTE:
1. Aerial imagery: Esri (2022)
2. Contour Source: Survey by USACE, dated October 27, 2021 and David Evans Associates Inc., dated May 27, 2022, with data gaps filled from survey by USACE dated November 14, 2022

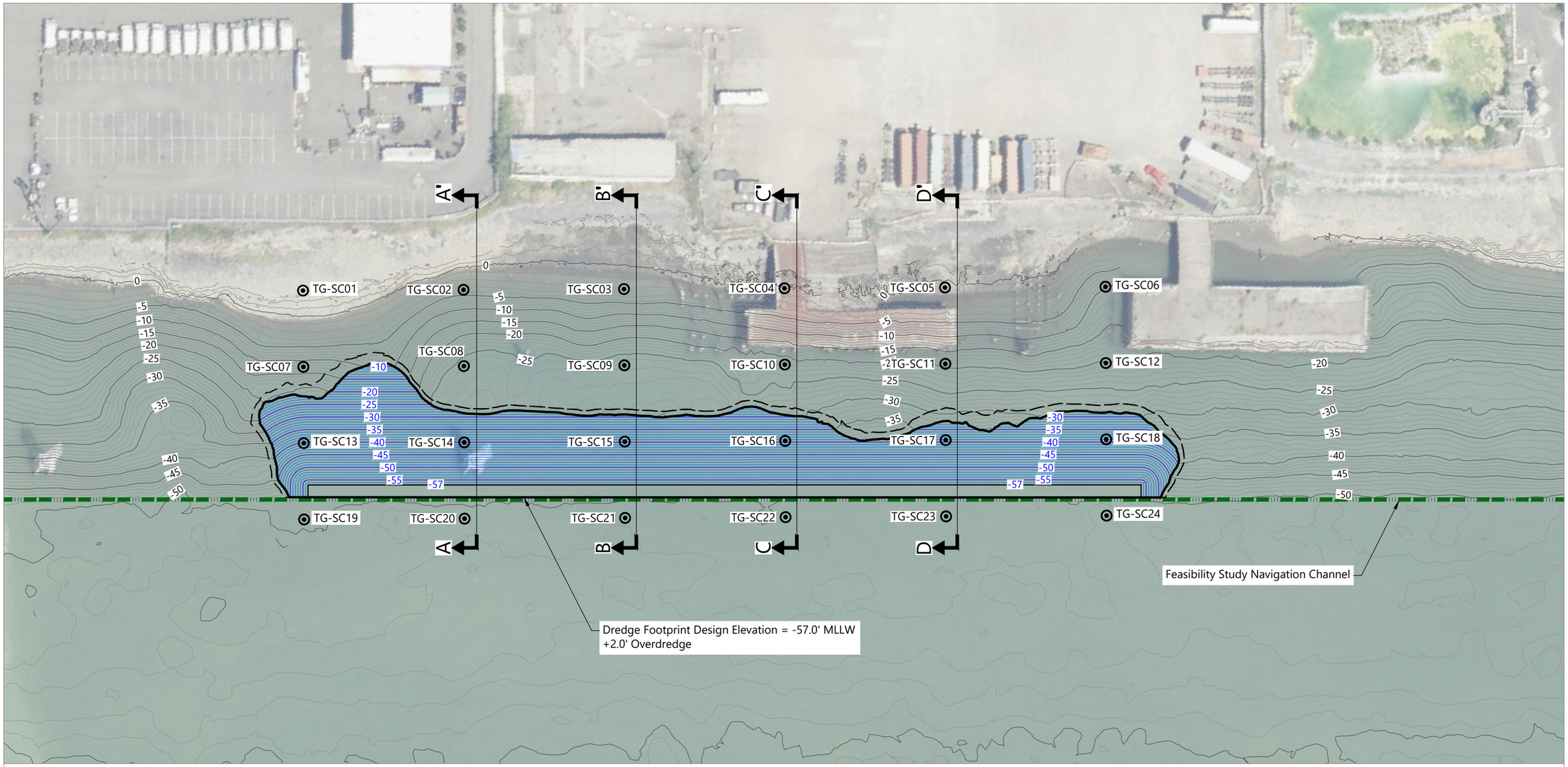
0 100
Feet

Publish Date: 2024/07/17, 11:48 AM | User: eiverson
Filepath: \\gstfile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\TruGrit_SQAPP\TruGrit_SQAPP.aprx | AQ_SQAPP_Fig5_ProposedSampling

ANCHOR QEA

Figure 5
Proposed Sampling Locations
Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation

FINAL



SOURCE: Bathymetric survey by eHydro dated 11/14/22.
Aerial from World Imagery: Esri, Maxar, Earthstar Geographics, and the GIS User community.
HORIZONTAL DATUM: Washington State Plane South Zone, NAD83, U.S. Survey Feet
VERTICAL DATUM: MLLW

LEGEND:

- Existing Contours (DEA 2022/USACE 2021, 1' and 5' Interval)
- Existing Contours (USACE 2022, 1' and 5' Interval)
- Proposed Design Target Daylight Extent (-57.0' MLLW)
- Proposed Overdredge Daylight Extent (-59.0' MLLW)
- Feasibility Study Navigation Channel
- Proposed Core Sampling Location

0 80
Feet

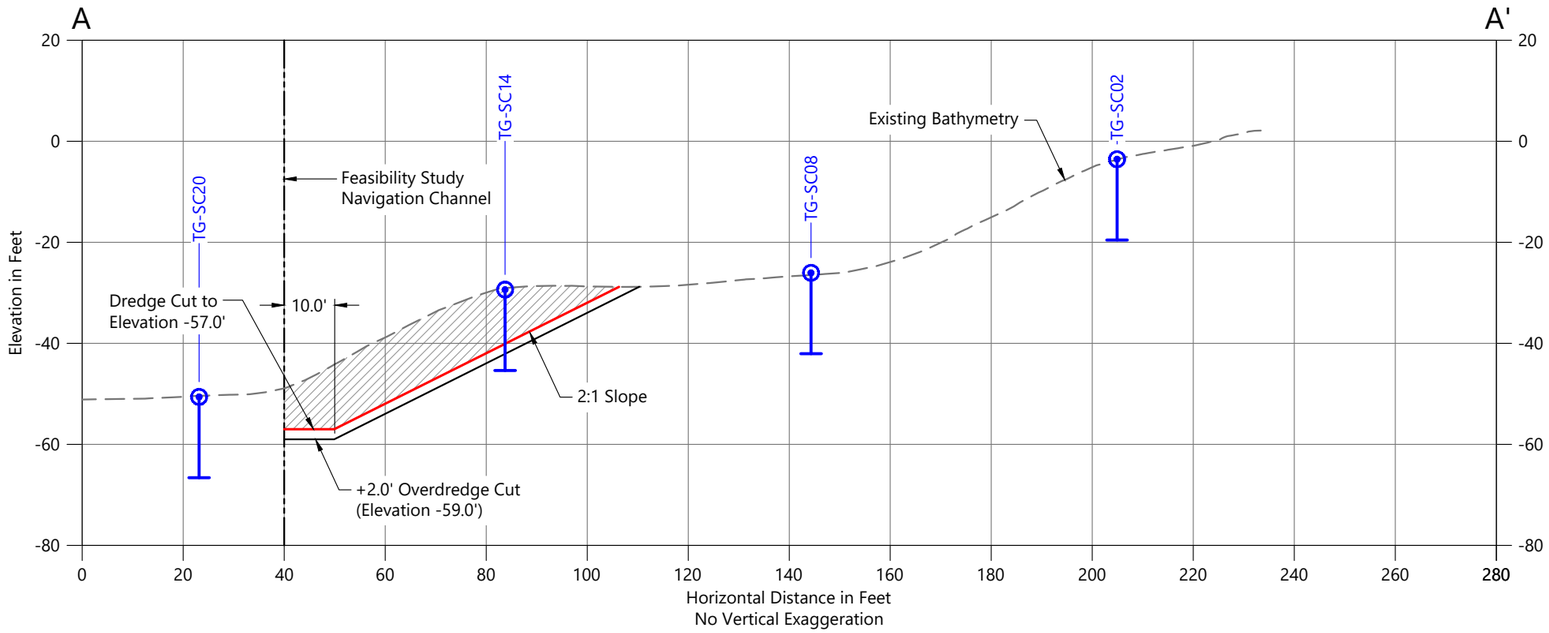
Publish Date: 2024/05/17 3:23 PM | User: jbigsby
Filepath: K:\Projects\0092 - Port of Tacoma\Tru-Grit Site Data Gaps Assessment\0092-RP-004 (Site Plan-SAP).dwg Figure 6a

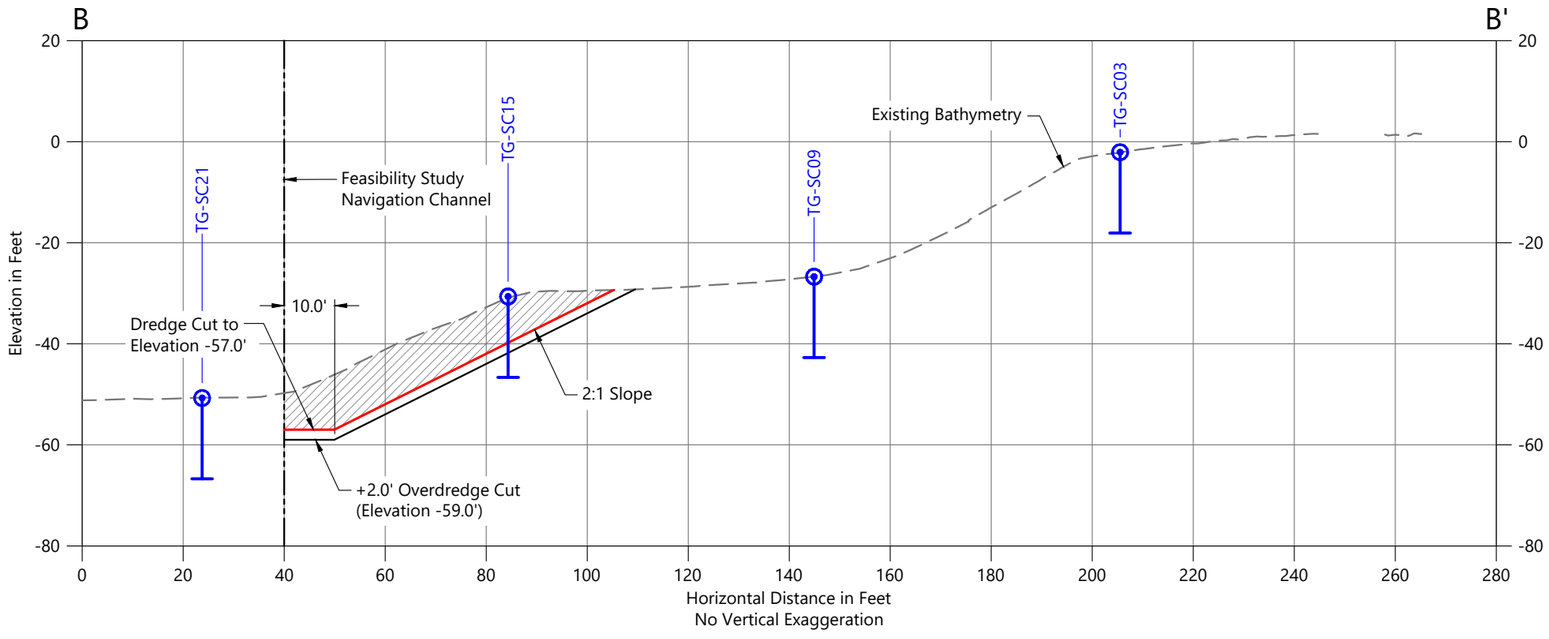
ANCHOR QEA

Figure 6a
Site Plan

Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation

FINAL





LEGEND:

Proposed Core Sampling Location

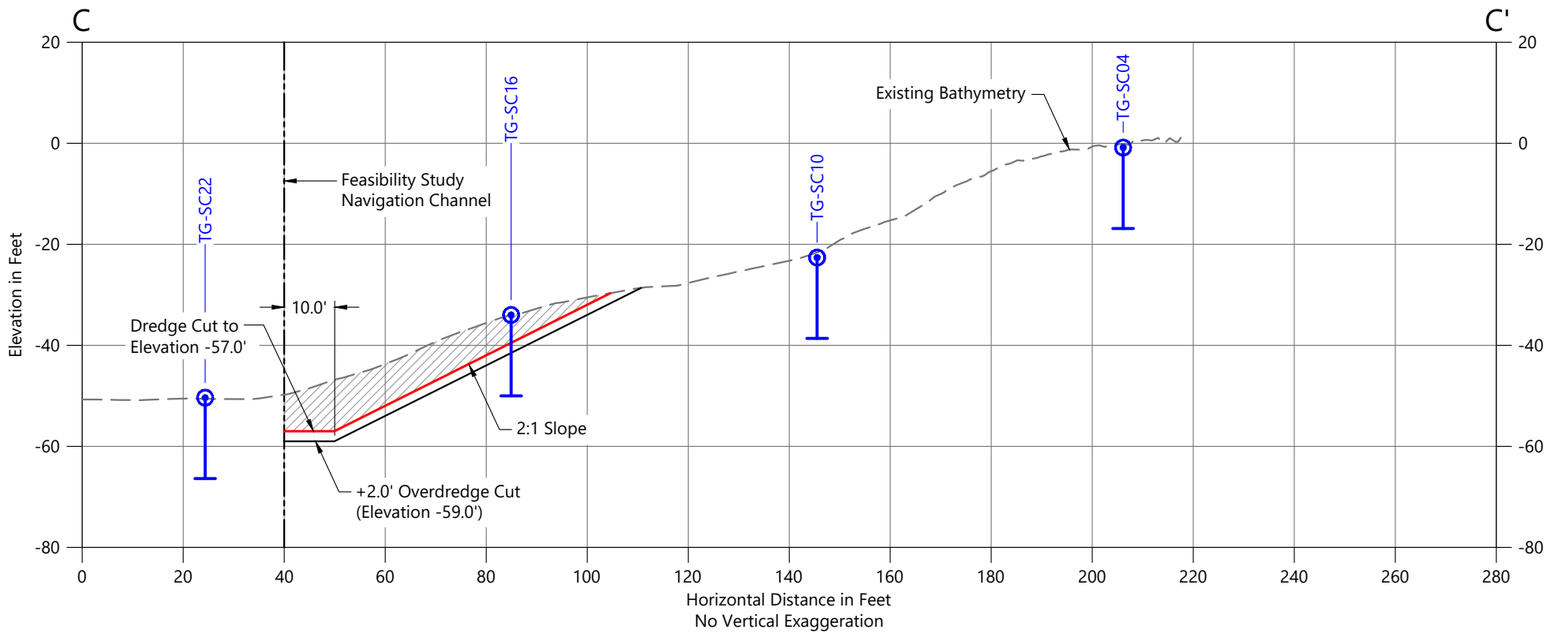
0 30
Feet

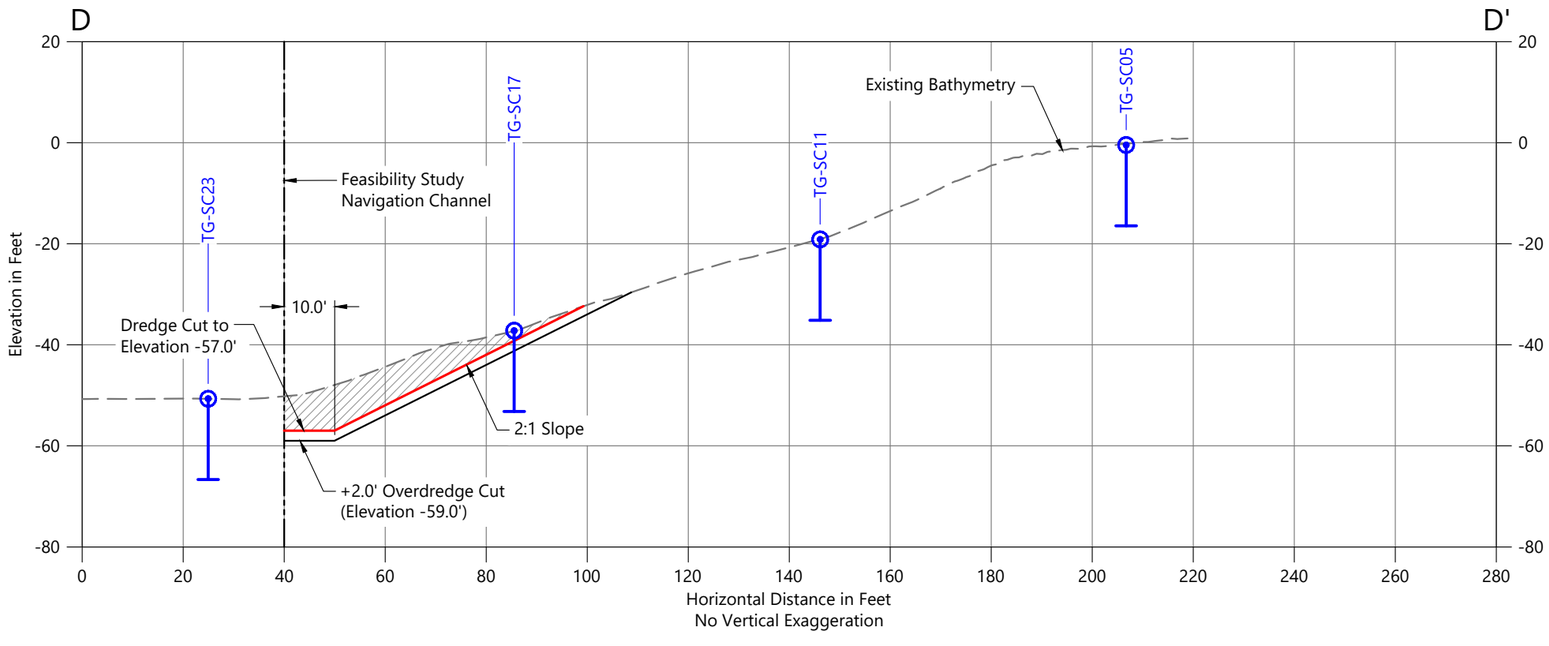
Publish Date: 2024/05/17 3:24 PM | User: jbigsby
Filepath: K:\Projects\0092 - Port of Tacoma\Tru-Grit Site Data Gaps Assessment\0092-RP-005 (Sections-SAP).dwg Figure 6b

ANCHOR QEA

Figure 6b
Cross Sections A-A' and B-B'

Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation





LEGEND:

Proposed Core Sampling Location

0 30
Feet

Publish Date: 2024/05/17 3:24 PM | User: jbigsby
Filepath: K:\Projects\0092 - Port of Tacoma\Tru-Grit Site Data Gaps Assessment\0092-RP-005 (Sections-SAP).dwg Figure 6c

ANCHOR QEA

Figure 6c
Cross Sections C-C' and D-D'

Sampling and Quality Assurance Project Plan
Tru-Grit Site Data Gaps Field Investigation

Legend

- Proposed Upland Surface Soil Sample Location
- Proposed □each Area Sediment Sample Location
- Proposed Subtidal Area Sediment Sample Location
- 2008 Sediment Sample Location
- Proposed Surface Grab Sample for SMS Suite and Core Sample
- Parcel □oundar□

KEY
F - Movable Building
G - Dryer Feed Hopper
H - Dry Drum Assembly
I - Screens
J - Baghouse
K - Bucket Elevator
L - Sand Storage
M - Bucket Elevator
N - Load-out Bin
P - Bucket Elevator

Ecology Block Wall
Load Out Area
CB5
CB3
New Storm Sewer
Approximate Location of Overflow Grit Stockpile Area (Used 2005-2007)
Covered Stockpile Area
CB2
CB4
U-6
U-5
U-4
Process Area
275 Gallon Diesel Tank
Additional Storage
Tent Shed with Forklift
Equipment Maintenance
Roof Drains
U-1
U-2
U-3
Tote
Current Stormwater Treatment Facility and Former Stormwater Infiltration Pond
Historical and Current Stormwater Overflow Swale
SG-2
SG-24
SG-3
Rip Rap
OUTFALL 4
SG-1
SG-5
Vegetated Area
SG-6
SG-7
SG-4
SG-23
Hopper
Approximate Ordinary High Water Line
Dock
GB-1
SG-9
SG-8
SG-10
G-2
G-3
G-1
G-4
G-5
Fender Piles
SG-12
SG-13
SG-11
SG-14
SG-15
Blair Waterway
SG-16
SG-17
SG-18
SG-19
Approximate Barge Location when Unloading (barge is aprox. 75 ft x 280 ft)
SG-20
SG-21
SG-22

Note

1. □lac□and white reproduction of this color original ma□reduce its effectiveness and lead to incorrect interpretation.

Source: Google Earth Pro 2010□Aerial dated 04-30-2009

0 60 120
Scale in Feet

LANDAU ASSOCIATES

Tru-Grit Facilit□ Tacoma, Washington	**Site Plan and Proposed Sampling Locations**	Figure 3

LAN□AU ASSOCIATES, INC. □□: 241 008 010.013 S-A Plan.dwg (A) "Figure 3" 2/6/2013

TABLE 1
TOTAL METALS CONTENT
GRANDBY BAY SLAG AND TRU-GRIT DRY MATERIAL(a)
TRU-GRIT FACILITY
TACOMA, WASHINGTON

	British Columbia Research Anyox slag (Tru-Grit Raw Material) Report Date 7/91 Sample No.		Sound Analytical		OCL Materials LTD
			11/4/1991	11/4/1991	Apr-92
			Tru-Grit	Black	Tru-Grit
Analyte	1	4	Material	Lustre (b)	Material
Aluminum	28,900	23,800	NA	NA	NA
Antimony	NA	NA	<1.0	<1.0	NA
Arsenic	<5	<5	<0.90	<0.90	<10
Barium	NA	NA	100	100	929
Beryllium	440	430	<0.090	<0.90	NA
Cadmium	<2.5	<2.5	<0.18	<0.18	<0.1
Chromium	94.8	74.4	27	27	29.5
Chromium (+6)	NA	NA	0.085	0.085	NA
Chromium (+3)	NA	NA	27	27	NA
Cobalt	NA	NA	60	60	180
Copper	2,590	2,330	1,000	1,000	2,280
Iron	329,000	337,000	NA	NA	NA
Lead	84.7	84.3	35	35	21
Mercury	<0.1	<0.1	<0.1	<0.1	<0.03
Molybdenum	NA	NA	27	27	7.7
Nickel	NA	NA	1.5	1.5	4.3
Selenium	4	2.9	<0.45	<0.45	<1
Silver	<5	<5	1.4	1.4	NA
Thallium	NA	NA	<0.72	<0.72	NA
Vanadium	NA	NA	37	37	NA
Zinc	8,380	8,930	3,900	3,900	8,270
Sodium	NA	NA	2,200	2,200	NA

NA = Not analyzed
(a) = Grandby Bay stockpile is the source of all materials analyzed.
(b) = Black Lustre is a Canadian trade name for Tru-Grit material.

TABLE 4
2008 SEDIMENT INVESTIGATION RESULTS
TRU-GRIT FACILITY
TACOMA, WASHINGTON

			Copper		Zinc		Arsenic
Landau Sample ID	Ecology Sample ID	Sample Desciption	Landau (ARI) Results	Ecology Results	Landau (ARI) Results	Ecology Results	Ecology Results
G-1	G-1	End of Conveyor Pier	303	280	**762**	**914**	19.9
C-1(15-25)	C-1A	15-25 centimerter depth at G-1	N/A	**700**	N/A	**1590**	24.3
C-1(25-35)	C-1B	25-35 centimeter depth at G-1	N/A	314	N/A	**957**	44.7
G-2	G-2	End of Conveyor Pier	117	72.4	228	180	24.9
G-3	G-3	End of Conveyor Pier	221	180	296	285	55.2
G-4	G-4	End of Conveyor Pier	151	140	217	200	17.5
G-5	G-5	End of Conveyor Pier	**1350**	**1390**	**2970**	**3400**	8.9
G-B1	G-B1	190' North of conveyor pier	N/A	391	N/A	**1250**	7.94
C-B1 (15-25)	CB-1A	15-25 centimeter depth at G-B1	N/A	332	N/A	**1140**	11.6
C-B1 (25-40)	CB-1B	25-40 centmeter depth at G-B1	N/A	55.4	N/A	86	13
G-B2	G-6	Background- 560' upstream on Blair Waterway	231	229	**629**	**665**	**185**
C-B2 (10-25)	C-2A	10-25 centimeter depth at G-B2	N/A	353	N/A	**1120**	34.5
C-B2 (25-40)	C2-B	25-40 centimeter depth at G-B2	N/A	**1340**	N/A	**4210**	**90.5**
Sediment Quality Standards (SQS)			390	390	410	410	57
Clean up Screening Level (CSL)			390	390	960	960	93

Bold = Exceedance of sediment quality standards (SQS).
Box = Exceedance of cleanup level (CSL).

TABLE A-1
SEDIMENT SAMPLE LOCATIONS AND ELEVATIONS
TRU-GRIT FACILITY
TACOMA, WASHINGTON

Sample Location	Northing (a)	Easting (a)	Elevation (b)
SG-1	712778.7	1168493.7	Beach
SG-2	712732.1	1168591.5	Beach
SG-3	712670.1	1168660.7	Beach
SG-4	712614.1	1168657.1	Beach
SG-5	712724.9	1168542.8	at or above MLLW
SG-6	712675.3	1168594.0	at or above MLLW
SG-7	712629.7	1168641.0	at or above MLLW
SG-8	712691.6	1168510.6	at or above MLLW
SG-9	712642.0	1168561.7	-11.1
SG-10	712599.1	1168611.2	-8.6
SG-11	712655.4	1168475.5	-27.0
SG-12	712605.8	1168526.6	-27.4
SG-13	712554.5	1168581.3	-26.5
SG-14	712479.0	1168643.7	-23.1
SG-15	712384.8	1168735.3	-25.7
SG-16	712620.1	1168441.3	-30.2
SG-17	712565.1	1168496.7	-31.6
SG-18	712505.8	1168556.2	-34.2
SG-19	712402.6	1168651.2	-40.2
SG-20	712528.6	1168461.2	-49.6
SG-21	712425.6	1168560.7	-51.0
SG-22	712315.8	1168668.3	-50.4
SG-23	712590.7	1168692.1	Beach
SG-24	712702.7	1168627.1	Beach
BSG-1	712242.7	1168110.6	-45.1
BSG-2	713348.9	1167715.4	-47.8
G-5	712555.6	1168615.7	-18.3
U-1	712747.2	1168605.3	aprox. 14
U-2	712682.4	1168672.5	aprox. 14
U-3	712664.9	1168697.6	aprox. 14
U-4	712646.4	1168780.0	aprox. 16
U-5	712662.1	1168795.9	aprox. 16
U-6	712720.4	1168788.0	aprox. 16

(a) Washington State Plane North Zone coordinate system [North America Datum (NAD) 83]
(b) Feet Mean Lower Low Water

5. SUMMARY

A summary of the biological tests conducted on the Tru-Grit remedial investigation sediments evaluated under the SMS sediment quality criteria (Table 5-1) is provided below.

Sample SG-16 failed SCO for the larval development test only. All remaining project samples pass the SCO and CSL performance criteria for all tests performed.

Table 5-1. Summary of SMS Evaluation.

Treatment	Sediment Cleanup Objectives			Cleanup Screening Levels		
	Amphipod	Polychaete	Larval	Amphipod	Polychaete	Larval
G-5-012518	Pass	Pass	Pass	Pass	Pass	Pass
SG-14-012518	Pass	Pass	Pass	Pass	Pass	Pass
SG-16-012518	Pass	Pass	Fail	Pass	Pass	Pass

5. SUMMARY

A summary of the toxicity tests conducted on the Tru-Grit remedial investigation sediment evaluated under the SMS sediment quality criteria (Table 5-1) is provided below.

Sample SG-17-012518 failed the SCO criteria for the larval development test but passed the SCO and CSL performance criteria for all remaining tests performed.

Table 5-1. Summary of SMS Evaluation

Treatment	Sediment Cleanup Objectives (SCO)			Cleanup Screening Levels (CSL)		
	Amphipod Survival	Polychaete Growth	Bivalve Embry-Larval Development	Amphipod Survival	Polychaete Growth	Bivalve Embry-Larval Development
SG-17-012518	Pass	Pass	**Fail**	Pass	Pass	Pass

Appendix C-1
Daily Logs

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway
DATE: 10/25/24
SITE ADDRESS: 1 Sitcum Way, Tacoma, WA
PERSONNEL: AW

WEATHER: **WIND FROM:** N | NE | E | (SE) | S | SW | W | NW

SUNNY | (CLOUDY) | RAIN | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: (°F) 43. °C
[Circle appropriate units]

TIME	COMMENTS
800	AW arrives on site
810	AW boards convey vessel
820	H&S Meeting
825	Mobilize to HT-SC29
904	Begin attempt #1 @ HT-SC29
918	Finish attempt #1 @ HT-SC29 (refusal) → reject
929	Begin attempt #2 @ HT-SC29
9[illegible]51	Finish attempt #2 @ HT-SC29 → accept
1005	Mobilize to HT-SC27
1030	Call with PMs about Tru-Grit under pier location
1105	Begin attempt #1 @ HT-SC27
1124	Finish attempt #1 @ HT-SC27 (full drive) → accept!
1134	Mobilize to HT-SC26, avoiding shipping vessel entering waterway
1217	Begin attempt #1 @ HT-SC26
1236	Finish attempt #1 @ HT-SC26 (full drive) → accept!
1246	Mobilize to HT-SC25
1301	Begin attempt #1 @ HT-SC25
1319	Finish attempt #1 @ HT-SC25 → tentatively rejected ✓
1333	Begin attempt #2 @ HT-SC25
1352	Finish attempt #2 @ HT-SC25 → accept!
1405	Mobilize to HT-SC24
1430	Change in plans, mobilize to TG-SC24
1505	Begin attempt #1 @ TG-SC24
1525	Finish attempt #1 @ TG-SC24 → accept!
1555	Mobilize back to dock
1604	Arrive @ dock, AW off vessel
1620	AW off site

Signature: [signature]

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway
DATE: 10/28/24
SITE ADDRESS: 1 Sitcum Way
PERSONNEL: AW, CS

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW

SUNNY | (CLOUDY) | (RAIN) | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: (°F) 50 . °C
[Circle appropriate units]

TIME	COMMENTS
930	AW & CS board coring vessel
935	H&S meeting
945	Mobilize to Tru-Grit (TG-SC04)
1155	Begin attempt #1 @ TG-SC04 (under piers) → reject
1222	Begin attempt #2 @ TG-SC04 → accept
	↳ core barrel stuck in muck below piers, took about
	1 hour + to retrieve
1350	Taking coordinates from TG-SC04
1410	Mobilize back to dock, done with coring for the day
1430	Arrive back at dock
1437	AW & CS off boat
1500	AW off site

Signature: AW Ulm

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway
DATE: 10/29/24
SITE ADDRESS: 1 Sitcum Way
PERSONNEL: AW

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW (E, SE circled)
SUNNY | CLOUDY (circled) | RAIN | ?
LIGHT | MEDIUM | HEAVY
TEMPERATURE: °F 45 . °C
[Circle appropriate units]

TIME	COMMENTS
8:00	AW on site, boards core vessel
8:20	H&S meeting
8:25	Mobilize to TG
8:50	Change plan, mobilize to HT-SC06
9:37	Begin attempt #1 @ HT-SC06
9:57	Finish attempt #1 @ HT-SC06 → accept
10 15	Mobilize to HT-SC05
1044	Begin attempt #1 @ HT-SC05
1104	Finish attempt #1 @ HT-SC05 → accept
1115	Mobilize to HT-SC04
1141	Begin attempt #1 @ HT-SC04
1202	Finish attempt #1 @ HT-SC04 → accept!
1230	working lunch, mobilize to TG
1316	Begin attempt #1 @TG-SC18
1333	restart attempt #1 @ TG-SC18 (Tech difficulties)
1355	Finish attempt #1 @ TG-SC18
	↳ Lost core barrel
1425	Gravity doing side/top scans to look for lost barrel
	& reconning Tru-Grit high tide locations and using splash
	camera to look for lost barrel
1605	Mobilize back to dock
1615	Arrive back at dock
1622	AW off boat

Signature: _____

Daily Log

ANCHOR QEA

PROJECT NAME: Black Waterway **DATE:** 10/31/24

SITE ADDRESS: 1 Sitcum Way, Tacoma **PERSONNEL:** AW

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW

SUNNY | CLOUDY | RAIN | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F 44 . °C

[Circle appropriate units]

TIME	COMMENTS
800	AW arrives on site & boards coring vessel
815	H&S, Mobilize to HT-SC14
358	Begin attempt #1 @ HT-SC14
816	Finish attempt #1 @ HT-SC14 → accept
924	Mobilize to HT-SC15
948	Begin attempt #1 @ HT-SC15
1006	Finish attempt #1 @ HT-SC15 → accept
1016	Mobilize to HT-SC16
1040	Begin attempt #1 @ HT-SC16
1055	Finish attempt #1 @ HT-SC16 → accept
1110	Boat crew extracts HT-SC16 on board
1220	Mobilize to TG-SC18
1250	Shawn (Gravity) arrives on board with ROV
1320	Recovered lost core barrel from TG-SC18
1354	Begin attempt #2 @ TG-SC18 → accept
1407	Mobilize to HT-SC13
1445	Begin attempt #2 @ HT-SC13 → reject
1518	Begin attempt #3 @ HT-SC13 → accept
1541	Mobilize back to dock
1600	Arrive at dock AW off boat

Signature: [signature]

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway
DATE: 11/5/24
SITE ADDRESS: 1 Sitcum Way, Tac
PERSONNEL: AW

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW
SUNNY | CLOUDY | RAIN | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F 43 . °C
[Circle appropriate units]

TIME	COMMENTS
7:20	AW arrives on site, boards coring vessel
7:40	H&S meeting, mobilize to WUT-SC04
8:25	Begin attempt #2 @ WUT-SC04
843	Finish attempt #2 @ WUT-SC04 → accept
850	Mobilize back to dock, vibracore ~~head~~ chuck cracked, Grav driving a new one down from Snoqualmie
915	Mobilize to fuel station
1000	Mobilize back to dock
1015	AW off boat (temp)
1134	AW back on boat, mobilize to WUT-SC06
1211	Begin Attempt #1 @ WUT-SC06
1230	Finish attempt #1 @ WUT-SC06 (refusal at 5') → reject
1238	Begin attempt #2 @ WUT-SC06
1259	Finish attempt #2 @ WUT-SC06 → reject (refusal at 4')
1313	Begin attempt #3 @ WUT-SC06
1320	~~[illegible]~~ Finish attempt #3, no penetration, no recovery → reject, accept attempt #2
1350	Mobilize to Tru-Grit
1434	Begin attempt #1 @ TG-SC02
1448	Finish attempt #1 @ TG-SC02
1455	Begin attempt #2 @ TG-SC02
1508	Finish attempt #2 @ TG-SC02 → reject ↳ vibracore plug shorted out, unusable for rest of day
1515	Mobilize back to dock
1535	Arrive back at dock, AW off boat

Signature: [signature]

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway
DATE: 11/6/24
SITE ADDRESS: 1 Sitcum Ave, Tac
PERSONNEL: AW

WEATHER: **WIND FROM:** N ~~NE~~ E SE S SW W NW (N) SUNNY; E SE CLOUDY; S SW RAIN; W NW ?
LIGHT MEDIUM HEAVY
TEMPERATURE: °F 50 . °C
[Circle appropriate units]

TIME	COMMENTS
7:20	AW arrives on site → vibracore hasn't arrived,
7:30	AW leaves site, will return at 9
850	AW arrives on site, boards coring vessel
1000	Vibracore head returned to boat
1010	Mobilize to HT-SC17
1024	There was a ship in the way (Eleftheria) Mobilizing
	to TG-SC02
1050	Begin attempt #3 @ TG-SC02
1055	Finish attempt #3 @ TG-SC02 (refusal @ 3') → reject,
	accept attempt #2 from 11/5
1102	Mobilize to TG-SC03
1138	Begin attempt #1 @ TG-SC03
1146	Finish attempt #1 @ TG-SC03
	↳ lost core barrel, working to retrieve it
1158	Retrieved barrel
1225	Begin attempt #2 @ TG-SC03
1233	Finish attempt #2 @ TG-SC03 → lost core barrel, retrieving
	it (1250)
1303	Begin attempt #3 @ TG-SC03
1310	Finish attempt #3 @ TG-SC03 → accept
1317	Mobilize to TG-SC06
1343	Begin attempt #1 @ TG-SC06
1353	Finish attempt #1 @ TG-SC06 → reject
1416	Begin attempt #2 @ TG-SC06
1424	Finish attempt #2 @ TG-SC06 → accept
1430	Mobilize to TG-SC12
1446	Begin attempt #1 @ TG-SC12
1457	Finish attempt #1 @ TG-SC12 → accept
1505	Mobilize to TG-SC11

Signature: AW

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway
DATE: 11/6/24
SITE ADDRESS: 1 Sitcum Ave, Tac
PERSONNEL: AW

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW

SUNNY | CLOUDY | RAIN | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F . °C
[Circle appropriate units]

TIME	COMMENTS
1525	Begin 1st attempt @ TG-SC11
1533	Finish attempt #1 @TG-SC11 → accept
1550	Start mobilizing back to dock
1610	Arrive back at dock, AW off boat

Signature: [signature]

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway **DATE:** 11/11/24

SITE ADDRESS: 1 Sitcom Way, Tac **PERSONNEL:** AW

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW

SUNNY | CLOUDY | (RAIN) | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: (°F) 50 . °C

[Circle appropriate units]

TIME	COMMENTS
7:30	AW arrives on site and boards boat
8:05	H&S meeting, mobilize to WUT-SC11 for liner retrieval
8 30	Confirmed liner is lying down, will leave in place
840	Mobilize to Tru-Grit → long time to anchor due to wind
1000	Begin attempt #1 @ TG-SC19
10M	Finish attempt #1 @ TG-SC19 → accept
1016	Mobilize to TG-SC13
1037	Begin attempt #1 @ TG-SC13
1053	Finish attempt #1 @ TG-SC13 → reject
1105	Begin attempt #2 @ TG-SC13
1120	Finish attempt #2 @ TG-SC13 → reject (refusal at 7.8')
11:26	Begin attempt #3 @ TG-SC13
1136	Finish attempt #3 @ TG-SC13
1142	Mobilize to TG-SC07
1207	Begin attempt #1 @ TG-SC07
1217	Finish attempt #1 @ TG-SC07 → reject
1225	Begin attempt #2 @ TG-SC07
1235	Finish attempt #2 @ TG-SC07
1245	Begin attempt #3 @ TG-SC07
1252	Finish attempt #3 @ TG-SC07
1256	Mobilize to TG-SC01
1319	Begin attempt #1 @ TG-SC01
1323	Finish attempt #1 @ TG-SC01 → refusal at surface, reject
1325	Begin attempt #2 @ TG-SC01
1329	Finish attempt #2 @ TG-SC01 → refusal at surface, reject
1336	Begin attempt #3 @ TG-SC01
1340	Finish attempt #3 @ TG-SC01 → refusal at 1', reject
1400	Mobilize to possible attempt #4
1410	Begin attempt #4 at TG-SC01

Signature: _____

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway
DATE: 11/11/24
SITE ADDRESS: 1 Sitcum Way, Tac
PERSONNEL: AW

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW

SUNNY | CLOUDY | RAIN | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F . °C
[Circle appropriate units]

TIME	COMMENTS
1416	Finish attempt #1 @ TG-SC01 → accept
1430	Mobilize to TG-SC10
1450	Begin attempt #1 @ TG-SC10
1505	Finish attempt #1 @ TG-SC10 → reject
1510	Begin attempt #2 @ TG-SC10
1520	Finish attempt #2 @ TG-SC10 → reject
1528	Begin attempt #3 @ TG-SC10
1537	Finish attempt #3 @ TG-SC10 → accept ✓
1542	Mobilize back to dock
1600	Arrive back at dock, AW off boat

Signature:

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway **DATE:** 11/12/24

SITE ADDRESS: 1 Sitcum Way, Tac **PERSONNEL:** AW

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW

SUNNY | CLOUDY | (RAIN) | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: (°F) 47 . °C

[Circle appropriate units]

TIME	COMMENTS
720	AW arrives on site, boards boat
740	HSS meeting
7:50	Mobilize to Tru-Grit (TG-SC21)
8:52	Begin attempt #1 @ TG-SC21
9:05	Finish attempt #1 @ TG-SC21 → reject
9:13	Begin attempt #2 @ TG-SC21
9:23	Finish attempt #2 @ TG-SC21 → reject
9:30	Begin attempt #3 @ TG-SC21
9:44	Finish attempt #3 @ TG-SC21 → accept
9:49	Mobilize to TG-SC15
10:00	Begin attempt #1 @ TG-SC15
1012	Finish attempt #1 @ TG-SC15 → reject
1020	Begin attempt #2 @ TG-SC15
1031	Finish attempt #2 @ TG-SC15 → accept
1037	Mobilize to TG-SC09
1048	Begin attempt #1 @ TG-SC09
1100	Finish attempt #1 @ TG-SC09 → accept
1110	Mobilize to TG-SC05, quick lunch
1211	Begin attempt #1 @ TG-SC05
1215	Finish attempt #1 @ TG-SC05 → reject
1219	Begin attempt #2 @ TG-SC05
1226	Finish attempt #2 @ TG-SC05 → accept
1232	Begin attempt #3 @ TG-SC05
1240	Finish attempt #3 @ TG-SC05 → reject
1250	Mobilize to TG-SC23
1358	Begin attempt #1 @ TG-SC23
1415	Finish attempt #1 @ TG-SC23 → accept
1510	Mobilize to ~~TG-SC~~ Dock
1530	Arrive at dock, AW off boat

Signature: [signature]

Daily Log

ANCHOR QEA

PROJECT NAME: Black waterway
DATE: 11/13/24
SITE ADDRESS: 1 Siteum way, Tac
PERSONNEL: AW

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW

SUNNY | CLOUDY | RAIN | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: (°F) 50 . °C
[Circle appropriate units]

TIME	COMMENTS
730	AW arrives on site, boards boat
740	H&S meeting
7:50	Mobilize to TG-SC14
834	Begin attempt #1 @TG-SC14
840	Finish attempt #1 @TG-SC14 → accept
850	Mobilize to TG-SC08
913	Begin attempt #1 @TG-SC08
925	Finish attempt #1 @TG-SC08 → accept
932	Mobilize to TG-SC20
946	Begin attempt #1 @TG-SC20
956	Finish attempt #1 @TG-SC20 → reject
1002	Begin attempt #2 @TG-SC20
1011	Finish attempt #2 @TG-SC20 → accept
1025	Mobilize to TG-SC16
1057	Begin attempt #1 @TG-SC16
1110	Finish attempt #1 @TG-SC16 → accept
1128	Mobilize to TG-SC22
1139	Begin attempt #1 @ TG-SC22
1150	Finish attempt #1 @TG-SC22 → accept
1200	Mobilize to TG-SC17, quick lunch
1310	Begin attempt #1 @ TG-SC17
1321	Finish attempt #1 @ TG-SC17 → accept
1335	Reconning grab sample locations for tomorrow
1350	Mobilize back to dock
1400	Arrive back at dock, AW off boat

Signature: _____

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Channel Deepening — TG — **DATE:** 03/27/2025

SITE ADDRESS: 1 Sitcum Way, Tacoma, WA — **PERSONNEL:** Amber S, Jilong L, Nik B

WEATHER: **WIND FROM:** N | NE | E | (SE) | S | SW | W | NW | ?

SUNNY | (CLOUDY) | (RAIN)

(LIGHT) | MEDIUM | HEAVY

TEMPERATURE: (°F) 54.0 °C [Circle appropriate units]

TIME	COMMENTS
0700	AQ on site
0715	AQ on Peter R mobilize to Nancy Anne
0745	Health and safety
	• this topic : cutting and handling cores
0755	Navigation check
0810	Mobilize to AC25-SC07
0837	AC25-SC07 attempt 1 89 % recovery accept
0845	Mobilize to Peter R → dock
0910	Mobilize to TG-SC09RE
0937	TG-SC09RE attempt 1 89 % recovery
1025	Peter R → dock, Mobilizing to TG-SC10RE
	TG-SC10RE attempt 1 100 % recovery, low volume reject
	TG-SC10RE attempt 2 0 % recovery reject
	TG-SC10RE attempt 3 62 % recovery reject
	TG-SC10RE attempt 4 52 % recovery accept
1310	Peter R → dock
~~1327~~ ↓	Mobilize to TG-SC11RE
1327	TG-SC11RE attempt 1 83 % recovery accept
1404	Mobilize to TG-SC15RE Peter R → dock
1450	TG-SC15RE attempt 1 82 % recovery reject
1527	TG-SC15RE attempt 2 90 % recovery
1600	End of day wellness check / navigation check / mobilize to dock on Peter R.
1615	AQ off boat
1630	Nik and Jilong off site
1040	Field call
1730	Amber off site

as 3/27/25

Signature: Amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Channel Deepening Tru-Grit
DATE: 03/28/2025
SITE ADDRESS: 1 Sitcum Way, Tacoma, WA
PERSONNEL: Nik B, Amber S

WEATHER: WIND FROM: N | NE | E | SE | (S) | SW | W | NW
SUNNY | (CLOUDY) | (RAIN) | ?
(LIGHT) | MEDIUM | HEAVY
TEMPERATURE: (°F) 50.0 °C
[Circle appropriate units]

TIME	COMMENTS
	AQ on site, unload empty used core tubes
0810	AQ on Peter R → Nancy Anne
0840	Health and safety meeting, navigation check
0850	Mobilize to TG-SC12RE
0915	TG-SC12RE attempt 1 94 % recovery accept
0958	Mobilize to Peter R. Peter R → dock
1008	Mobilize to TG-SC25
1026	TG-SC25 attempt 1 0 % recovery reject
1044	TG-SC25 attempt 2 74 % recovery reject
1124	TG-SC25 attempt 3 87 % recovery accept
1210	Peter R → dock (cores & calibration gas sent)
1210	Mobilize to TG-SC26
1220	TG-SC25 attempt 1 94 % recovery accept
1250	Peter R → dock, Nancy Anne boat crew on standby till tides allow for TG-SC05 accsess.
1310	Mobilize to TG-SC05RE
1340	attempt 1 TG-SC05RE 72 % recovery reject
1420	Vibrating equipment broken, moving off TG-SC05RE for repair.
1440	Repair expected to exceed 2 hr. Core collection done for the day, waiting for Peter R EOD wellness check
1510	Mobilize Peter R w/ AQ staff → dock (1530)
1545	~~AQ off site~~ as 3/28/25 Nik off site
1545	Log QC/scan
1630	Amber off site
	as 03/28/25

Signature: amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Channel Deepening Tru-Grit
DATE: 03/31/2025
SITE ADDRESS: 1 Sitcum Way, Tacoma, WA
PERSONNEL: Amber S, Evan F

WEATHER: **WIND FROM:** N | NE | E | SE | S | (SW) | W | NW | ?
SUNNY | (CLOUDY) | (RAIN)
(LIGHT) | MEDIUM | HEAVY
TEMPERATURE: (°F) 47.0 °C
[Circle appropriate units]

TIME	COMMENTS
0750	AQ on site, MSS loading new core tubes on boat
0810	AQ on boat
0810	MSS repair boat
0815	Health and safety meeting
0849	Mobilize to TG-SCO5RE/ navigation check
0920	TG-SCO5 RE attempt 2 64% recovery
1007	TG-SCO5 RE attempt 3 → moved out of area with core. because of low tide.
1029	Finish processing TG-SCO5 attempt 2 + 3. Dale adress hydraulic issue - end work for the day
1120	TG-SCO5 RE attempt 3 70% recovery 9.4' of material to process ACCEPT, EOD wellness check
1133	Mobilize to dock on Gravity boat.
1150	AQ off boat
1200	Evan off site
1230	Amber off site

AS 3/31/25

Signature: Amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Channel Deepening
DATE: 5/9/2025
SITE ADDRESS: 1 Sitcum Way, Tacoma, WA
PERSONNEL: WS EF DD WB DB

WEATHER: WIND FROM: N | NE | E | SE | S | SW | W | NW | ?
SUNNY | CLOUDY | RAIN
LIGHT | MEDIUM | HEAVY
TEMPERATURE: °F 65 . °C [Circle appropriate units]

TIME	COMMENTS
	PID Bump check : passed
08:10	Board, Peter R, inobe to Nancy Anne
08:35	Board Nancy Anne, Safety meeting
08:50	Mobe to TG-SC27
09:10	Drive TG-SC27 95% rec, 13.9 ft drive Accepted
09:50	Mobe to TG-SC28
10:00	Drive TG-SC28 96% rec, 13.9 ft drive Accepted
10:30	Mobe to SC166
10:40	Drive SC166 100% rec., 13.9 ft drive Accepted
11:05	Mobe to SC164
11:20	Drive SC164 87% rec., 13.4 ft drive, Accepted
11:55	Mobe to SC160
12:05	Drive SC160 #1 81% rec 9.6 ft drive, Rejected
12:35	Drive SC160 #2 73% rec. 5.9 ft drive, Rejected
13:05	Drive SC160 #3 94% rec. 13.9 ft drive, Accepted
13:45	Mobe to SC159
13:55	Drive SC159 #1 78%, 6.5 ft drive, Rejected
14:25	Drive SC159 #2 82%, 13.9 ft drive, Accepted
15:00	Secure & Clean boat
15:15	Offload cores to Peter R boat
15:30	Mobe to dock
15:45	Offload cores
16:00	Disembark

WS

Signature: WS

Daily Log

ANCHOR QEA

PROJECT NAME: Tru-Grit **DATE:** 8/25/25

SITE ADDRESS: 1 Steam Way, Tacoma **PERSONNEL:** AW, NM

WEATHER: **WIND FROM:** N ~~NE~~ E SE S SW W (NW)

(SUNNY) CLOUDY RAIN ?

(LIGHT) MEDIUM HEAVY

TEMPERATURE: (F) 65-70 . °C

[Circle appropriate units]

TIME	COMMENTS
650	AW & NM board Nancy Ann, H&S meeting
715	Mobilize to TG-SC31, AM nav check
754	TG-SC31 attempt #1 13.6' drive, 10' (73.5%) recovery [reject]
824	TG-SC31 attempt #2 12.6' drive, 10.6' (84%) recovery [accept]
854	TG-SC31 attempt #3 11.7' drive, 10.4' (88.9%) recovery [reject]
916	Mobilize to TG-SC29
930	TG-SC29 attempt #1 14' drive, 12.7' (90.7%) recovery [accept]
950	Mobilize to TG-SC30
1000	TG-SC30 attempt #1 14' drive, 14' (100%) recovery [accept]
1045	Mobilize to PM nav check
1100	Mobilize to dock
1125	Arrive at dock, NM & AW off Nancy Ann
	AW

Signature: [signature]

Daily Log

ANCHOR QEA

PROJECT NAME: Tru-Grit
SITE ADDRESS:
DATE: 8/26/25
PERSONNEL: NM, AR, JC

WEATHER: WIND FROM: N | NE | E | SE | S | SW | W | NW
SUNNY | CLOUDY | RAIN | ?
LIGHT | MEDIUM | HEAVY
TEMPERATURE: (F) 83 °C [Circle appropriate units]

TIME	COMMENTS
0700	Arrive on site, board MSS vessel, H3S meetng
0740	Mobilize vessel to Tru-Grit site
0802	Nav check
0813	Attempt 1 @ SG32, 4 inch recovery, ACCEPT
0836	Attempt 2 @ SG32. no recovery
0845	Attempt 3 @ SG32, 9.5 in recovery, ACCEPT
	Begin compositing
0910	Mobilize to SG06
0923	Attempt 1 @ SG06, 10in recovery, ACCEPT
0941	Attempt 2 @ SG06, 3in recovery, reject
0954	Attempt 3 @ SG06, 8in recovery, ACCEPT
1025	Attempt 1@ SG31, 11.5in recovery, ACCEPT
1042	Attempt 2@ SG31, 11.5in recovery, ACCEPT
1050	Mobilize back to dock to drop off Jordan Cooper
1107	Arrive at dock, JC departs
1115	Boat mobilizes back to site
1142	Attempt 1@ SG12, 9.5 in recovery, Accept
1205	Attempt 2@ SG12, 7.5in recovery, ACCEPT
1236	Attempt 1@ SG25. no recovery rope? steel in jaws
1245	Attempt 2@ SG25, no recovery; jaws bent, MSS fixing
1305	Jaws fixed
1310	Attempt 3@ SG25, no recovery, jaws closed
1317	Attempt 4@ SG25, 9in recovery, ACCEPT
1334	Attempt 5@ SG25, 9.75in recovery, ACCEPT
1410	Attempt 1@ SG27, 12+ in recovery, overpenetration, reject
1418	Attempt 2@ SG27, 11.5in recovery, ACCEPT
	MSS adjusts grab to avoid further overpenetration
1432	Attempt 3@ SG27, 11in recovery, ACCEPT
1520	Attempt 1@ SG29, 10.5in recovery, ACCEPT

Signature:

Daily Log

ANCHOR QEA

PROJECT NAME: Tru-Grit
SITE ADDRESS: —
DATE: 8/26/25
PERSONNEL: NM, AR, JC

WEATHER: WIND FROM: N | NE | E | SE | S | SW | W | NW
SUNNY | CLOUDY | RAIN | ?
LIGHT | MEDIUM | HEAVY
TEMPERATURE: (F) 83. °C
[Circle appropriate units]

TIME	COMMENTS
1536	Attempt 2 @ SG29, 11in recovery, ACCEPT
1610	Attempt 1 @ SG30, 11.5in recovery, ACCEPT
1627	Attempt 2 @ SG30, 11in recovery, ACCEPT
1708	Collect rinse blank samples
1715	Transit back to dock
1735	Unload gear from vessel
1800	N. Maw & A. Riolo depart dock to demobilize & prepare samples for pick up.

Signature:

Scanned with CamScanner

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway DATE: 10/28/24

SITE ADDRESS: 1 Sitcum Way, Tacoma WA PERSONNEL: AS, AW, AR, KT, JC, CS, SN

WEATHER: WIND FROM: N | NE | E | SE | S | SW | W | NW | ?

SUNNY | (CLOUDY) | RAIN

LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F 50.0 °C (Circle appropriate units)

TIME	COMMENTS
0830	Arno + Kim on site
0835	Amber on site
0850	Jordan on site
0855	Christine on site
0908	Audrey on site, Sasha on site.
0910	Health + Safety meeting
1030	Process HT-SC29 / mudline @ -52.07' MLLW
	A: 0-2.9ft
	B: 2.9-5.8ft
1145 KT SN	Process TG-SC24 mudline @ -50.61ft MLLW
	2ft intervals sampled down length of core to 11.2ft
	Collected G-S @ 0-2, 6-8ft, Atterberg @ 0-2ft
	FD collected at 4-6ft
	MS/MSD collected @ 6-8ft
1530	HT-SC26 → sampled
	Mudline @ -51.2' MLLW
	A: 0-3.8'
	B: 3.8-5.8'
1600	Cleanup
1700	Offsite.

AW 11/19/25

Signature: _____

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway
DATE: 10/29/24
SITE ADDRESS: 1 Sitcum Way, Tacoma, WA
PERSONNEL: SN, AS, KT, AN

WEATHER: WIND FROM: N | NE | E | SE | S | SW | W | NW
SUNNY | CLOUDY | RAIN | ?
LIGHT | MEDIUM | HEAVY
TEMPERATURE: °F 49.0 °C [Circle appropriate units]

TIME	COMMENTS
0830	Arno & Kim on site
0845	Amber on site
0855	Sasha on site, 0930 Jordan on site
0900	Health and safety meeting
0915	HT-05CS-A-241029 sample start
1015	HT-10CS-B-241029 sample start
~~1130~~	~~TG-SC05 sample start~~
1130	Process TG-SC04
	0-2ft intervals, 6.8ft to process
	GS @ 2-4ft and 4-6ft
	Atterberg @ 5.8-6ft
1315	HT-SC06 Mudline @ -51.88ft MLLW
	A: 0-3.1 ft
	B: 3.1-5.4 ft
1405	HT-SC05, mudline @ -51.4ft MLLW
	A: 0-3.6ft
	B: 3.6ft-6.7ft

AW 11/19/25

Signature: Amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway DATE: 10/31/24

SITE ADDRESS: 1 Sitcum Way Tacoma WA PERSONNEL: AS, KT, SN, AR

WEATHER: WIND FROM: N | NE | E | SE | S | SW | W | NW

SUNNY | CLOUDY | RAIN | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F 48.0 °C [circle appropriate units]

TIME	COMMENTS
0830	AQ on site
0930	sampled HT-SC11 mudline -52.46'
	A 0-2.5' atterberg limit taken
	B 2.5'-6.5'
	Z 6.5'-8.5'
1000	Health and safety
	sampled HT-SC12 mudline -50.98'
	A 0-4'
	B 4'-8'
	Z 8'-8.3'
	sampled HT-SC14 mudline -53.18
	A: 0-1.8
	B 1.8-5.6
1300	Tru-Grit rinse blank
1400	Process HT-SC15 mudline @ -51.46ft
	A: 0-3.5ft
	B 3.5-6.3ft
1515	Process HT-SC16 mudline @ -54.68ft MLLW
	A: 0-0.3ft
	B: 0.3-4.3ft Atterberg @ 1.7-2.7ft
	Z 4.3-6.3

AW 11/19/25

Signature: _____

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway **DATE:** 11/1/24

SITE ADDRESS: 1 Sitcum Way, Tacoma WA **PERSONNEL:** AS, CW, KT, AL, SN

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW | ?

SUNNY | CLOUDY | RAIN

LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F 50.0 °C [Circle appropriate units]

TIME	COMMENTS
0830	AQ on site
0840	Health + safety
0930	sample QC for lab pick-up.
1135	Process TG-SC18
	2 ft intervals to 9.9ft
1330	Process HT-SC13 mudline - 5182
	A 0-3.2
	B 3.2-5.0
1450	Process HT-07CS-B
	Process WUT-SC07
	A: 0-4.6
1533	B: 4.6-6.7
1600	troubleshoot truck fridge issue
~~1525~~ 1725	AQ off site

AW 11/19/25

Signature: Amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway **DATE:** 11/8/24

SITE ADDRESS: 1 Sitcum Way Tacoma WA **PERSONNEL:** AS, CW,

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW

SUNNY | CLOUDY | RAIN | ?

LIGHT | MEDIUM | HEAVY

TEMPERATURE: °F 57. °C [Circle appropriate units]

TIME	COMMENTS
0745	Amber Arno Claudia on site
0750	H+S meeting.
0800	sample QC set up - took a long time
1055	sample start TG-SC06: 7'
1300	sample start TG-SC02: 1.7'
	sample start TG-SC03: 1'
1430	Jordan off site
1450	RY off site
1605	AG off site

AW 11/19/25

Signature: Amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway Deepening
DATE: ~~10/~~ 11/1/24
SITE ADDRESS:
PERSONNEL: SN, CW, AR, JL

WEATHER: WIND FROM: N | NE | E | SE | S | SW | W | NW
SUNNY | CLOUDY | RAIN | ?
LIGHT | MEDIUM | HEAVY
TEMPERATURE: °F . °C [Circle appropriate units]

TIME	COMMENTS
0830	Processing team on site
0850	H+S meeting and plan of the day
0945	sampled TG-SC11 4' core
1045	sampled TG-SC12 4.5' core
1215	sampled HT-SC20 mudline:
	A 0-1.9'
	B 1.9-4.7'
	Z 4.7-7.7'
1400	sampled HT-SC19 mudline:
	A: 0-3.3'
	B: 3.3-6.1'
1500	sampled HT-SC21 mudline:
	A: 0-2.9'
	B: 2.9'-5.1'

AW 11/19/25

Signature: Amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway
DATE: 11/12/24
SITE ADDRESS: 1 Sitcum Way Tacoma WA
PERSONNEL: AS, CW, JL, CR

WEATHER: WIND FROM: N | NE | E | SE | S | SW | W | NW (SE)
SUNNY | CLOUDY | RAIN | ?
LIGHT | MEDIUM | HEAVY
TEMPERATURE: °F . °C
[Circle appropriate units]

TIME	COMMENTS
0830	AQ on site
0850	H+S meeting
0915	sampled HT-SC22 mudline -51.73'
	A 0-3.3'
0950	sampled HT-SC23 mudline -51.49'
	A 0-3.0'
1020	sampled HT-SC24 mudline -51.24'
	A 0-3.8'
	B: 3.8'-6.3'
1105	composited HT-SC04
1115	composited HT-SC09
	(22 + 23B were not collected, and ~~as a result of no~~ not inc in composite)
1245	sampled ~~HT~~ TG-SC10 5.2'
1415	sampled TG-SC19 5.4'
	~~sampled TG-SC07 at~~
1635	AQ off site

AW 11/19/25

Signature: Amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway **DATE:** 11/13/24

SITE ADDRESS: 1 Sitcum Way Tacoma WA **PERSONNEL:** AS, AR, CW,

WEATHER: **WIND FROM:** (N) NE E SE S SW W NW ?

SUNNY (CLOUDY) (RAIN)

LIGHT MEDIUM HEAVY

TEMPERATURE: (°F) 53.0 °C [Circle appropriate units]

TIME	COMMENTS
0745	AQ on site
	H+S meeting
0845	sampled TG-SC09 6.7'
0950	sampled TG-SC05 1.6'
1030	sampled TG-SC01 1.0' -Jordan left 10:40
1045	sampled TG-SC07 5.9'
1145	sampled TG-SC21 6.0'
1305	sampled TG-SC23 5.5'
	MS/MSD: 0-2
	FD 2-4
1405	sampled TG-SC15 3.2'
	appears to have settled ~3'.
1445	sampled TG-SC13 3.3
1555	AQ off site

AW 11/19/25

Signature: Amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Waterway
DATE: 11/14/24
SITE ADDRESS: 1 Sitcum Way Tacoma WA
PERSONNEL: AS, AR, WS, JL

WEATHER: **WIND FROM:** N | NE | E | SE | S | (SW) | W | NW | ?
SUNNY | (CLOUDY) | RAIN
LIGHT | MEDIUM | HEAVY
TEMPERATURE: (°F) 48.0 °C
[Circle appropriate units]

TIME	COMMENTS	
0745	AQ on site	
0755	H+S meeting	
0820	sampled TG-SC08	6'
0910	sampled TG-SC14	6.1'
1000	sampled TG-SC16	5.4'
1100	sampled TG-SC17	6.2
1220	sampled TG-SC20	4.8'
1250	sampled TG-SC22	6.8'
0944	sampled HT-SC01	24 cm
~~10~~ 1141	sampled HT-SC02	38 cm
1030	sampled HT-SC03	38 cm
1215	~~Sam~~ composited HT-01CS	
	IDW samples collected	
	IDW-HT-2-241114 1530	IDW-WUT-5-241114 1538
	IDW-TG-1-241114 1532	IDW-WUT-7-241114 1540
	IDW-WUT-4-241114 1534	IDW-TG-9-241114 1542
	IDW-HT-6-241114 1536	
	5 gallon buckets from previous sampling event (clean) sediment put into drum #5 ↑ IDW-~~HT~~ WUT-5	
1600	AQ off site	

AW 11/19/25

Signature: amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Channel Deepening
DATE: 3/27/25
SITE ADDRESS: 1 Sitcum Way, Tacoma, WA
PERSONNEL: AR, AW, HS

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW | ? — **SUNNY** | **CLOUDY** | **RAIN** — LIGHT | MEDIUM | HEAVY
TEMPERATURE: ~55 °C [Circle appropriate units]

TIME	COMMENTS
0800	AQ & HA on site for H&S Meeting
0830	Setting up processing area
0845	Opening AL25-SC-06 Att #1 accepted & Processed ✓
1007	Opening AL25-SC07 ATT #1 accepted ✓
1035	Collecting cores from Vessel (TG core) TG-SC09RE ✓
1130	HA off Site Geotech complete)!
~~1203~~ 1204	Processing TG-SC09RE
1254	AW off site checking HA drums & AQ drums.
1315	AW on site
~~1318~~ AR 1325	Off loading cores from Vessel to processing area.
1422	Processing ~~TG-SC04R~~ TG-SC11RE ✓
1603	Breaking down Processing area
1617	off loading cores from Vessel
1715	AQ off site

AR

Signature: Anna Ribo

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Channel Deepening
DATE: 3/28/25
SITE ADDRESS: 1 Sitcum Way, Tacoma, WA
PERSONNEL: AR

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW — SUNNY | CLOUDY | RAIN | ?
LIGHT | MEDIUM | HEAVY
TEMPERATURE: (°F) 55 . °C [Circle appropriate units]

TIME	COMMENTS
0745	AQ on site
0800	H&S Meeting & Bumpcheck for PID
0830	Processing TG-SC15RE
1025	Off loading cores from vessel to processing area.
1100	Processing TG-SC12RE
1227	off loading cores from Vessel to Processing area
1235	Processing TG-SC10(Alt#4)
1445	Processing TG-SC25 (Alt#3) w/ FD & MS/MSD
1555	QCing Samples ✓
1600	Cleaning ~~Equip~~ AR up site for the weekend.
1645	AQ off site

AR

Signature: Anna Rubo

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Channel Deepening
DATE: 3/31/25
SITE ADDRESS: 1 Sitcum Way, Tacoma, WA
PERSONNEL: AR, AW

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW | ?
SUNNY | CLOUDY | RAIN
LIGHT | MEDIUM | HEAVY
TEMPERATURE: (°F) 55 . °C
[Circle appropriate units]

TIME	COMMENTS
0800	AQ on site
0810	H&S Meeting
0820	Setting up site
0930	Processing ~~AR~~ TG-SC26 ✓
1030	dumping reject cores.
1145	off loading cores
1215	cleaning up site for the day
1230	dumster run cleaning out trash bags.
1245	CW, SZ, JL off site
1250	AW, AF Setting up Bio assay storage.
1400	AR, AW off site

AQ

Signature: Anna Ruelo

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Channel Deepening
DATE: 4/1/23
SITE ADDRESS: 1 Sitcum Way, Tacoma, WA
PERSONNEL: AR

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | NW
SUNNY | CLOUDY | RAIN | ?
LIGHT | MEDIUM | HEAVY
TEMPERATURE: °F 50 . °C [Circle appropriate units]

TIME	COMMENTS
0745	AQ on site
0800	H&S Meeting Tim.S on site w/ Nik.B.
AR ~~0850~~ 0849	Processing ~~TG-SC~~ AR TG-SCOSRE
1045	dumping reject cores.
1100	disposing IDW in Roll off bin.
1100	Cleaning up site for the day.
1137	SZ, JL off site for dump run of core tubes.
1230	SZ, JL on site
1300	SZ, JL off site for the day
AR ~~1355~~ 1405	Sampling TG Rinse blank
1430	AR, AW locking up site / Site walk
1443	AQ off site

AR

Signature: Anna Riolo

Daily Logs

Daily Log

ANCHOR QEA

PROJECT NAME: Blair Channel Deepening
DATE: 5/12/25
SITE ADDRESS: 1 Sitcum Way, Tacoma, WA
PERSONNEL: James, Arno, Jon, Tessa, Kim

WEATHER: **WIND FROM:** N | NE | E | SE | (S) | SW | W | NW
SUNNY | (CLOUDY) | RAIN | ?
LIGHT | MEDIUM | HEAVY
TEMPERATURE: (°F) 60 . °C
[Circle appropriate units]

TIME	COMMENTS
0730	James Milton (ANCHOR) on-site
0800	Arno Rico, Tessa Sharpe, John Lane (ANCHOR) on-site
0820	Kim Tran (ANCHOR) on-site. Kim and Arno to get Grant Island
0900	Begin TG-SC27 sample @08:54
1030	Finish TG-SC27 and begin TG-SC28
1115	45 empty coolers arrive Taken to Biomass Storage
1200	Begin SC-166
1220	ARL cooler pickup
1300	SC-166 sample plan 0–0.3, 0.3–4.0, 4.0–5.0, 5.0–10.0, 10–12, 12–13.2
1330	Finish sampling SC-166
—	Begin SC-164 No archive sample 10–11.1
—	BW-D139-A & BW-D139-B 5-L/each
1515	Finish SC-164
—	Begin SC-160
—	BW-D135CS-A BW-D135CS-B 6-L/8-L
1620	Finish SC-160
—	Begin SC-159
—	BW-137CS-A BW-D137CS-B 6-L/8-L
1700	Weekly safety Briefing
1730	QA/QC Trip Grit, ARL, Equipment samples
1830	Off-site.

JM

Signature: _____

Daily Log

ANCHOR QEA

PROJECT NAME: Tru-Grit
DATE: 08/25/25
SITE ADDRESS: 401 Alexander Ave, Tacoma WA
PERSONNEL: AS, EF

WEATHER: WIND FROM: N | NE | E | SE | S | SW | W | (NW)
(SUNNY) | CLOUDY | RAIN | ?
(LIGHT) | MEDIUM | HEAVY
TEMPERATURE: (°F) 77.0 °C
[Circle appropriate units]

TIME	COMMENTS
0650	AS + EF on site
0655	Health and safety discussion
0705	Transported MSS cutting equipment to processing area
0740	Kevin (POT) on site to unlock facilities
0750	Kevin off site
0805	AS + EF picked up equipment from Tacoma office
0900	Uline drum drop off
0910	AS + EF on site equipment set up
1230	Nina arrived @ processing area
1250	Audrey arrived @ processing area
1305	Nina + Audrey off site
1307	EF + AS off site

Signature: Amber Smith

Daily Log

ANCHOR QEA

PROJECT NAME: Tru-Grit
DATE: 08/26/25
SITE ADDRESS: 401 Alexander Avenue, Tacoma WA
PERSONNEL: AS, AW, EF, JC

WEATHER: **WIND FROM:** N | NE | E | SE | S | SW | W | (NW)
SUNNY | (CLOUDY) | RAIN | ?
LIGHT | MEDIUM | HEAVY
TEMPERATURE: (°F) 75.0 °C
[circle appropriate units]

TIME	COMMENTS
0700	AW, EF, AS on site
	Health and safety → focus on using proper PPE while cutting / handling cores + opening drums
	Equipment set up
0845	TG-SC30 sampled Field duplicate 6-8'
	one clear 16 oz collected for 12-13.7' interval, wrapped in foil
1000	TG-SC29 sampled. 0.5' gap @ 8'. closed gap to process
1130	JC on site for arch monitoring offsite @~1200
1145	TG-SC31 sample start
1255	~~RF as blanks~~ IDW-TG-ADD2-D1-D2-Sediment collected
1300	IDW-TG-ADD2-D3-water collected
1315	TG-SC-RB-250826 collected
1345	EF off site for core tube recycling
1400	Sample QC, cleanup
1445	EF on site
1450	AW off site to deliver samples
	EF + AS dump waste at transfer station
1730	EF + AS drop off MSS equipment at Sitcum dock
1745	EF + AS load remaining equipment into field truck + drop off equipment at Tacoma office
1830	EOD wellness check - no H+S incidents

Signature: amber Smith

Appendix C-2
Health and Safety Logs

Daily Safety Briefing Form

ANCHOR QEA

Date: 10/25/24
Project No: 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: AW
Health & Safety Officer: TS
Project Manager: OB

TOPICS COVERED: *Highlighted topics are required*

- ☒ Emergency Procedures and Evacuation Route
- ☒ Directions to Hospital
- ☒ HASP Review and Location
- ☒ Safety Equipment Location
- ☒ Proper Safety Equipment Use
- ☒ Employee Right-to-Know/ SDS Location
- ☒ Fire Extinguisher Location
- ☒ Eye Wash Station Location
- ☒ Buddy System
- ☒ Self and Coworker Monitoring
- ☒ Lines of Authority
- ☒ Communication
- ☒ Site Security
- ☒ Vessel Safety Protocols
- ☒ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☒ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☒ Decontamination Procedures
- ☒ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☒ Hazard Exposure Routes
- ☒ Heat and Cold Stress
- ☒ Overhead and Underfoot Hazards
- ☒ Chemical Hazards
- ☒ Flammable Hazards
- ☐ Biological Hazards
- ☒ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: 43°-60° F, cloudy

Daily Work Scope: HT vibracoring

Site-specific Hazards: slips trips & falls, boat hazards, lifting heavy cores

Safety Comments: Be careful when maneuvering 20' core barrels!

Attendees

Printed Name	Signature
Audrey White	
Eric Dieters	
John Schaefer	
Kyle Sonders	

End of Day Wellness Check

Eric Dieters	
Audrey White	

Daily Safety Briefing Form

ANCHOR QEA

Date: 10/28/24
Project No: 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: AW
Health & Safety Officer: TS
Project Manager: DB

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☐ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☒ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: 45-55°, cloudy with scattered showers

Daily Work Scope: Tru-Grit vibracoring

Site-specific Hazards: Slips, trips, falls Boat hazards

Safety Comments:

Attendees

Printed Name	Signature
Audrey White	
CHRISTINE SIMMONS	Christine S
Eric Dieters	
John Schaefer	

End of Day Wellness Check

CHRISTINE SIMMONS	Christine S
Audrey White	
Eric Dieters	
John Schaefer	

Daily Safety Briefing Form

ANCHOR QEA

Date: 10/29/24
Project No: aw ~~Blair Waterway~~ 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: AW
Health & Safety Officer: TS
Project Manager: OB

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☐ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☒ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: Partly cloudy - cloudy 43°-55° F

Daily Work Scope: Tru-Grit Vibracoring

Site-specific Hazards: Slips trips falls, boat hazards

Safety Comments:

Attendees

Printed Name	Signature
Audrey White	
Eric Dietz	

End of Day Wellness Check

Daily Safety Briefing Form

ANCHOR QEA

Date: 10/31/24
Project No: ~~Blair Waterway~~ 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: AW
Health & Safety Officer: TS
Project Manager: DB

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☐ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☒ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: 40-50°F, 70% chance of rain

Daily Work Scope: HT vibracoring & ROV work

Site-specific Hazards: slips trips falls, boat hazards, cold stress

Safety Comments:

Attendees

Printed Name	Signature
Audrey White	
Eric Dieter	
John Schaefer	

End of Day Wellness Check

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/5/24
Project No: 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: AW
Health & Safety Officer: TS
Project Manager: DB

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☐ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☒ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- ☐ Other: _____

Weather Conditions: 42-53°F, cloudy

Daily Work Scope: WUT & TG vibra-coring

Site-specific Hazards: slips trips falls, boat hazards, cold-stress

Safety Comments: wear sunglasses if its bright, put on sunscreen

Attendees

Printed Name	Signature
Audrey White	
Eric Dieters	
Mike Duffy	

End of Day Wellness Check

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/6/24
Project No: 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: AW
Health & Safety Officer: TS
Project Manager: DB

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☐ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☒ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: 39°-54°F. sunny

Daily Work Scope: Vibracoring at Tru-Grit and/or Husky Terminal (depends on ship movement)

Site-specific Hazards: Slips trips falls, boat hazards, sunny day so wear sun protection!

Safety Comments:

Attendees

Printed Name	Signature
Audrey White	
Mike Duffield	
Eric Diders	

End of Day Wellness Check

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/11/24
Project No: 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: AW
Health & Safety Officer: TS
Project Manager: DB

TOPICS COVERED: *Highlighted topics are required*

- [x] Emergency Procedures and Evacuation Route
- [x] Directions to Hospital
- [x] HASP Review and Location
- [x] Safety Equipment Location
- [x] Proper Safety Equipment Use
- [x] Employee Right-to-Know/ SDS Location
- [x] Fire Extinguisher Location
- [x] Eye Wash Station Location
- [x] Buddy System
- [x] Self and Coworker Monitoring
- [x] Lines of Authority
- [x] Communication
- [x] Site Security
- [x] Vessel Safety Protocols
- [x] Work Zones
- [ ] Vehicle Safety and Driving/ Road Conditions
- [x] Equipment Safety and Operation
- [x] Proper Use of PPE
- [x] Decontamination Procedures
- [x] Near Miss Reporting Procedures
- [x] Lifting Techniques
- [x] Slips, Trips, and Falls
- [x] Hazard Exposure Routes
- [x] Heat and Cold Stress
- [x] Overhead and Underfoot Hazards
- [ ] Chemical Hazards
- [ ] Flammable Hazards
- [ ] Biological Hazards
- [ ] Eating/Drinking/Smoking
- [x] Reviewed Prior Lessons Learned
- [ ] Field Team Medical Conditions for Emergency Purposes (Confidential):
- [ ] Other:

Weather Conditions: 48-53°F, rainy

Daily Work Scope: Retrieving core liner at WUT, vibracoring at Tru-Grit

Site-specific Hazards: slips trips falls, boat hazards, working around large ships

Safety Comments:

Attendees

Printed Name	Signature
Audrey White	
Eric Dieter	

End of Day Wellness Check

Audrey White	

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/12/24
Project No: ~~Blair~~ 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: AW
Health & Safety Officer: TS
Project Manager: DB

TOPICS COVERED: *Highlighted topics are required*

- ☒ Emergency Procedures and Evacuation Route
- ☒ Directions to Hospital
- ☒ HASP Review and Location
- ☒ Safety Equipment Location
- ☒ Proper Safety Equipment Use
- ☒ Employee Right-to-Know/ SDS Location
- ☒ Fire Extinguisher Location
- ☒ Eye Wash Station Location
- ☒ Buddy System
- ☒ Self and Coworker Monitoring
- ☒ Lines of Authority
- ☒ Communication
- ☒ Site Security
- ☒ Vessel Safety Protocols
- ☒ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☒ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☒ Decontamination Procedures
- ☒ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☒ Hazard Exposure Routes
- ☒ Heat and Cold Stress
- ☒ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: 46°-54°F, rainy & cloudy

Daily Work Scope: Vibracoring at Tru-Grit

Site-specific Hazards: Slips trips falls, boat hazards, cold stress

Safety Comments:

Attendees

Printed Name	Signature
~~D~~ SLOAN	
Audrey Whyte	
Eric Dietz	
Jake Langdon	

End of Day Wellness Check

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/13/24
Project No: 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: AW
Health & Safety Officer: TS
Project Manager: DB

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☐ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☒ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: 50-56°F, rainy

Daily Work Scope: Vibracoring at Tru-Cut

Site-specific Hazards: Slips trips falls, boat hazards, underwater debris in TC area (be cautious)

Safety Comments:

Attendees

Printed Name	Signature
Jakob Langdon	
Audrey White	
Ed Scott	
Eric Dieters	

End of Day Wellness Check

Audrey White	

Daily Safety Briefing Form

ANCHOR QEA

Date: 03/27/2025
Project No: 240092-03.04
Project Name: Blair Channel Deepening

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith
Health & Safety Officer: Amber Smith
Project Manager: Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☒ Overhead and Underfoot Hazards
- ☒ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- ☒ Other: working with sharp tools / boat tie off practice

Weather Conditions: 50° - 58° rain/overcast

Daily Work Scope: geotech core and TG core collection

Site-specific Hazards: chemical, boat hazards,

Safety Comments: Be mindful while cutting / handling cores

Attendees

Printed Name	Signature
Amber Smith	amber Smith
Jilong Lin	
Nick Bacher	
Tim Thompson	
Dave Dickinson	
Nik Bacher	

End of Day Wellness Check

Amber Smith	amber Smith
Dave Dickinson	
Jilong Lin	
Nik Bacher	
Nick Bacher	
Tim Thompson	

Daily Safety Briefing Form

ANCHOR QEA

Date: 03/28/2025
Project No: 240092-03.06
Project Name: Blair Channel Deepening

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith
Health & Safety Officer: Amber Smith
Project Manager: Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☒ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☒ Overhead and Underfoot Hazards
- ☒ Chemical Hazards
- ☐ Flammable Hazards
- ☒ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- ☐ Other: _____

Weather Conditions: rain/overcast 47° - 53°

Daily Work Scope: TG core collection

Site-specific Hazards: boat hazards, coring hazard, chemical

Safety Comments: Be mindful of slippery deck and dock.

Attendees

Printed Name	Signature
Amber Smith	A Smith
Mike Baker	
Dave Dickinson	
Nik Bader	
Tim Thompson	

End of Day Wellness Check

Amber Smith	Amber Smith
Nik Bader	
Mike Baker	
Dave Dickinson	
Tim Thompson	

Daily Safety Briefing Form

ANCHOR QEA

Date: 03/31/2025
Project No: 240092-03.0#C
Project Name: Blair Channel Deepening

Submit a Playing It Safe Event

Person Conducting Meeting: Amber / Dale **Health & Safety Officer:** Amber Smith **Project Manager:** Christire Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☒ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☒ HASP Review and Location
- ☒ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☒ Employee Right-to-Know/ SDS Location
- ☒ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☒ Self and Coworker Monitoring
- ☒ Lines of Authority
- ☒ Communication
- ☒ Site Security
- ☒ Vessel Safety Protocols
- ☐ Work Zones
- ☒ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☒ Hazard Exposure Routes
- ☒ Heat and Cold Stress
- ☒ Overhead and Underfoot Hazards
- ☒ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: 43° - 51° overcast, light rain

Daily Work Scope: TG + Channel ~~cores~~ cores as 3/31/25

Site-specific Hazards: boat hazards, chemical

Safety Comments: no running on the dock

Attendees

Printed Name	Signature
Amber Smith	Amber Smith
Wes Barnes	
Logan Nelson	
Evan Foley	Evan Foley
David Dickinson	

End of Day Wellness Check

David Dickinson	
Evan Foley	Evan Foley
Wes Barnes	
Logan Nelson	

Daily Safety Briefing Form

ANCHOR QEA

Date: 5/9/2025
Project No: 240092-03.04
Project Name: Blair Channel Deepening

Submit a Playing It Safe Event

Person Conducting Meeting: WS
Health & Safety Officer: WS
Project Manager: Christine S

TOPICS COVERED: *Highlighted topics are required*

- ☑ Emergency Procedures and Evacuation Route
- ☑ Directions to Hospital
- ☑ HASP Review and Location
- ☑ Safety Equipment Location
- ☑ Proper Safety Equipment Use
- ☑ Employee Right-to-Know/ SDS Location
- ☑ Fire Extinguisher Location
- ☑ Eye Wash Station Location
- ☑ Buddy System
- ☑ Self and Coworker Monitoring
- ☑ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☑ Lines of Authority
- ☑ Communication
- ☑ Site Security
- ☑ Vessel Safety Protocols
- ☑ Work Zones
- ☑ Vehicle Safety and Driving/ Road Conditions
- ☑ Equipment Safety and Operation
- ☑ Proper Use of PPE
- ☑ Decontamination Procedures
- ☑ Near Miss Reporting Procedures
- ☑ Lifting Techniques
- ☑ Slips, Trips, and Falls
- ☑ Hazard Exposure Routes
- ☑ Heat and Cold Stress
- ☑ Overhead and Underfoot Hazards
- ☑ Chemical Hazards
- ☑ Flammable Hazards
- ☑ Biological Hazards
- ☑ Eating/Drinking/Smoking
- ☑ Reviewed Prior Lessons Learned
- ☒ Other: Epipen on board (Dale bee allergy

Weather Conditions: Sunny, warm

Daily Work Scope: Vibra-coring

Site-specific Hazards: Overhead hazards; slips, trips, & falls; pinchpoints

Safety Comments: Stay hydrated, watch your fingers, communicated

Attendees

Printed Name	Signature
Will Barnes	
Evan Foley	
Dave Dickinson	
David Brown	
Wayton Shellenberger	
~~Evan Foley~~	

End of Day Wellness Check

Evan Foley	
Dave Dickinson	
Will Barnes	
Wayton Shellenberger	

Daily Safety Briefing Form

ANCHOR QEA

Date: 8/25/25
Project No: 240092-03 06
Project Name: TRU-Grit

Submit a Playing It Safe Event

Person Conducting Meeting: AW
Health & Safety Officer: AW
Project Manager: CS

TOPICS COVERED: *Highlighted topics are required*

- ☒ Emergency Procedures and Evacuation Route
- ☒ Directions to Hospital
- ☒ HASP Review and Location
- ☒ Safety Equipment Location
- ☒ Proper Safety Equipment Use
- ☒ Employee Right-to-Know/ SDS Location
- ☒ Fire Extinguisher Location
- ☒ Eye Wash Station Location
- ☒ Buddy System
- ☒ Self and Coworker Monitoring
- ☒ Lines of Authority
- ☒ Communication
- ☒ Site Security
- ☒ Vessel Safety Protocols
- ☒ Work Zones
- ☒ Vehicle Safety and Driving/ Road Conditions
- ☒ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☒ Decontamination Procedures
- ☒ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☒ Hazard Exposure Routes
- ☒ Heat and Cold Stress
- ☒ Overhead and Underfoot Hazards
- ☒ Chemical Hazards
- ☒ Flammable Hazards
- ☒ Biological Hazards
- ☒ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned

☐ Field Team Medical Conditions for Emergency Purposes (Confidential): Peanut allergy (Audrey) bee allergy (Dale)

☐ Other:

Weather Conditions: 65-90°f, sunny

Daily Work Scope: vibracoring

Site-specific Hazards: slips trip falls, chemistry

Safety Comments: hot today!

Attendees

Printed Name	Signature
Will Sanders	
Nina Maas	
Dale Dickinson	
Audrey White	

End of Day Wellness Check

Audrey White	

Daily Safety Briefing Form

ANCHOR QEA

Date: 8/26/25
Project No: 240092-03.06
Project Name: Tru-Grit

Submit a Playing It Safe Event

Person Conducting Meeting: N. Maas
Health & Safety Officer: N. Maas
Project Manager: C. Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☑ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☑ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☑ Site Security
- ☐ Vessel Safety Protocols
- ☑ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☑ Equipment Safety and Operation
- ☑ Proper Use of PPE
- ☑ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☑ Lifting Techniques
- ☑ Slips, Trips, and Falls
- ☑ Hazard Exposure Routes
- ☑ Heat and Cold Stress
- ☑ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☑ Flammable Hazards
- ☐ Biological Hazards
- ☑ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- ☐ Other: _____

Weather Conditions: Sunny 85°

Daily Work Scope: Collect/process sediment grabs

Site-specific Hazards: On-water work

Safety Comments: —

Attendees

Printed Name	Signature
Nina Maas	
Arno Riolo	
[illegible]	
[illegible]	
Jordan Cooper	

End of Day Wellness Check

Daily Safety Briefing Form

ANCHOR QEA

Date: 10/28/24
Project No: 240092-03.02 & 240092-03.06
Project Name: Blair Waterway Deepening - HTA TO GRH

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith
Health & Safety Officer: Tim Sharer
Project Manager: Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- [x] Emergency Procedures and Evacuation Route
- [x] Directions to Hospital
- [x] HASP Review and Location
- [x] Safety Equipment Location
- [x] Proper Safety Equipment Use
- [x] Employee Right-to-Know/ SDS Location
- [x] Fire Extinguisher Location
- [x] Eye Wash Station Location
- [x] Buddy System
- [x] Self and Coworker Monitoring
- [x] Lines of Authority
- [x] Communication
- [x] Site Security
- [ ] Vessel Safety Protocols
- [ ] Work Zones
- [x] Vehicle Safety and Driving/ Road Conditions
- [x] Equipment Safety and Operation
- [x] Proper Use of PPE
- [x] Decontamination Procedures
- [ ] Near Miss Reporting Procedures
- [x] Lifting Techniques
- [x] Slips, Trips, and Falls
- [ ] Hazard Exposure Routes
- [ ] Heat and Cold Stress
- [x] Overhead and Underfoot Hazards
- [x] Chemical Hazards
- [x] Flammable Hazards
- [x] Biological Hazards
- [x] Eating/Drinking/Smoking
- [x] Reviewed Prior Lessons Learned
- [ ] Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- [ ] Other: _____

Weather Conditions: 47° - 54° F rain, overcast

Daily Work Scope: sediment core sampling

Site-specific Hazards: vehicle, chemical

Safety Comments: none

Attendees

Printed Name	Signature
Amber Smith	Amber Smith
Jordan Cooper	Jordan Cooper
Arno Riolo	Arno Riolo
Kim Tran	Kim Tran
Audrey White	Audrey White
Sasha Norwood	Sasha Norwood
CHRISTINE SIMMONS	Christine S

End of Day Wellness Check

Amber Smith	Amber Smith
Arno Riolo	Arno Riolo
Kim Tran	Kim Tran
CHRISTINE SIMMONS	
Sasha Norwood	Sasha Norwood

Daily Safety Briefing Form

ANCHOR QEA

Date: 10/29/24
Project No: 240092-03.02 & 240092-03.06
Project Name: Blair Waterway Deepening - HT & TroGrit

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith **Health & Safety Officer:** Tim Sharer **Project Manager:** Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☒ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☒ Lines of Authority
- ☐ Communication
- ☒ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☒ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☐ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☒ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- ☐ Other: _____

Weather Conditions: 43° - 56° F partly cloudy

Daily Work Scope: sediment core sampling

Site-specific Hazards: vehicle, chemical

Safety Comments: none

Attendees

Printed Name	Signature
Amber Smith	Amber Smith
Arno Riolo	Arno Riolo
Kim Tran	
Jordan Looper	

End of Day Wellness Check

Amber Smith	Amber Smith
Sasha Worrell	
Arno Riolo	Arno Riolo
Kim Tran	

Daily Safety Briefing Form

ANCHOR QEA

Date: 10/31/24
Project No: 240092-03.02 & 240092-03.06
Project Name: Blair Waterway Deepening HTRW GRR

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith **Health & Safety Officer:** Tim Shaver **Project Manager:** Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- [x] Emergency Procedures and Evacuation Route
- [ ] Directions to Hospital
- [x] HASP Review and Location
- [ ] Safety Equipment Location
- [x] Proper Safety Equipment Use
- [ ] Employee Right-to-Know/ SDS Location
- [ ] Fire Extinguisher Location
- [ ] Eye Wash Station Location
- [ ] Buddy System
- [x] Self and Coworker Monitoring
- [ ] Lines of Authority
- [x] Communication
- [ ] Site Security
- [ ] Vessel Safety Protocols
- [ ] Work Zones
- [x] Vehicle Safety and Driving/ Road Conditions
- [ ] Equipment Safety and Operation
- [ ] Proper Use of PPE
- [ ] Decontamination Procedures
- [ ] Near Miss Reporting Procedures
- [ ] Lifting Techniques
- [ ] Slips, Trips, and Falls
- [ ] Hazard Exposure Routes
- [ ] Heat and Cold Stress
- [ ] Overhead and Underfoot Hazards
- [x] Chemical Hazards
- [ ] Flammable Hazards
- [ ] Biological Hazards
- [ ] Eating/Drinking/Smoking
- [ ] Reviewed Prior Lessons Learned
- [ ] Field Team Medical Conditions for Emergency Purposes (Confidential):
- [ ] Other:

Weather Conditions: 42°-51° cloudy, some rain

Daily Work Scope: sediment core sampling

Site-specific Hazards: vehicle, chemical

Safety Comments: none

Attendees

Printed Name	Signature
Amber Smith	
Sasha Norwood	
Kim Tran	

End of Day Wellness Check

Sasha Norwood	
Kim Tran	
Arno Rjolo	
Amber Smith	

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/1/24
Project No: — 240092-03,06 & 240092-03,02
Project Name: Blair Waterway - TruGrid HSafe Event

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith **Health & Safety Officer:** Tim Shaner **Project Manager:** Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☒ Emergency Procedures and Evacuation Route
- ☒ Directions to Hospital
- ☒ HASP Review and Location
- ☒ Safety Equipment Location
- ☒ Proper Safety Equipment Use
- ☒ Employee Right-to-Know/ SDS Location
- ☒ Fire Extinguisher Location
- ☒ Eye Wash Station Location
- ☒ Buddy System
- ☒ Self and Coworker Monitoring
- ☒ Lines of Authority
- ☒ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☒ Work Zones
- ☒ Vehicle Safety and Driving/ Road Conditions
- ☒ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☒ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☒ Hazard Exposure Routes
- ☒ Heat and Cold Stress
- ☒ Overhead and Underfoot Hazards
- ☒ Chemical Hazards
- ☒ Flammable Hazards
- ☐ Biological Hazards
- ☒ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): —
- ☐ Other: —

Weather Conditions: 47°-53° cloudy, rainy

Daily Work Scope: sediment core sampling

Site-specific Hazards: chemical, vehicle

Safety Comments: —

Attendees

Printed Name	Signature
Amber Smith	Amber Smith
Claudia Woodward	Claudia Woodward
Arno Riolo	Arno Riolo
Kim Tran	Kim Tran
Sasha Norwood	Sasha Norwood

End of Day Wellness Check

Sasha Norwood	
Kim Tran	
Claudia Woodward	
Arno Riolo	Arno Riolo

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/8/24
Project No: – 240092 – 03.06
Project Name: Blair Waterway – TruGrit

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith **Health & Safety Officer:** Claudia Woodard **Project Manager:** Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☒ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☒ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☒ Self and Coworker Monitoring
- ☒ Lines of Authority
- ☒ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): ———
- ☐ Other: ———

Weather Conditions: 44° – 57°

Daily Work Scope: sediment core samples

Site-specific Hazards: vehicle, chemical

Safety Comments: ——

Attendees

Printed Name	Signature
Amber Smith	Amber Smith
Arno Riolo	Arno Riolo
Jordan Cooper	Jordan Cooper
E. Pearson	E. Pearson
Claudia Woodard	Claudia Woodard

End of Day Wellness Check

Jordan Cooper	Jordan Cooper
Arno Riolo	Arno Riolo
Amber Smith	Amber Smith
Claudia Woodard	Claudia Woodard

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/8/11/24
Project No: 240092-03.06
Project Name: Blair Waterway Deepening

Submit a Playing It Safe Event

Person Conducting Meeting: Sasha Norwood **Health & Safety Officer:** Tim Shaller **Project Manager:** Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☒ HASP Review and Location
- ☒ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☒ Fire Extinguisher Location
- ☒ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☒ Lines of Authority
- ☐ Communication
- ☒ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☒ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☒ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☒ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☒ Flammable Hazards
- ☐ Biological Hazards
- ☒ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: Cloudy 50°F

Daily Work Scope: Core processing

Site-specific Hazards: Slips/trips/falls heavy lifting

Safety Comments: Can use AED in building

Attendees

Printed Name	Signature
Jiang Lin	
Arno Rislo	
Claudia Woodard	
Sasha Norwood	

End of Day Wellness Check

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/12/24
Project No: — 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith **Health & Safety Officer:** Claudia **Project Manager:** Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☑ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☑ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☑ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☑ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): —
- ☐ Other: —

Weather Conditions: cloudy

Daily Work Scope: sediment core sampling

Site-specific Hazards: chemical, vehicle

Safety Comments: —

Attendees

Printed Name	Signature
Aino Riello	Aino Riello
Amber Smith	Amber Smith
Claudia Woodward	Claudia Woodward
Jiang Lin	Jiang Lin

End of Day Wellness Check

Amber Smith	Amber Smith
Aino Riello	Aino Riello
Jiang Lin	Jiang Lin
Claudia Woodward	Claudia Woodward

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/13/24
Project No: 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith **Health & Safety Officer:** Claudia Woodward **Project Manager:** Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☐ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☑ Proper Use of PPE
- ☑ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☑ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☑ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- ☐ Other: _____

Weather Conditions: rainy 54° F

Daily Work Scope: sediment core sampling

Site-specific Hazards: vehicle, chemical

Safety Comments: Be mindful of wet slippery surfaces

Attendees

Printed Name	Signature
Anna Ridlo	Anna Ridlo
Jiabing Lin	
Jordan Cooper	
Claudia Woodward	

End of Day Wellness Check

Jordan Cooper	
Amber Smith	Amber Smith
Jiabing Lin	
Anna Ridlo	Anna Ridlo

Daily Safety Briefing Form

ANCHOR QEA

Date: 11/14/24
Project No: 240092-03.06
Project Name: Blair Waterway

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith
Health & Safety Officer: Amber Smith
Project Manager: Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☒ Emergency Procedures and Evacuation Route
- ☒ Directions to Hospital
- ☒ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☐ Lifting Techniques
- ☐ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: cloudy/ rainy

Daily Work Scope: sediment core sampling

Site-specific Hazards: vehicle, chemical, cold

Safety Comments: —

Attendees

Printed Name	Signature
Waylon Shellenberger	WS
Jilong Lin	
Arno Riolo	
Amber Smith	

End of Day Wellness Check

Waylon Shellenberger	WS
Arno Riolo	
Jilong Lin	
Amber Smith	

Daily Safety Briefing Form

ANCHOR QEA

Date: 3/27/25

Project No: 240092-03.04

Project Name: Blair Channel Deepening

Submit a Playing It Safe Event

Person Conducting Meeting: AR **Health & Safety Officer:** AR **Project Manager:** CS

TOPICS COVERED: *Highlighted topics are required*

- [x] Emergency Procedures and Evacuation Route
- [x] Directions to Hospital
- [x] HASP Review and Location
- [x] Safety Equipment Location
- [x] Proper Safety Equipment Use
- [ ] Employee Right-to-Know/ SDS Location
- [x] Fire Extinguisher Location
- [x] Eye Wash Station Location
- [x] Buddy System
- [ ] Self and Coworker Monitoring
- [ ] Lines of Authority
- [ ] Communication
- [ ] Site Security
- [ ] Vessel Safety Protocols
- [x] Work Zones
- [ ] Vehicle Safety and Driving/ Road Conditions
- [x] Equipment Safety and Operation
- [x] Proper Use of PPE
- [ ] Decontamination Procedures
- [ ] Near Miss Reporting Procedures
- [x] Lifting Techniques
- [x] Slips, Trips, and Falls
- [ ] Hazard Exposure Routes
- [ ] Heat and Cold Stress
- [ ] Overhead and Underfoot Hazards
- [ ] Chemical Hazards
- [ ] Flammable Hazards
- [ ] Biological Hazards
- [ ] Eating/Drinking/Smoking
- [ ] Reviewed Prior Lessons Learned
- [ ] Field Team Medical Conditions for Emergency Purposes (Confidential):
- [ ] Other:

Weather Conditions: Sunny/Cloudy ~55°F

Daily Work Scope: Core processing/ Geotech & Tru-grit

Site-specific Hazards: Power tools

Safety Comments:

Attendees

Printed Name	Signature
Claudia Woodward	
Tessa Sharpe	
Audrey White	
Aidy Ung	
Simon Dudenhoefer	
Hayley Sharken	

End of Day Wellness Check

Claudia Woodward	
Aidy Ung	
Hayley Sharken	
Simon Dudenhoefer	
Tessa Sharpe	
Audrey White	

Daily Safety Briefing Form

ANCHOR QEA

Date: 3/28/2025
Project No: 240092-03.04
Project Name: Blair Channel Deepening

Submit a Playing It Safe Event

Person Conducting Meeting: AR **Health & Safety Officer:** AR **Project Manager:** CS

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☒ Directions to Hospital
- ☒ HASP Review and Location
- ☐ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☒ Fire Extinguisher Location
- ☒ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☒ Lines of Authority
- ☐ Communication
- ☒ Site Security
- ☐ Vessel Safety Protocols
- ☒ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: Cloudy ~55°F

Daily Work Scope: Coreprocessing

Site-specific Hazards: Power tools

Safety Comments:

Attendees

Printed Name	Signature
Simon Dudenhoefer	
Claudia Woodward	
Audrey White	
Tessa Sharp	
Arno Rido	

End of Day Wellness Check

Claudia Woodward	
Audrey White	
Tessa Sharp	
Simon Dudenhoefer	
Arno Rido	

Daily Safety Briefing Form

ANCHOR QEA

Date: 3/31/25
Project No: 240092-03.04
Project Name: Blair Channel Deepening

Submit a Playing It Safe Event

Person Conducting Meeting: AR
Health & Safety Officer: AR
Project Manager: CS

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☒ Directions to Hospital
- ☒ HASP Review and Location
- ☒ Safety Equipment Location
- ☒ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☒ Fire Extinguisher Location
- ☒ Eye Wash Station Location
- ☒ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☐ Site Security
- ☐ Vessel Safety Protocols
- ☒ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☒ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- ☐ Other: _____

Weather Conditions: Cloudy ~50°F

Daily Work Scope: Core processing

Site-specific Hazards: Power tools, active parking lot.

Safety Comments:

Attendees

Printed Name	Signature
Arwo Riolo	Arwo Riolo
Claudia Woodward	Claudia Woodward
Samson Zermariam	
Jilong Lin	
Audrey White	

End of Day Wellness Check

Claudia Woodward	Claudia Woodward
Audrey White	
Jilong Lin	
Samson Zermariam	
Arwo Riolo	Arwo Riolo

Daily Safety Briefing Form

ANCHOR QEA

Date: 4/1/25
Project No: 240092-03.04
Project Name: Blair Channel Deepening

Submit a Playing It Safe Event

Person Conducting Meeting: AR
Health & Safety Officer: AR
Project Manager: CS

TOPICS COVERED: *Highlighted topics are required*

- ☐ Emergency Procedures and Evacuation Route
- ☐ Directions to Hospital
- ☒ HASP Review and Location
- ☐ Safety Equipment Location
- ☒ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☒ Fire Extinguisher Location
- ☒ Eye Wash Station Location
- ☐ Buddy System
- ☐ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☒ Communication
- ☒ Site Security
- ☐ Vessel Safety Protocols
- ☒ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☐ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- ☐ Other: _____

Weather Conditions: Cloudy ~50°f

Daily Work Scope: Core processing

Site-specific Hazards: power tools, Site traffic

Safety Comments: _____

Attendees

Printed Name	Signature
Arno Riolo	
Audrey White	
Samson Zeemariam	
Claudia Woodward	
Jilong Lin	
Jordan Cooper	
Tim Shaw	

End of Day Wellness Check

Nik Bacher	
Audrey White	
Jordan Cooper	
Jilong Lin	
Samson Zeemariam	

end of day check AR

NB

Daily Safety Briefing Form

HOR QEA

Date: 5/12/25
Project No: 240092-03.04
Project Name: Blair Channel Deepening

Submit a Playing It Safe Event

Person Conducting Meeting: James Mehta **Health & Safety Officer:** James Mehta **Project Manager:** C Sanders

TOPICS COVERED: *Highlighted topics are required*

- ☑ Emergency Procedures and Evacuation Route
- ☑ Directions to Hospital
- ☑ HASP Review and Location
- ☑ Safety Equipment Location
- ☑ Proper Safety Equipment Use
- ☑ Employee Right-to-Know/ SDS Location
- ☑ Fire Extinguisher Location
- ☑ Eye Wash Station Location
- ☑ Buddy System
- ☑ Self and Coworker Monitoring
- ☑ Lines of Authority
- ☑ Communication
- ☑ Site Security
- ☑ Vessel Safety Protocols
- ☑ Work Zones
- ☑ Vehicle Safety and Driving/ Road Conditions
- ☑ Equipment Safety and Operation
- ☑ Proper Use of PPE
- ☑ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☑ Lifting Techniques
- ☑ Slips, Trips, and Falls
- ☑ Hazard Exposure Routes
- ☑ Heat and Cold Stress
- ☑ Overhead and Underfoot Hazards
- ☑ Chemical Hazards
- ☑ Flammable Hazards
- ☑ Biological Hazards
- ☑ Eating/Drinking/Smoking
- ☑ Reviewed Prior Lessons Learned
- ☑ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: 60s mid

Daily Work Scope: Jon Exit cores

Site-specific Hazards: Slips, trips, falls

Safety Comments: Be careful of snakes
New people on site, please ask
A lot of questions

Attendees

Printed Name	Signature
James Mehta	
Joey Lane	
Tessa Sharpe	Tessa Sharpe
Kim Tran	
Arno Riolo	
W Shellenberger	

End of Day Wellness Check

Tessa Sharpe	Tessa Sharpe
W Shellenberger	
Kim Tran	
Joey Lane	
Arno Riolo	
James Mehta	

Daily Safety Briefing Form

ANCHOR QEA

Date: 08/25/25
Project No: 240092-03.06
Project Name: Tru-Grit

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith
Health & Safety Officer: Amber Smith
Project Manager: Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☑ Emergency Procedures and Evacuation Route
- ☑ Directions to Hospital
- ☑ HASP Review and Location
- ☑ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☑ Self and Coworker Monitoring
- ☐ Lines of Authority
- ☐ Communication
- ☑ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☐ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☑ Lifting Techniques
- ☑ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☑ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☐ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential): _____
- ☐ Other: _____

Weather Conditions: sunny, 60°-88°

Daily Work Scope: sampling station set up

Site-specific Hazards: —

Safety Comments: Practice proper lifting techniques.

Attendees

Printed Name	Signature
Amber Smith	Amber Smith
Evan Foley	Evan Foley

End of Day Wellness Check

Amber Smith	Amber Smith
Evan Foley	Evan Foley

Daily Safety Briefing Form

ANCHOR QEA

Date: 08/26/25
Project No: 240092-03.06
Project Name: Tru-Grit

Submit a Playing It Safe Event

Person Conducting Meeting: Amber Smith **Health & Safety Officer:** Audrey White **Project Manager:** Christine Simmons

TOPICS COVERED: *Highlighted topics are required*

- ☒ Emergency Procedures and Evacuation Route
- ☒ Directions to Hospital
- ☒ HASP Review and Location
- ☒ Safety Equipment Location
- ☐ Proper Safety Equipment Use
- ☐ Employee Right-to-Know/ SDS Location
- ☐ Fire Extinguisher Location
- ☐ Eye Wash Station Location
- ☐ Buddy System
- ☒ Self and Coworker Monitoring
- ☒ Lines of Authority
- ☐ Communication
- ☒ Site Security
- ☐ Vessel Safety Protocols
- ☐ Work Zones
- ☐ Vehicle Safety and Driving/ Road Conditions
- ☐ Equipment Safety and Operation
- ☒ Proper Use of PPE
- ☐ Decontamination Procedures
- ☐ Near Miss Reporting Procedures
- ☒ Lifting Techniques
- ☒ Slips, Trips, and Falls
- ☐ Hazard Exposure Routes
- ☒ Heat and Cold Stress
- ☐ Overhead and Underfoot Hazards
- ☒ Chemical Hazards
- ☐ Flammable Hazards
- ☐ Biological Hazards
- ☐ Eating/Drinking/Smoking
- ☐ Reviewed Prior Lessons Learned
- ☐ Field Team Medical Conditions for Emergency Purposes (Confidential):
- ☐ Other:

Weather Conditions: overcast 62°-88°

Daily Work Scope: sediment core sampling

Site-specific Hazards: chemical, cutting

Safety Comments: cut resistant gloves

Attendees

Printed Name	Signature
Amber Smith	Amber Smith
Evan Foley	Evan Foley
Jordan Cooper	
Andrew White	

End of Day Wellness Check

Amber Smith	Amber Smith
Evan Foley	Evan Foley

Appendix C-3
Collection Logs

ANCHOR QEA
Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC01
Attempt No. 4
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 718752.49
Long/Easting: 1160842 8.72

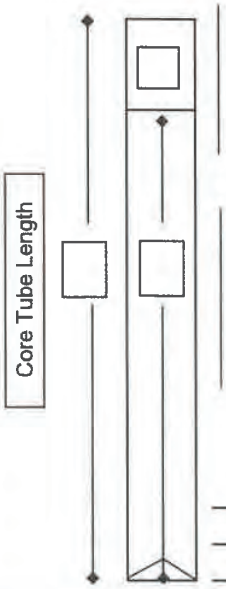
A. Water Depth
DTM Depth Sounder: ——
DTM Lead Line: 15.0

B. Water Level Measurements
Time: 1408
Height: 12.33'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-2.67

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 5.1'
Headspace Measurement: 8.7'
Recovery Measurement: 1.3'
Recovery Percentage: 25.5%
Total Length of Core To Process: 1.3'

Recovery Measurements (prior to cuts)



Drive Notes:
Hard drive, pounding on rod until refusal at 5.1'
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota
AW 11/12/25

Notes:
63.3' from target, on line between TG-SC07 and TG-SC02
Rain cloud on tablet AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

AW 11/12/25

Job: ~~Blair Waterway~~
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC01
Attempt No. 1
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712815.03 Y
Long/Easting: 1168412.55 X

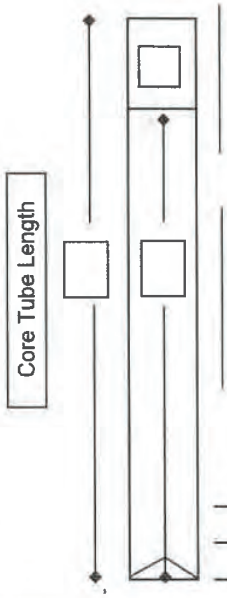
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 9.4'

B. Water Level Measurements
Time: 1316
Height: 12.87
Source: Noaa 9446484 Tac

C. Mudline Elevation
3.47

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 0.5
Headspace Measurement: 10'
Recovery Measurement: 0'
Recovery Percentage: 0%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Refusal at/near surface, rocks

AW 11/12/25

Sections To Process:
A:
B:
C:
D:

AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

AW 11/12/25

Notes:
No core to dispose of

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC01
Attempt No. 2
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

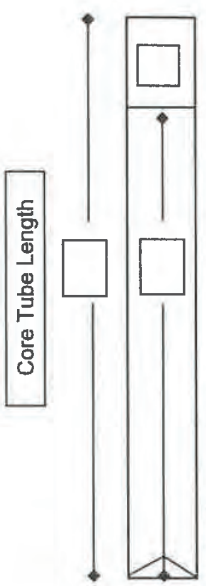
Field Collection Coordinates:
Lat/Northing: 712799.20
Long/Easting: 1168397.09

A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 12.4

B. Water Level Measurements
Time: 1325
Height: 12.84'
Source: Noaa 9446484 Tac

C. Mudline Elevation
0.44

Recovery Measurements (prior to cuts)



Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 0.5'
Headspace Measurement: 10'
Recovery Measurement: 0'
Recovery Percentage: 0%
Total Length of Core To Process: —

Drive Notes:
Refusal at/near surface, hard time finding spot in vicinity of target without riprap

AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

AW 11/12/25

Notes:
21.1' from target point
No core to dispose of

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC01
Attempt No. 3
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712818.60
Long/Easting: 1168386.85

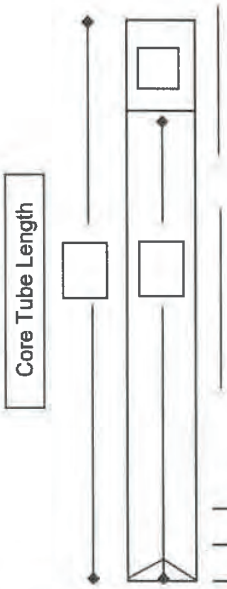
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 11.9'

B. Water Level Measurements
Time: 1340
Height: ~~12.67~~ 12.67'
Source: Noaa 9446484 Tac

C. Mudline Elevation
0.77

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 1'
Headspace Measurement: 10'
Recovery Measurement: 0'
Recovery Percentage: 0%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Very hard, refusal at 1.0'

AW 11/12/25

Sections To Process:
A:
B:
C:
D:

AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

AW 11/12/25

Notes:
No core to dispose of
21' from target location

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Harr Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC02
Attempt No. 2
Date: 11/3/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates: switch
Lat/Northing: 1168492.13
Long/Easting: 712726.57

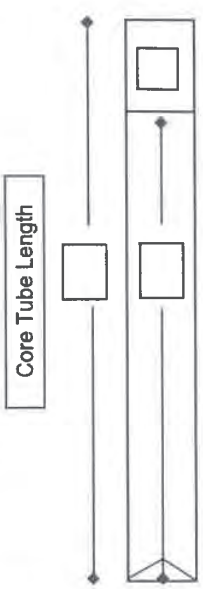
A. Water Depth
DTM Depth Sounder: ——
DTM Lead Line: 14.3'

B. Water Level Measurements
Time: 1453
Height: 8.03'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-6.27'

Core Collection Recovery Details:
Core Accepted: (Yes) No
Core Tube Length: 8'
Drive Penetration: 4'
Headspace Measurement: 5.6'
Recovery Measurement: 2.4'
Recovery Percentage: 60%
Total Length of Core To Process: 2.4'

Recovery Measurements (prior to cuts)



Drive Notes:
Refusal at 4', hard drive

AW 11/12/25

Sections To Process:
A:
B:
C:
D:

AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

AW 11/12/25

Notes:
Vibracore plug shorted out
*Best of 3 attempts

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC02
Attempt No. 1
Date: 11/5/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates: switch
Lat/Northing: 1168497.95
Long/Easting: 712719.61

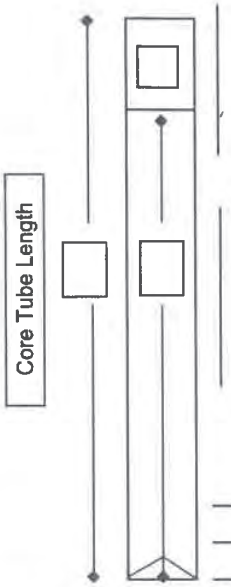
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 10.3'

B. Water Level Measurements
Time: 1432
Height: 7.84'
Source: NOAA 9446484 Tac

C. Mudline Elevation
-8.46'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 12'
Drive Penetration: 4'
Headspace Measurement: 10.4'
Recovery Measurement: 1.6'
Recovery Percentage: 40%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Refusal at 4.0'

AW 11/12/25

Sections To Process:
A:
B:
C:
D:

AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

AW 11/12/25

Notes:

AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC02
Attempt No. 3
Date: 11/6/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712723.21 N (SW)
~~Long~~/Easting: 1168498.06 E (SW)

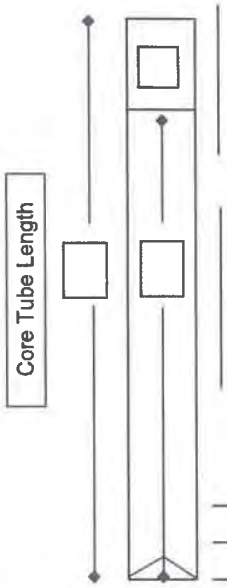
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 17.3'

B. Water Level Measurements
Time: 1050
Height: 10.60'
Source: Noaa 9446484, Tac

C. Mudline Elevation
-6.7'

Core Collection Recovery Details:
Core Accepted: Yes (No)
Core Tube Length: 8'
Drive Penetration: 3'
Headspace Measurement: 0.8'
Recovery Measurement: 1.2'
Recovery Percentage: 40%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Hard drive, refusal @ 3'
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Fine sand w/ trace MCOs in bottom
AW 11/12/25

Notes:
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit AW 11/12/25

Job: ~~Blair Waterway~~
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC03
Attempt No. 3
Date: 11/6/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712621.92 Y
Long/Easting: 1108576.22 X

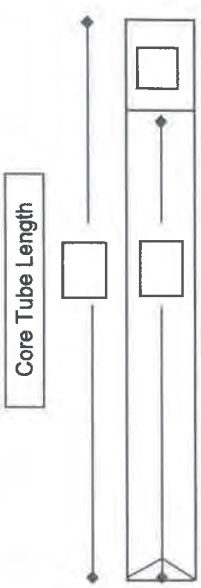
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 20.5'

B. Water Level Measurements
Time: 1303
Height: 8.41'
Source: Nona 9446484 Tac

C. Mudline Elevation
-12.09'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 8'
Drive Penetration: 8'
Headspace Measurement: 1.4'
Recovery Measurement: 6.6'
Recovery Percentage: 82.5%
Total Length of Core To Process: 6.6'

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth, full drive

AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Mud in bottom/shoe

AW 11/12/25

Notes:
*Located 24.7' from target (within 25' radius) in attempt to find softer ground) away from shore

labeled as accepted

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC03
Attempt No. 1
Date: 11/6/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712643.03 Y SN
Long/Easting: 1119393.51 X SN

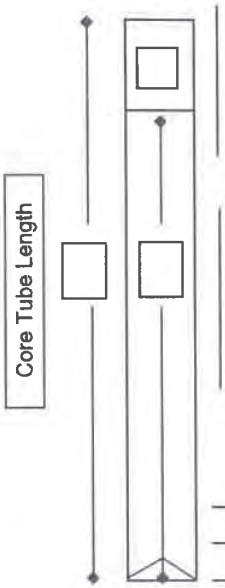
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 11.3'

B. Water Level Measurements
Time: 1135
Height: 9.94'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-1.36'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 8'
Drive Penetration: 1.7'
Headspace Measurement: 8'
Recovery Measurement: 0'
Recovery Percentage: 0%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Hard drive, refusal at 1.7'
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Hard sand (felt) at surface (not rock)
AW 11/12/25

Notes:
Lost core at end of drive but were able to retrieve it due to shallow water
No sediment to dispose of

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC03
Attempt No. 2
Date: 11/6/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712633.83 Y
Long/Easting: 1168588.21 X

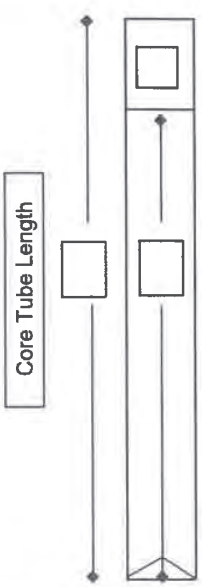
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 12.3'

B. Water Level Measurements
Time: 1223
Height: 9.1'
Source: Noaa
9446484 Tac

C. Mudline Elevation
-3.2'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 8'
Drive Penetration: 3.2'
Headspace Measurement: 0.2'
Recovery Measurement: 1.8'
Recovery Percentage: 56.25%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Very hard drive, refusal at 3.2' and lost core barrel (quickly retrieved)

AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Fine dark sand in bottom, trace silt on outside of barrel

AW 11/12/25

Notes:

AW 11/12/25

ANCHOR QEA
Tru-Grit

Sediment Core Collection Log

Job: ~~Black Waterway~~ AW 11/12/25
Job No: 240092-03.07p
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC04
Attempt No. 2
Date: 10/28/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates: → * coordinates taken separately
~~Lat/Northing~~: 1160852.63 (X) ~~Long/Easting~~: 712520.13 (Y) → 53.5' offset 38°

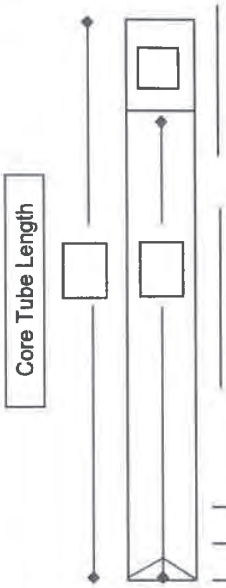
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 7.4

B. Water Level Measurements
Time: 1222
Height: 7.5'
Source: Noaa9446484

C. Mudline Elevation
+0.1'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 8'
Drive Penetration: 7.0'
Headspace Measurement: 1.1'
Recovery Measurement: 6.9'
Recovery Percentage: 98.6%
Total Length of Core To Process: 6.9'

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive once they got past the hard top
Barrel got stuck & recovery took ~1 hour

AW 11/12/25

Sections To Process:
A:
B:
C:
D:

AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Black streaks silt on outside of core barrel, clean sand w/ MCG in shoe/bottom

AW 11/12/25

Notes:
*Note that correct coordinates ~~listed~~ are 53.5' offset 38° from coordinates listed, unable to take coords from under pier boat

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC04
Attempt No. 1
Date: 10/28/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

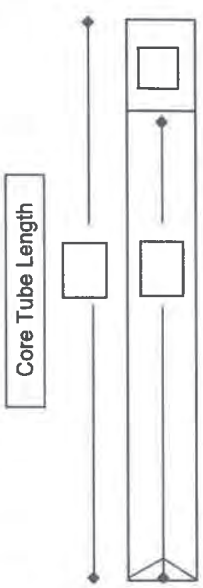
Field Collection Coordinates:
Lat/Northing: ———
Long/Easting: ———

A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 7.0'

B. Water Level Measurements
Time: 1155
Height: 6.33'
Source: Noaa 9446484

C. Mudline Elevation
-0.67

Recovery Measurements (prior to cuts)



Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 8'
Drive Penetration: 0.1'
Headspace Measurement: 7.9'
Recovery Measurement: 0'
Recovery Percentage: 0'
Total Length of Core To Process: —

Drive Notes:
No drive, very hard rock + gravel
Nothing to dispose of
~~Tried~~ Began drive 3x in same location before ending attempt

AW 11/12/25

Sections To Process:
A:
B:
C:
D:

AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Black gravel in shoe

AW 11/12/25

Notes:

AW 11/12/25

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC05
Attempt No. 2
Date: 11/12/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712461.22 +
Long/Easting: 1168779.18

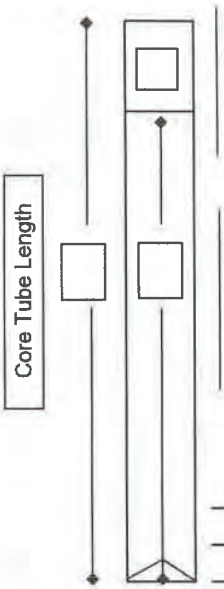
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 12.0

B. Water Level Measurements
Time: 1218
Height: 11.53
Source: Noaa 9446484 Tac

C. Mudline Elevation
~~Depth~~ -0.47

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 1.3'
Headspace Measurement: 8.7'
Recovery Measurement: 1.3
Recovery Percentage: 100%
Total Length of Core To Process: 1.3'

Recovery Measurements (prior to cuts)



Drive Notes:
Hard hard drive, refusal at 1.3'
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Soft, sandy top material, rocks in vicinity
AW 11/12/25

Notes:
~~Happy Strawberry on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC05
Attempt No. 1
Date: 11/12/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712463.03
Long/Easting: 1166878.46

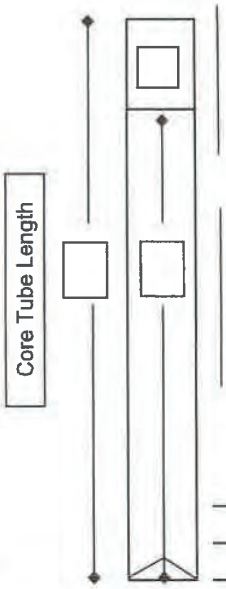
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 10.6'

B. Water Level Measurements
Time: 1210
Height: 11.22
Source: Noaa 9446484 Tac

C. Mudline Elevation
0.62

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 0'
Headspace Measurement: 10'
Recovery Measurement: 0'
Recovery Percentage: 0%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Refusal at/near surface, rocky surface

AW 11/12/25

Sections To Process:
A:
B:
C:
D:

AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

AW 11/12/25

Notes:
No core to dispose of

AW 11/12/25

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC05
Attempt No. 3
Date: 11/12/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712445.37
Long/Easting: 1168782.35

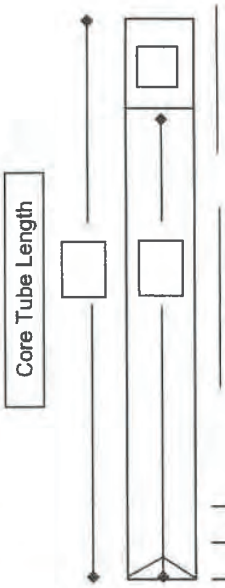
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 13.1

B. Water Level Measurements
Time: 1231
Height: 11.78'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-1.32'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 0.5'
Headspace Measurement: 10'
Recovery Measurement: 0'
Recovery Percentage: 0%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Refusal at/near surface
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota
AW 11/12/25

Notes:
17.1 ft from target
No core to dispose of

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Grit
Job No: 240092-03.06
Field Staff: Amber Smith, Evan Foley
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC05RE
Attempt No. 3
Date: 03/31/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712454.66
~~Long~~/Easting: 1168779.01

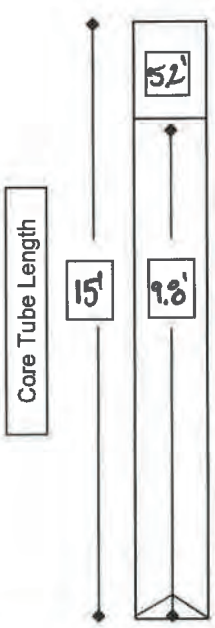
A. Water Depth
DTM Depth Sounder:
DTM Lead Line: ~~6.52'~~ as 3/31/25

B. Water Level Measurements
Time: 1007
Height: 6.34'
Source: ~~NOAA station~~ #9446484

C. Mudline Elevation
-0.14

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15'
Drive Penetration: 14'
Headspace Measurement: 5.2'
Recovery Measurement: 9.8' as 3/31/25
Recovery Percentage: 70%
Total Length of Core To Process: 9.4'

Recovery Measurements (prior to cuts)



Drive Notes: 0.7' free fall
light vibration, easy penetration
moderate vibration @ 2'
easy, fast penetration @ 5'
slowing at 7'.
full vibration @ 8.5', slow drive.
refusal @ 14'
as 3/31/25

Sections To Process:
A: 0'-4'
B: 4'-8'
C: 8'-9.4'
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Section A top: grey silt
B top: silty sand
C top: ~~silty sand~~ as 3/31/25 sandy silt
sandy silt in core catcher
as 3/31/25

Notes:
Base adjusted to position 1. to account for slope.
Sending core catcher to provide additional volume.
as 3/31/25

ANCHOR QEA

Sediment Core Collection Log

Job: ~~Blair Channel Deepening~~ Tru-Grit
Job No: 240092-03.04
Field Staff: ~~Amber S,~~ Nik B
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SCO5RE
Attempt No. 1
Date: 03/28/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ south, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712467.40
~~Long~~/Easting: 1168770.61

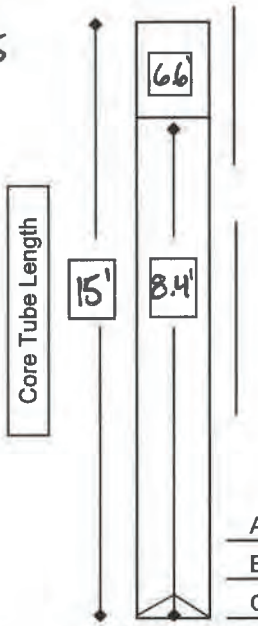
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 60.6' ✓

B. Water Level Measurements
Time: 1340
Height: 7.09'
Source: ~~NOAA station~~ #9446~~[illegible]~~484 as 3/28/25

C. Mudline Elevation
-0.49'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 15'
Drive Penetration: 11.7'
Headspace Measurement: 6.6'
Recovery Measurement: 8.4'
Recovery Percentage: ~~[illegible]~~ as 3/28/25 72%
Total Length of Core To Process: 8

Recovery Measurements (prior to cuts)



Drive Notes: 0.5' Free Fall
low vibration, slow penetration
moderate vibration @ 2.3',
slow penetration
increase vibration @ 7.5'
hard drive
Full vibration
refusal @ 11.7

~~AA 3/28/25~~

Sections To Process:
A: 0'-4'
B: 4-8'
C: —
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Section top A: grey silt
B: sand
sand in core catcher

AA 03/28/25

Notes:
Base adjusted to positon 2, then to position 1.
Core collected using position 1. Sending core catcher.

AA 3/28/25

ANCHOR QEA

Sediment Core Collection Log

Job: ~~Blair Channel Deepening~~ Tru-Grit
Job No: 240092-03.0$6
Field Staff: Amber Smith, Evan Foley
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC05RE
Attempt No. 2
Date: 03/31/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712468.73
~~Long~~/Easting: 1168779.00

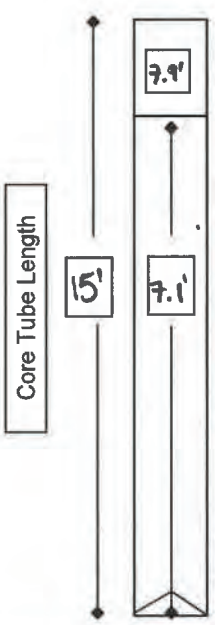
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 7.7'

B. Water Level Measurements
Time: 0920
Height: 9.1'
Source: NOAA Station #9446484

C. Mudline Elevation
-1.4'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 15'
Drive Penetration: 11.1'
Headspace Measurement: 7.9'
Recovery Measurement: 7.1'
Recovery Percentage: 64%
Total Length of Core To Process: 6.7

Recovery Measurements (prior to cuts)



Drive Notes: 0.7' free fall
light vibration, easy peretration
2.5' moderate vibration, easy
penetration. Some resistance at 4.5'
8' Full vibration, slow penetration
refusal @ 11.1

AA 3/31/25

Sections To Process:
A: 0'-4'
B: 4-6.7
C: —
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

wire sticking out of core catcher, thin.

Section top A: grey silt
B: sand
core catcher largly empty, some sand observed

AA 3/31/25

Notes:
Base adjusted to account for slope. Position 1

AA 3/31/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SCOLe
Attempt No. 2
Date: 11/6/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712371.62 4
Long/Easting: 1160845.29 X

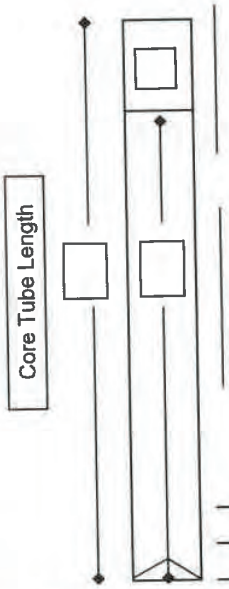
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 19.1'

B. Water Level Measurements
Time: 1413
Height: 7.86'
Source: Noaa 9446484 Tac

C. Mudline Elevation
~11.24'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 8'
Drive Penetration: 8'
Headspace Measurement: 0.7'
Recovery Measurement: 7.3'
Recovery Percentage: 91.25%
Total Length of Core To Process: 7.3'

Recovery Measurements (prior to cuts)



Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Drive Notes:
Smooth drive
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Sticky silt on outside of core barrel, light tan mud in shoe
AW 11/12/25

Notes:
22' from target to avoid underwater metal debris
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit AW 11/12/25

Job: ~~Blair Waterway~~
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC06
Attempt No. 1
Date: 11/6/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712365.83 Y
Long/Easting: 1168878.06 X

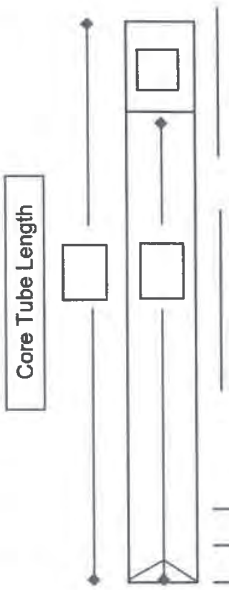
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 12.2'

B. Water Level Measurements
Time: 1339
Height: 8.03'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-4.17'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 8'
Drive Penetration: 8'
Headspace Measurement: 6.2'
Recovery Measurement: 1.8'
Recovery Percentage: 22.5%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Slow, smooth drive
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Firm sediment surface on top (felt)
AW 11/12/25

Notes:
Old dock (?) structure noticed below drive location (underwater) after core was collected, Next attempt will avoid it

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC07
Attempt No. 3
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712767.11
Long/Easting: 1168359.21

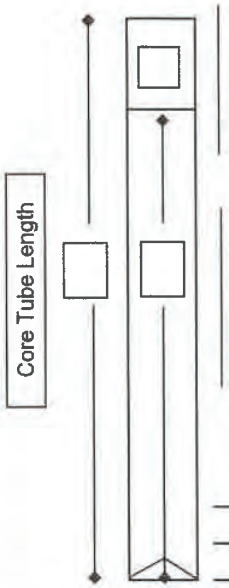
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 31.8'

B. Water Level Measurements
Time: 1244
Height: 12.84'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-18.96'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 6.8'
Headspace Measurement: [redacted] 3.7'
Recovery Measurement: 6.3'
Recovery Percentage: 92.6%
Total Length of Core To Process: 6.3'

Recovery Measurements (prior to cuts)



Drive Notes:
Hard drive, refusal at 6.8'
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel, clean sand w/ MCGS in bottom
AW 11/12/25

Notes:
No drawing on label AW 11/12/25
AW 11/12/25

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC07
Attempt No. 1
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712778.15
Long/Easting: 1168370.25

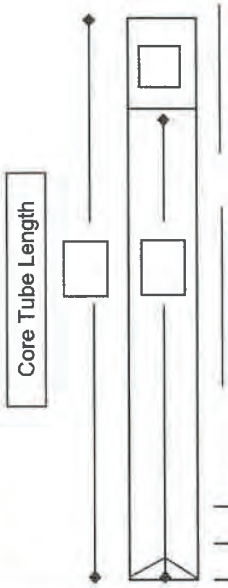
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 22.9'

B. Water Level Measurements
Time: 1202
Height: 12.44
Source: Noaa 9447648 Tac

C. Mudline Elevation
-10.46

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 10'
Headspace Measurement: 6'
Recovery Measurement: 4'
Recovery Percentage: 40%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Hard hard drive, rocks in vicinity
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Gritty material in bottom, top feels hard/dense
AW 11/12/25

Notes:
~~Warried star on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC07
Attempt No. 2
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712781.54 Y
Long/Easting: 1168361.14 X

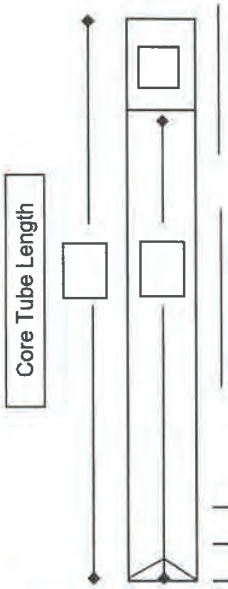
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 25.8'

B. Water Level Measurements
Time: 1225
Height: 12.77'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-13.03

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 5'
Headspace Measurement: 0'
Recovery Measurement: 4'
Recovery Percentage: 80%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Hard drive, refusal at 5'
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel, top of core felt very soft
Rocks in vicinity but core was advanced on soft surface
AW 11/12/25

Notes:
Slightly outside 10' circle, trying to find spot with softer surface
~~Robot on label~~ AW 11/12/25

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: Blair Waterway AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC08
Attempt No. 1
Date: 11/13/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712691.57
Long/Easting: 1168463.08

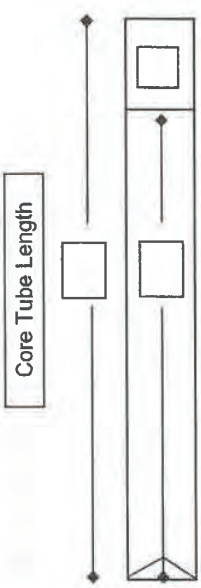
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 31.1'

B. Water Level Measurements
Time: 910
Height: 5.8'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-25.3

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: ~~8~~ 7.9'
Headspace Measurement: 3.6'
Recovery Measurement: 6.4'
Recovery Percentage: 81%
Total Length of Core To Process: 6.4'

Recovery Measurements (prior to cuts)



Drive Notes:
Refusal at ~8 ft, smooth/straight drive until refusal
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on barrel, clean sand w/ MGGs in bottom
AW 11/12/25

Notes:
~~Sleepy bear on tabel~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Job: ~~Blair Waterway~~ Tru-Grit AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC09
Attempt No. 1
Date: 11/12/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712596.74 Y
Long/Easting: 1168550.16 X

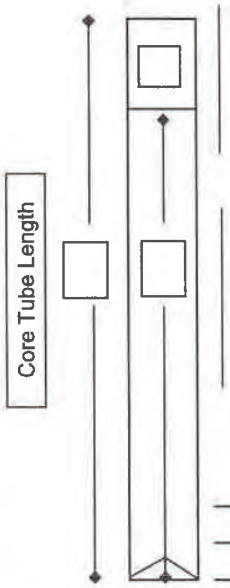
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: ~~37~~ 34.7'

B. Water Level Measurements
Time: 1044
Height: 8.27'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-26.43

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 7.9'
Headspace Measurement: 2.9'
Recovery Measurement: 7.1'
Recovery Percentage: 88.75%
Total Length of Core To Process: 7.1'

Recovery Measurements (prior to cuts)



Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Drive Notes:
smooth drive until refusal at 7.9'
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel, clean sand w/ MCGs in bottom
AW 11/12/25

Notes:
~~Lightning cloud on tabet~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

AB 3/27/25

Sediment Core Collection Log

Job: ~~Pstat~~ Tru-Grit
Job No: 240092-03.06
Field Staff: Amber S, Jilong L, Nik B
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SCORE
Attempt No. 1
Date: 03/27/2025
Logged By: Amber Smith
Horizontal Datum: ~~NAD83 WA State Plane North, feet~~ WGS84

Field Collection Coordinates:
Lat/~~Northing~~: 47.27176747
Long/~~Easting~~: -122.40092182

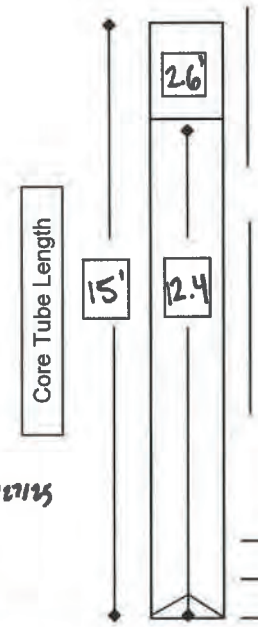
A. Water Depth
DTM Depth Sounder: 32.4' ✓
DTM Lead Line: 33.0'

B. Water Level Measurements
Time: 0937
Height: 5.87
Source: NOAA Station #9446484

C. Mudline Elevation
-26.53

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15'
Drive Penetration: 14.0'
Headspace Measurement: 2.6'
Recovery Measurement: 12.4'
Recovery Percentage: 89%
Total Length of Core To Process: 12'

Recovery Measurements (prior to cuts)



Drive Notes: 3.0' Free Fall
light vibration, easy drive
6' moderate vibration, easy drive
7' moderate vibration, fast drive
some slowing around 8.5', ~~foot~~ AB 3/27/25
refusal @ 12.4'

AB 3/27/25

Sections To Process:
A: 0'-4'
B: 4-8'
C: 8-12'
D: —

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Section cut A grey silt
B sand with grey silt clast
C olive grey silt with wood debris
all descriptions taken from top of section shoe has olive grey silt.

3/27/25 AB

Notes:
Adjusted base to account for slope.

3/27/25 AB

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC10
Attempt No. 3
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712514.63 Y
Long/Easting: 1167646.82 X

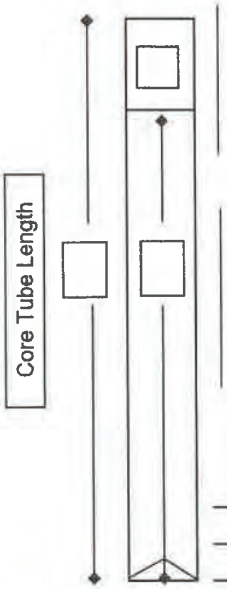
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 29.7'

B. Water Level Measurements
Time: 1527
Height: 10.43'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-19.27

Core Collection Recovery Details:
Core Accepted (Yes) / No
Core Tube Length: 10'
Drive Penetration: 7.2'
Headspace Measurement: 4.5'
Recovery Measurement: 5.5'
Recovery Percentage: 76.4%
Total Length of Core To Process: 5.5'

Recovery Measurements (prior to cuts)



Drive Notes:
smooth drive
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

silt on barrel. Silty sand in bottom of core
AW 11/12/25

Notes:
~~sleepy head on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC10
Attempt No. 1
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712509.05 Y
Long/Easting: 1168651.61 X

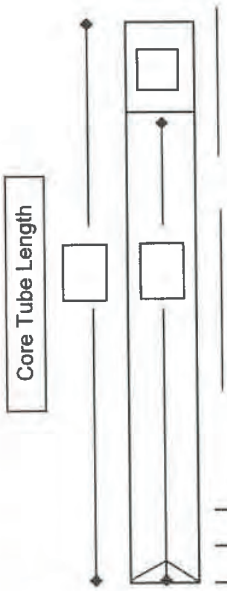
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 29.1'

B. Water Level Measurements
Time: 1448
Height: 11.43'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-17.67'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 9'
Headspace Measurement: 6.0'
Recovery Measurement: 4.0'
Recovery Percentage: ~~44.4%~~ 44.4%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel
AW 11/12/25

Notes:
AW 11/12/25

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blaine Waterfront~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC10
Attempt No. 2
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712512.21 Y
Long/Easting: 1168648.48 X

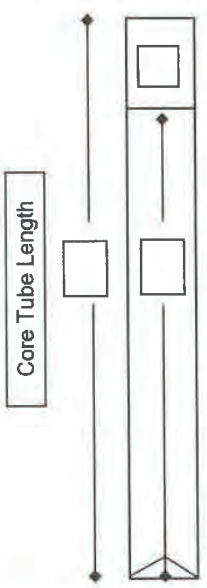
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 29.8'

B. Water Level Measurements
Time: 1510
Height: 10.8'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-19.0'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 9.5'
Headspace Measurement: 4.0'
Recovery Measurement: 6.0'
Recovery Percentage: 63.2%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside, appears to be silty sand on bottom
AW 11/12/25

Notes:
~~Weird cap on tube~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Grit
Job No: 240092-03.06
Field Staff: Amber S, Nik B, Jilong L
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SCIORE
Attempt No. 4
Date: 03/27/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712504.21
~~Long~~/Easting: 1168649.95

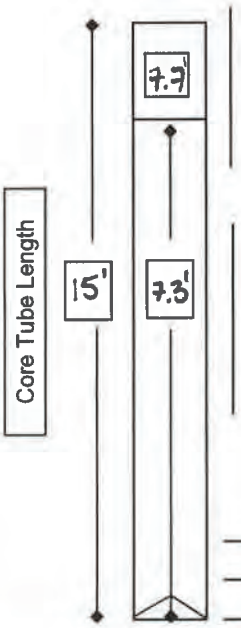
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 26.4' ✓

B. Water Level Measurements
Time: 1237
Height: 7.12'
Source: NOAA Station #9446484

C. Mudline Elevation
−19.28'

Core Collection Recovery Details:
Core Accepted: (Yes) / ~~No~~
Core Tube Length: 15'
Drive Penetration: 14'
Headspace Measurement: 7.7'
Recovery Measurement: 7.3'
Recovery Percentage: 52%
Total Length of Core To Process: 6.9'

Recovery Measurements (prior to cuts)



Drive Notes:
light vibration ~~until~~
moderate vibration, notchy drive →
~~Full vibration~~ easier penetration @ 5'
full vibration @ end of core
refusal @ 14'
3/27/25 AS
AS 3/27/25

Sections To Process:
A: 0'-4'
B: 4-6.9'
C: —
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Section A: grey silt
B: sand w/ some silt
~~C~~ AS 3/27/25
shoe: sand, wood fragments, some clast
AS 3/27/2025

Notes:
sending catcher with additional material.
AS 3/27/2025

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Grit
Job No: 240092-03.06
Field Staff: Amber S, Jilong L, Nick B
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC10RE
Attempt No. 1
Date: 03/27/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates: state plane
~~Lat/Northing:~~ Y: 712509.62
~~Long/Easting:~~ X: 1168650.81
AS 3/27/25 3/27/25

A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 22.8' ✓ at 3/27/25

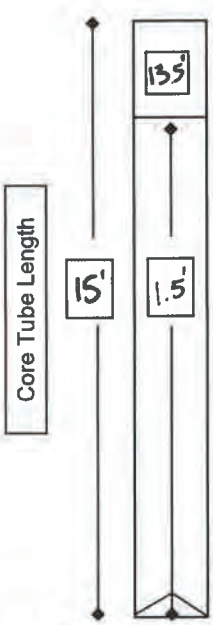
B. Water Level Measurements
Time: ~~5.29'~~ 1044
Height: ~~10.42~~ 5.29'
Source: NOAA station #9446484

C. Mudline Elevation
— 17.51

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 15'
Drive Penetration: 1.5
Headspace Measurement: not measured
Recovery Measurement: 1.5
Recovery Percentage:
Total Length of Core To Process: —
AS 3/27/25

Drive Notes: @ 1.5' free Fall
light vibration
moderate vibration
full vibration
refusal @ 1.5'
AS 3/27/2025

Recovery Measurements (prior to cuts)



Sections To Process:
A: —
B: —
C: —
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

1.5' recovery verified by pinging core barrel and listening for change in tone. Cleaning out barrel to reuse for attempt 2. Material in barrel is pea gravel sized.
AS 3/27/25

Notes:
Base adjusted position 4 to account for slope.
AS 3/27/25

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Grit
Job No: 240092-03.06
Field Staff: Amber S, Jilong L, Nik B
Contractor: MSJ
Vertical Datum: MLLW

Station ID: TG-SC10 RE
Attempt No. 2
Date: 03/27/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712505.17
~~Long~~/Easting: 1168641.23

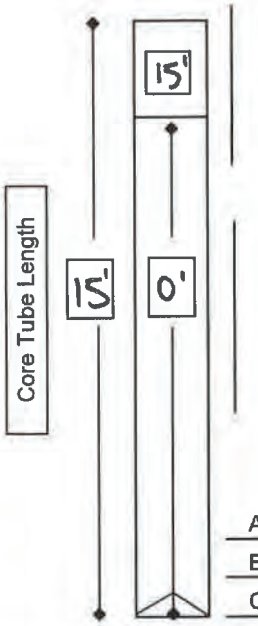
A. Water Depth
DTM Depth Sounder: –
DTM Lead Line: 24.3' ✓

B. Water Level Measurements
Time: 1109
Height: 5.36'
Source: NOAA Station #9446484

C. Mudline Elevation
– 18.94'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 15
Drive Penetration: 0.5'
Headspace Measurement: 15'
Recovery Measurement: 0'
Recovery Percentage: 0%
Total Length of Core To Process: –

Recovery Measurements (prior to cuts)



Drive Notes: 0.5' free fall
light ~~penetration~~ at 3/27/25
vibration
moderate vibration
full vibration
refusal @ 0.5'
at 3/27/25

Sections To Process:
A: –
B: –
C: –
D: –

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

no material in core barrel, reuse for attempt 3.
at 3/27/25

Notes:
Base adjusted to position 3 to account for slope
Flapper valve: not ~~engaged~~ triggered.
at 3/27/25

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Grit
Job No: 240092-03.06
Field Staff: ~~Amber S.~~, Nik B., Vilong L
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC10 RE
Attempt No. 3
Date: 03/27/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712508.38
~~Long~~/Easting: 1168635.14

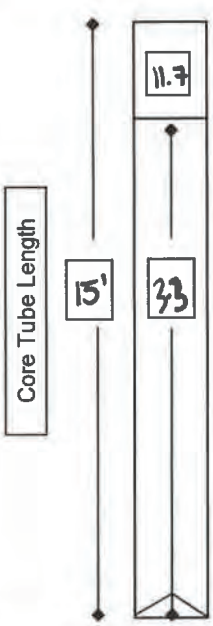
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 28.4'

B. Water Level Measurements
Time: 11:27
Height: 5.51'
Source: NOAA Station #9446484

C. Mudline Elevation
-22.89'

Core Collection Recovery Details:
Core Accepted: ~~Yes~~ / (No) OA 3/27/25
Core Tube Length: 15'
Drive Penetration: 5.3'
Headspace Measurement: 11.7'
Recovery Measurement: 3.3'
Recovery Percentage: 62%
Total Length of Core To Process: 2.9'

Recovery Measurements (prior to cuts)



Drive Notes: light vibration
moderate vibration @ 3'
full vibration
refusal @ 5.3'
OA 3/27/25

Sections To Process:
A: 0 - 2.9'
B: —
C: —
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Black sand, grit in bottom of interval A.
OA 3/27/25

Notes:
Sending core catcher with additional sample volume beyond 2.9'
OA 3/27/25

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC11
Attempt No. 1
Date: 11/6/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712411.84 Y
Long/Easting: 1168739.86 X

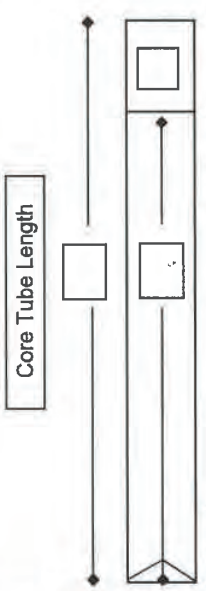
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 26.1'

B. Water Level Measurements
Time: 1524
Height: 7.96'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-18.14'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 8'
Drive Penetration: 6'
Headspace Measurement: 3.2'
Recovery Measurement: 4.8'
Recovery Percentage: 80%
Total Length of Core To Process: 4.8'

Recovery Measurements (prior to cuts)



Drive Notes:
smooth drive until refusal at 6'

AW 11/12/25

Sections To Process:
A:
B:
C:
D:

AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Dark, very soft silt on top, sticky lighter grey silt on outside of barrel

AW 11/12/25

Notes:

AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Grit
Job No: 240092-03.06
Field Staff: Amber S, Nik B, Jilong L
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC11RE
Attempt No. 1
Date: 03/27/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~, feet South

Field Collection Coordinates:
~~Lat~~/Northing: 712425.22
~~Long~~/Easting: 1168728.15

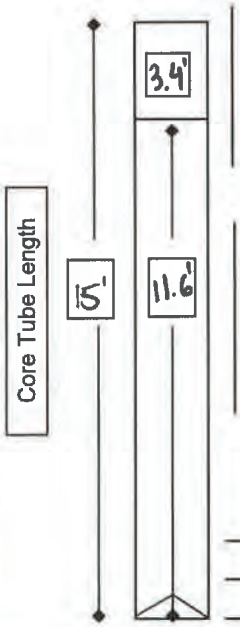
A. Water Depth
DTM Depth Sounder: 26.3'
DTM Lead Line: 26.0' ✓

B. Water Level Measurements
Time: 1327 3/27/25
Height: ~~13.30~~ as 8.35'
Source: NOAA station #9446484

C. Mudline Elevation
−17.65'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15'
Drive Penetration: 14'
Headspace Measurement: 3.4'
Recovery Measurement: 11.6'
Recovery Percentage: 83 %.
Total Length of Core To Process: 11.3'

Recovery Measurements (prior to cuts)



Drive Notes:
light vibration
2.5' moderate vibration, slow penetration
Full vibration at end
refusal @ 14'

as 3/27/25

Sections To Process:
A: 0-4'
B: 4-8'
C: 8-11.3'
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

section top
A grey silt
B black silty sand ← gap @ 4' due to removed 3" rock.
C sand

as

Notes:
Base adjusted to position 4 to account for slope.
core catcher empty

as 3/27/25

ANCHOR QEA

Sediment Core Collection Log

Page 1 of 1

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC12
Attempt No. 1
Date: 11/6/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
~~Lat/Northing:~~ 1168829.162 X (Long)
~~Long/Easting:~~ 712329.32 Y (Lat)

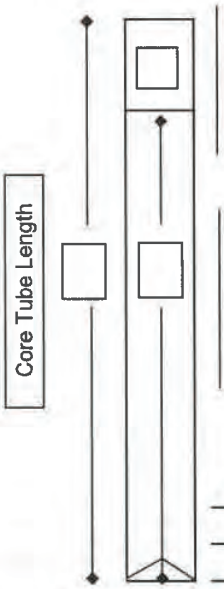
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 28.1'

B. Water Level Measurements
Time: 1442
Height: 7.77'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-20.33'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 8'
Drive Penetration: 5'
Headspace Measurement: 3'
Recovery Measurement: 5'
Recovery Percentage: 100%
Total Length of Core To Process: 5'

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive until refusal at 5'
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of core barrel
AW 11/12/25

Notes:
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Page 1 of 1

Job: ~~Blair Channel Deepening~~ Tru-Grit
Job No: 240092-03.06
Field Staff: Amber S, Nik B
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC12RE
Attempt No. 1
Date: 03/28/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712339.01
~~Long~~/Easting: 1168828.17

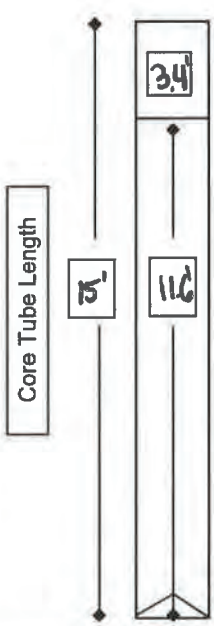
A. Water Depth
DTM Depth Sounder: 25.2'
DTM Lead Line: 25.0' ✓

B. Water Level Measurements
Time: 0915
Height: 6.52'
Source: NOAA station #9446484

C. Mudline Elevation
-18.48'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15'
Drive Penetration: 12.4'
Headspace Measurement: 3.4'
Recovery Measurement: 11.6
Recovery Percentage: ~~93~~ 94% as 3/28/25
Total Length of Core To Process: 11.2'

Recovery Measurements (prior to cuts)



Drive Notes:
1.5' free fall
light vibration, slow penetration
moderate vibration @ 3', slow penetration → slightly faster @ 5'
full vibration @ 7'
slow penetration
refusal @ 12.4'
as 3/28/25

Sections To Process:
A: 0'-4'
B: 4-8'
C: 8 - ~~12~~ 11.2' as 3/28/25
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

section top A: silt
B: sand
C: grey silt dense
sand in core catcher

as 3/28/25

Notes:
sending core catcher with additional material.

as 3/28/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC13
Attempt No. 2
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712730.07
Long/Easting: 1168317.82 X

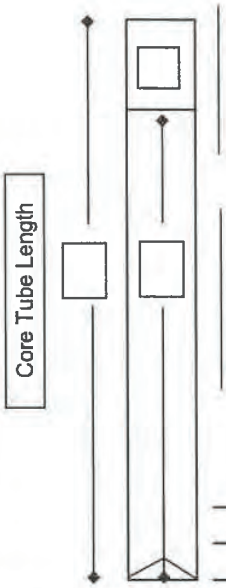
A. Water Depth
DTM Depth Sounder: ——
DTM Lead Line: 49.5'

B. Water Level Measurements
Time: 1105
Height: ~~Guess~~ 11.33
Source: Noaa 9446484 Tac

C. Mudline Elevation
-38.17'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 7.8'
Headspace Measurement: 0.1'
Recovery Measurement: 3.9'
Recovery Percentage: 50%
Total Length of Core To Process: 3.9'

Recovery Measurements (prior to cuts)



Drive Notes:
Hard refusal at 7.8
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

sticky silt on outside
AW 11/12/25

Notes:
~~Sad cloud on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC13
Attempt No. 1
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712730.01 Y
Long/Easting: 1160335.35 X

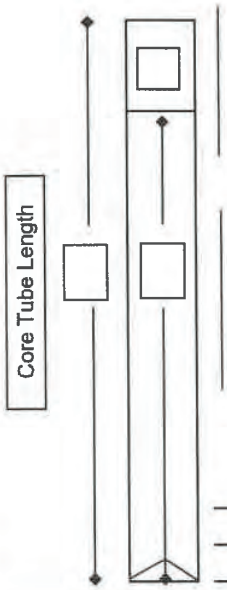
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 43.1'

B. Water Level Measurements
Time: 1036
Height: 10.07'
Source: Noaa
9446481 Tac

C. Mudline Elevation
-33.03

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 10'
Headspace Measurement: 6.2'
Recovery Measurement: 3.8'
Recovery Percentage: 38%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Hard, rocks on top
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel
AW 11/12/25

Notes:
~~Parting cut on tube~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Job: ~~Blair Waterway~~ Tru-Grit AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC13
Attempt No. 3
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712727.26 Y
Long/Easting: 1168332.41 X

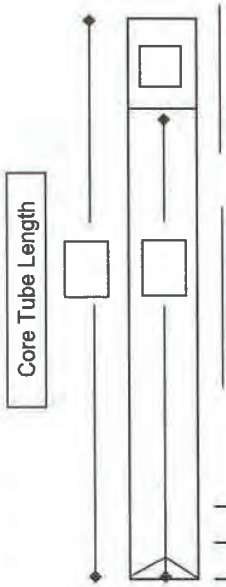
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 46.5'

B. Water Level Measurements
Time: 1126
Height: 11.6'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-34.84

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 3.6'
Headspace Measurement: 7.4'
Recovery Measurement: 2.6'
Recovery Percentage: 72.2%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Hard refusal at 3.6'
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside, hard top
AW 11/12/25

Notes:
~~Stick figure on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blaine Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC14
Attempt No. 1
Date: 11/13/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712643.01
Long/Easting: 1168418.29

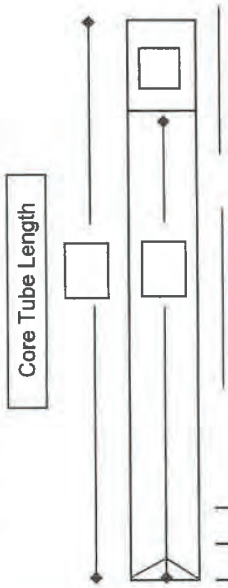
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 34.5'

B. Water Level Measurements
Time: 829
Height: 5.54'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-28.96

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 8.0'
Headspace Measurement: 3.9'
Recovery Measurement: 6.1'
Recovery Percentage: 76.25
Total Length of Core To Process: 6.1'

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive, refusal ~8'
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of core barrel, silty sand in core bottom
AW 11/12/25

Notes:
~~Moustache cat on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blaine Waterfront~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC15
Attempt No. 2
Date: 11/12/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712550.13
Long/Easting: 1168507.69

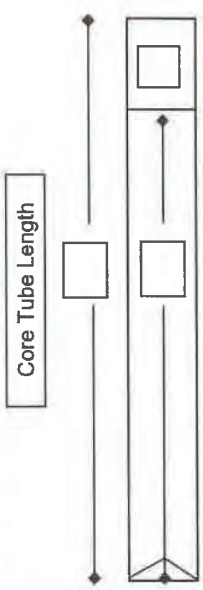
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 39.7'

B. Water Level Measurements
Time: 1018
Height: 7.6'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-32.1

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: ~~8.0'~~ 8.0'
Headspace Measurement: 3'
Recovery Measurement: 7'
Recovery Percentage: ~~80%~~ 87.5%
Total Length of Core To Process: 7.0'

Recovery Measurements (prior to cuts)



Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Drive Notes:
Hard spot at ~3.5'
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on barrel, clean sand w/ MCFS in bottom, very soft top
AW 11/12/25

Notes:
~~Excited~~ sheep on label AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC15
Attempt No. 1
Date: 11/12/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712546.55
Long/Easting: 1168512.01

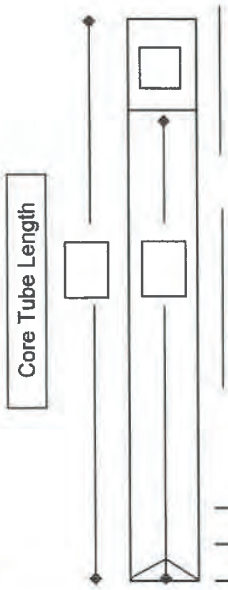
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 39.1' | 39.9'

B. Water Level Measurements
Time: 958 | 1012
Height: 6.52' | 7.16
Source: NOAA 9446484 Tac

C. Mudline Elevation
-32.58 | -32.74

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 7.4'
Headspace Measurement: 0'
Recovery Measurement: 4'
Recovery Percentage: 54%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Refusal at 7.4'
AW 11/12/25

Sections To Process:
A: ~~AW 11/12/25~~
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel
AW 11/12/25

Notes:
~~Angry cat on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Job: TRU-Grit
Job No: 240092.03.06
Field Staff: Amber S, Nik B, Jilong L
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC15 RE
Attempt No. 2
Date: 03/27/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712549.54
~~Long~~/Easting: 1168500.83

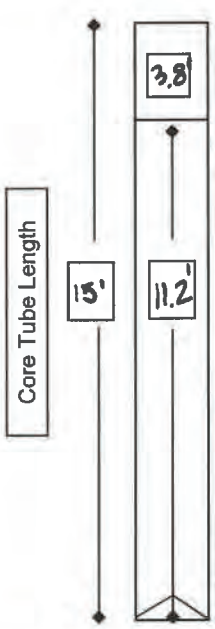
A. Water Depth
DTM Depth Sounder: 43.6' ✓
DTM Lead Line: 44.8'

B. Water Level Measurements
Time: 1527
Height: 11.13'
Source: NOAA station #9446484

C. Mudline Elevation
−32.47'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15'
Drive Penetration: 12.5'
Headspace Measurement: 3.8'
Recovery Measurement: [redacted] as 3/27/25 11.2'
Recovery Percentage: 90%
Total Length of Core To Process: 10.9'

Recovery Measurements (prior to cuts)



Sections To Process:
A: 0'-4'
B: 4'-8'
C: 8'-10.9'
D: —

Drive Notes: 1.5' free fall
light vibration, easy penetration
8' moderate vibration adjust to
full vibration, slow penetration
till refusal @ 12.5'

as 3/27/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

section top
A: grey silt
B: grey sand
C: olive grey silty sand w/ shell fragments

as 3/27/25

Notes:
Base still adjusted to position 3. Sending core catcher for additional volume.

as 3/27/25

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Grit
Job No: 240092-03.06
Field Staff: Amber S, Jiang L, Nik B
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC15RE
Attempt No. 1
Date: 03/27/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712550.48
~~Long~~/Easting: 1168509.47

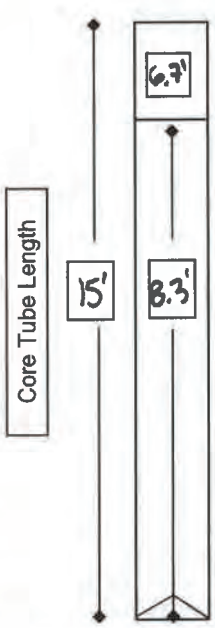
A. Water Depth
DTM Depth Sounder: 41.7'
DTM Lead Line: 42.0' ✓

B. Water Level Measurements
Time: 1450
Height: 10.64'
Source: NOAA station #9446484

C. Mudline Elevation
−31.36'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 15'
Drive Penetration: 10.1'
Headspace Measurement: 6.7'
Recovery Measurement: 8.3'
Recovery Percentage: 82%
Total Length of Core To Process: 7.9'

Recovery Measurements (prior to cuts)



Sections To Process:
A: 0-4'
B: 4-[redacted] 7.9'
C: —
D: —
AD 3/27/25

Drive Notes:
light to moderate vibration, steady penetration
refusal @ 10.1'
AD 3/27/25

Core Field Observations and Description:
AD 3/27/25
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Section top: B[redacted]: sand, some shell
A[redacted]: Silt grey
3/27/25 AD

Notes:
AD 3/27/25
Base adjusted to positon 1, then ~~then~~ 2, then 3 until balanced. Fell over at position 3, attempt collected using position 3. Sending core catcher with material.
3/27/25

ANCHOR QEA

Tru-Grit

Sediment Core Collection Log

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC16
Attempt No. 1
Date: 11/13/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712458.18 Y
Long/Easting: 1168611.80 X

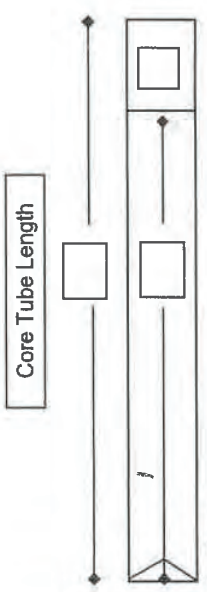
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 42.1' | 43.8

B. Water Level Measurements
Time: 1056 | 1110
Height: 8.97' | 9.4'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-33.13 | -34.4

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 10.5'
Headspace Measurement: 4.2'
Recovery Measurement: 5.8'
Recovery Percentage: 89.2%
Total Length of Core To Process: 5.8'

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive until refusal at 10.5'
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

silt on outside of core barrel, silty sand at bottom
inside out shoe ~~EDE~~ fingers again (high-pressure extraction?)
but core is intact
soft (silt?) top
AW 11/12/25

Notes:
~~House on tube~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Page 1 of 1

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC17
Attempt No. 1
Date: 11/13/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712380.55 Y
Long/Easting: 1168696.21 X

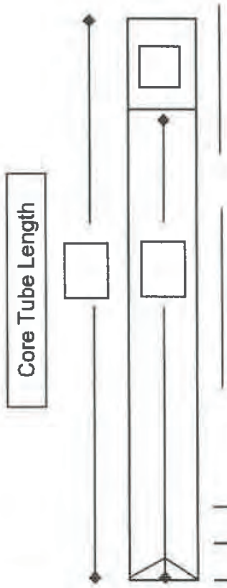
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 49.0'

B. Water Level Measurements
Time: 1305
Height: 13.0'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-36.0

Core Collection Recovery Details:
Core Accepted: (Yes) No
Core Tube Length: 10'
Drive Penetration: 8'
Headspace Measurement: 3.1'
Recovery Measurement: 6.9'
Recovery Percentage: 86.25
Total Length of Core To Process: 6.9'

Recovery Measurements (prior to cuts)



Sections To Process:
A:
B:
C:
D: AW 11/12/25

Drive Notes:
Smooth drive until refusal at 8'
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of core barrel, sand in bottom, top looks like fine sand
AW 11/12/25

Notes:
~~Sunglasses sat on table~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Page 2 of 2

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.01
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC18
Attempt No. 2
Date: 10/31/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
~~Lat/Northing~~: 1160785.78 (X)
~~Long/Easting~~: 712283.28 (Y)

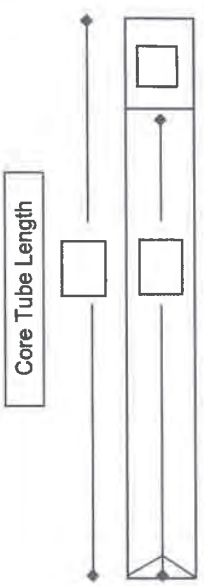
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 43.6'

B. Water Level Measurements
Time: 1342
Height: 7.96
Source: Noaa 9446484

C. Mudline Elevation
-35.64'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15'
Drive Penetration: 10.9'
Headspace Measurement: 4.9'
Recovery Measurement: 10.1'
Recovery Percentage: 92.7%
Total Length of Core To Process: 10.1'

Recovery Measurements (prior to cuts)



Drive Notes:
Refusal @ 10.9', hand drive

AW 11/12/25

Sections To Process:
A:
B:
C:
D:

AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel, clean sand w/ MEGs in bottom / shoe

AW 11/12/25

Notes:

AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Page 1 of 1

Job: ~~Blair Waterway~~ Tru-Grit AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC18
Attempt No. 1
Date: 10/29/24
Logged By: ACS
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
~~Lat/Northing~~: 1168788.44 (X)
~~Long/Easting~~: 712285.90 (Y)

A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 41.7' | 44.4'
start end

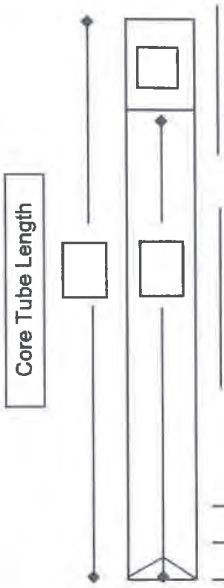
B. Water Level Measurements

Time:	1312	1353
Height:	7.84	9.21
Source:	NOAA	NOAA
Station	9446484	
	start	end

C. Mudline Elevation
-33.86'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 15'
Drive Penetration: 15'
Headspace Measurement: — 11.3'
Recovery Measurement: — 3.7'
Recovery Percentage: — 24.6%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive all the way down (felt like)
Lost core barrel
↓
retrieved on 10/31

AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

AW

Notes:

NO core to dispose of → retrieved core (with sediment)

AW

ANCHOR QEA

Sediment Core Collection Log

Page 1 of 1

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC19
Attempt No. 1
Date: 11/11/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712691.87 Y
Long/Easting: 1168287.19 X

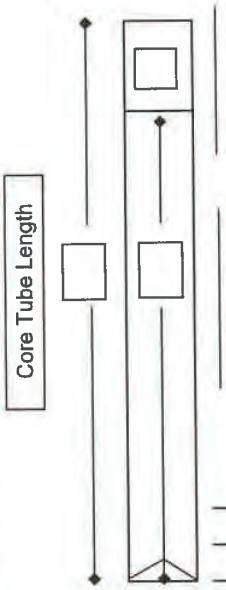
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 58.2'

B. Water Level Measurements
Time: 958
Height: 8.44'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-49.76

Core Collection Recovery Details:
Core Accepted: (Yes) No
Core Tube Length: 10'
Drive Penetration: 9'
Headspace Measurement: 3.1'
Recovery Measurement: 6.9'
Recovery Percentage: 76.7%
Total Length of Core To Process: 6.9'

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive
AW 11/12/25

Sections To Process:
A:
B:
C:
D: AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel, clean sand w/ MCGs in bottom
AW 11/12/25

Notes:
~~Happy heart on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC20
Attempt No. 2
Date: 11/13/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712597.36
Long/Easting: 1168378.61

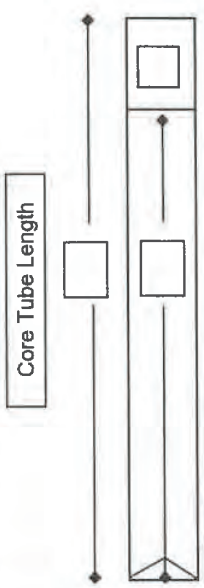
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 50.9

B. Water Level Measurements
Time: 1000
Height: 7.01
Source: Noaa 9446484 Tac

C. Mudline Elevation
-49.89

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 8'
Headspace Measurement: 4'
Recovery Measurement: 6'
Recovery Percentage: 75%
Total Length of Core To Process: 6.0'

Recovery Measurements (prior to cuts)



Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Drive Notes:
Smooth drive until refusal at 8
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel, sandy material in bottom
Core shoe fingers turned inside out (unusual) maybe from dense sand?
AW 11/12/25

Notes:
~~Electric~~ star on label AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC20
Attempt No. 1
Date: 11/13/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712595.60
Long/Easting: 1168381.21

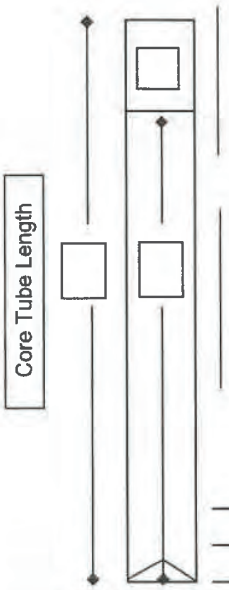
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 56.3'

B. Water Level Measurements
Time: 944
Height: 6.63
Source: Noaa 9446484 Tac

C. Mudline Elevation
-49.67

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 8'
Headspace Measurement: 10'
Recovery Measurement: 0'
Recovery Percentage: 0%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
smooth drive
full drive, no recovery (shoe fell out/fingers broke off, maybe a rock?)

AW 11/12/25

Sections To Process:
A:
B:
C:
D:

AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

NA

AW 11/12/25

Notes:
~~sheeky start on label~~
No core sediment to dispose of

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC21
Attempt No. 3
Date: 11/12/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712521.37
Long/Easting: 1168483.16

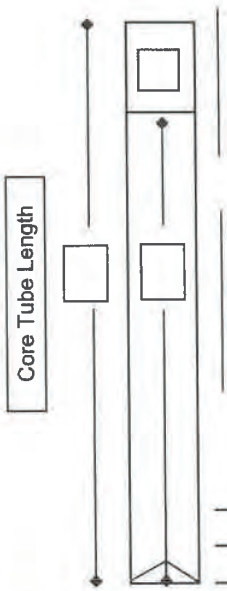
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 55.1

B. Water Level Measurements
Time: 928
Height: 5.45
Source: Noaa 9447644 84

C. Mudline Elevation
-49.65'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 8'
Headspace Measurement: 3.2'
Recovery Measurement: 6.8'
Recovery Percentage: 85%
Total Length of Core To Process: 6.8'

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on core barrel, clean sand w/ MCGs in bottom
AW 11/12/25

Notes:
~~Exasperated star on label~~
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC21
Attempt No. 1
Date: 11/12/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712513.27 Y
Long/Easting: 1168473.87 X

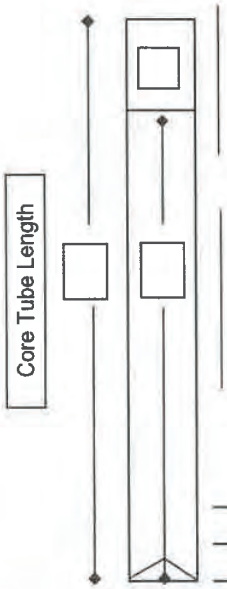
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 55.0

B. Water Level Measurements
Time: 848
Height: 4.46
Source: Noaa 9446484 Tac

C. Mudline Elevation
-50.54

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 8'
Headspace Measurement: 4.6'
Recovery Measurement: 5.4'
Recovery Percentage: 67.5%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive, refusal at 8'
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel, clean sand w/ MCGs in bottom
AW 11/12/25

Notes:
~~Dazed cat on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Page 2 of 3

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC21
Attempt No. 2
Date: 11/12/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712514.64 Y
Long/Easting: 1168473.52 X

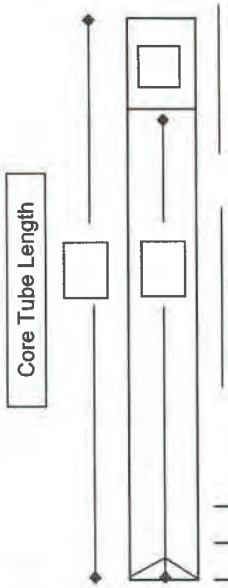
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 55.5'

B. Water Level Measurements
Time: 912
Height: 5.08
Source: Noaa 9446484 Tac

C. Mudline Elevation
-50.42'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 10'
Drive Penetration: 8'
Headspace Measurement: 4.9'
Recovery Measurement: 5.1'
Recovery Percentage: 63.75%
Total Length of Core To Process: —

Recovery Measurements (prior to cuts)



Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Drive Notes:
Smooth drive, refusal at 8'
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

silt on barrel
AW 11/12/25

Notes:
~~Volcano on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Page 1 of 1

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC23
Attempt No. 1
Date: 11/13/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712422.35 Y
Long/Easting: 1160856.30 X

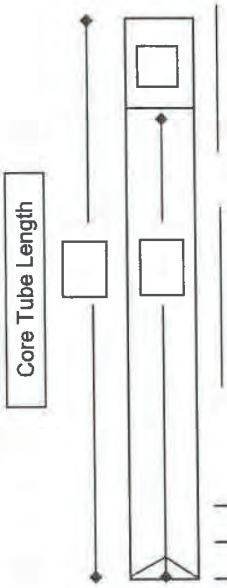
A. Water Depth
DTM Depth Sounder: ——
DTM Lead Line: 60.5' | 60.0'

B. Water Level Measurements
Time: 1135 | 1151
Height: 10.29' | 10.7'
Source: Noaa 9446484 Tac

C. Mudline Elevation
-50.21 | -50.3

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 8'
Headspace Measurement: 2.2'
Recovery Measurement: 7.8'
Recovery Percentage: 97.5%
Total Length of Core To Process: 7.8'

Recovery Measurements (prior to cuts)



Drive Notes:
Smooth drive until refusal @ 8'
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Silt on outside of barrel, grit material (?) in top of core (white gritty pieces)
AW 11/12/25

Notes:
~~Rhino (?) on label~~
AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Page 1 of 1

Tru-Grit

Job: ~~Blair Waterway~~ AW 11/12/25
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC23
Attempt No. 1
Date: 11/12/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712330.16 Y
Long/Easting: 1168657.10 X

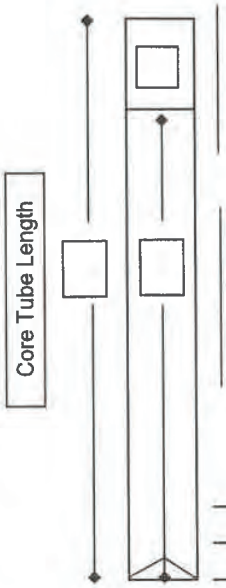
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 62.7'

B. Water Level Measurements
Time: 1356
Height: 12.56
Source: Noaa 9446484 Tac

C. Mudline Elevation
-50.14

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 10'
Drive Penetration: 8'
Headspace Measurement: 3.6'
Recovery Measurement: 6.4'
Recovery Percentage: 80%
Total Length of Core To Process: 6.4'

Recovery Measurements (prior to cuts)



Drive Notes:
Refusal at 8, Smooth drive
AW 11/12/25

Sections To Process:
A:
B:
C:
D:
AW 11/12/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Grey silt in bottom/shoe, silt on outside of core barrel
AW 11/12/25

Notes:
~~Happy bear on label~~ AW 11/12/25
AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Tru-Grit AW 11/12/25

Job: ~~Blair Waterway~~
Job No: 240092-03.06
Field Staff: AW
Contractor: Gravity
Vertical Datum: MLLW

Station ID: TG-SC24
Attempt No. 1
Date: 10/25/24
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
~~Lat/Northing~~: 1108741.59 (X)
~~Long/Easting~~: 712248.08 (Y)

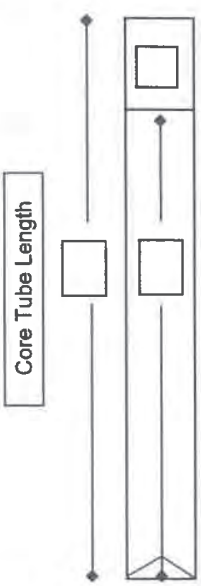
A. Water Depth
DTM Depth Sounder: ———
DTM Lead Line: 62.1'

B. Water Level Measurements
Time: 1504
Height: 11.49'
Source: Noaa 9446484

C. Mudline Elevation
−50.61 ft MLLW

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 12'
Drive Penetration: [redacted] 12'
Headspace Measurement: 0.8'
Recovery Measurement: 11.2'
Recovery Percentage: 93.3%
Total Length of Core To Process: 11.2'

Recovery Measurements (prior to cuts)



Sections To Process:
A:
B:
C:
D: AW 11/12/25

Drive Notes:
smooth, hit refusal @ [redacted] 12, hard layer began ~10.4'
↳ just about full drive
Hard to get barrel out of mud after end of vibe

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

sticky silt on outside of core barrel, clean sand w/MCG in bottom

AW 11/12/25

Notes:
20 min vibe

AW 11/12/25

ANCHOR QEA

Sediment Core Collection Log

Job: ~~Blair Channel Deepening~~ TRU-Grit
Job No: 240092-03.06
Field Staff: Amber S, Nik B
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC25
Attempt No. 3
Date: 03/28/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712237.89
~~Long~~/Easting: 1168921.79

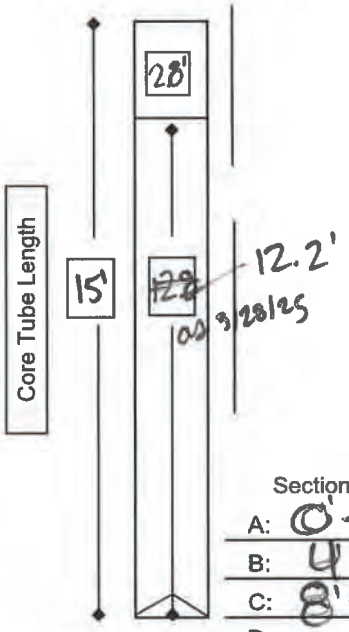
A. Water Depth
DTM Depth Sounder: 22.7
DTM Lead Line: 23.2' ✓

B. Water Level Measurements
Time: 1124
Height: 4.07'
Source: NOAA Station #9446484

C. Mudline Elevation
−19.13

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15'
Drive Penetration: 14'
Headspace Measurement: 2.8'
Recovery Measurement: 12.2'
Recovery Percentage: 87%
Total Length of Core To Process: 11.8'

Recovery Measurements (prior to cuts)



Drive Notes: 1.5' Free fall
light vibration, easy penetration
moderate vibration @ 6'
slow penetration, speed increase
@ 8', slow penetration
full vibration, slow to moderate
penetration.
Refusal @ 14'
as 3/28/25

Sections To Process:
A: 0'-4'
B: 4-8'
C: 8'-11.8'
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Section A top grey silt
B top silt
C top sand
Sand in core catcher
as 3/28/25

Notes:
Sending core catcher to add sample volume.
as 3/28/25
as 3/28/25

ANCHOR QEA

Sediment Core Collection Log

Job: ~~Blair Channel Deepening~~ Tru-Grit
Job No: 240092-03.06 QA 3/28/25
Field Staff: Amber S, Nick B
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC25
Attempt No. 1
Date: 03/28/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712251.12
~~Long~~/Easting: 1168917.53

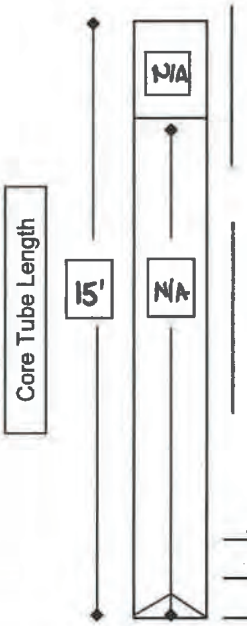
A. Water Depth
DTM Depth Sounder: –
DTM Lead Line: 23.6' ✓

B. Water Level Measurements
Time: 1026
Height: 4.54'
Source: NOAA Station #944

C. Mudline Elevation
– 19.06'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 15'
Drive Penetration: 1.3
Headspace Measurement: N/A
Recovery Measurement: N/A
Recovery Percentage: 0
Total Length of Core To Process: N/A

Recovery Measurements (prior to cuts)



Sections To Process:
A: –
B: –
C: –
D: –

Drive Notes: 1.3' Free fall
light → moderate → Full vibration
refusal at 1.3'
QA 3/28/25

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

No material in core barrel.
QA 3/28/25

Notes:
Core barrel cleaned for attempt 2 reuse.
3/28/25

ANCHOR QEA

Sediment Core Collection Log

Job: ~~Blair Channel Deepening~~ Tru-Grit
Job No: 240092-03.04
Field Staff: ~~Amber~~ S, Nik B
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC25
Attempt No. 2
Date: 03/28/2025
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712243.32
~~Long~~/Easting: 1168908.40

AD 3/28/25

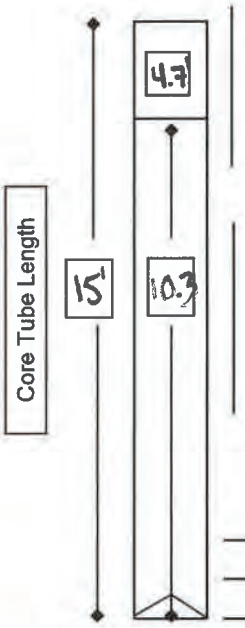
A. Water Depth
DTM Depth Sounder: —
DTM Lead Line: 24.7'

B. Water Level Measurements
Time: 1044
Height: 4.27'
Source: NOAA station #9444

C. Mudline Elevation
−20.43'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 15'
Drive Penetration: 14'
Headspace Measurement: 4.7'
Recovery Measurement: 10.3
Recovery Percentage: 74%
Total Length of Core To Process: 9.9'

Recovery Measurements (prior to cuts)



Drive Notes: 0.5' free fall
light vibration, slow penetration
moderate vibration @ 2.5'
slow penetration + transition to high vibration
refusal @ 14'

AD 3/28/25

Sections To Process:
A: 0 - 4'
B: 4 - 8'
C: 8 - 9.9'
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Section top
A grey silt
B Organic material - decaying, + sandy silt
C black silt

AD 3/28/25

Notes:
Base adjusted to position 2 to account for slope. Since being sent to supplement additional volume.

AD 3/28/25

ANCHOR QEA

Sediment Core Collection Log

Job: ~~Blair Channel Deepening~~ TruGrit
Job No: 240092-03.06
Field Staff: ~~Amber S,~~ NIK B
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC26
Attempt No. 1
Date: 03/28/25
Logged By: Amber Smith
Horizontal Datum: NAD83 WA State Plane ~~North~~ South, feet

Field Collection Coordinates:
~~Lat~~/Northing: 712198.41
~~Long~~/Easting: 1168874.40

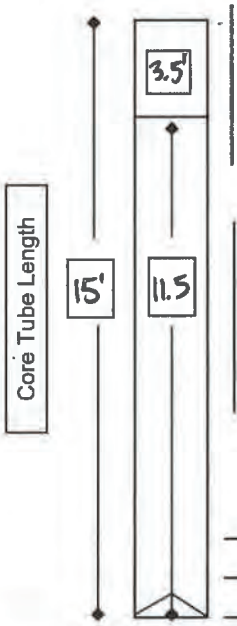
A. Water Depth
DTM Depth Sounder: 38.8' ✓
DTM Lead Line: 40.1' ✗

B. Water Level Measurements
Time: 1220
Height: 4.07
Source: ~~NOAA Station~~ #9446484

C. Mudline Elevation
-34.73'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15'
Drive Penetration: 12.2'
Headspace Measurement: 3.5'
Recovery Measurement: 11.5'
Recovery Percentage: 94%
Total Length of Core To Process: 11'

Recovery Measurements (prior to cuts)



Drive Notes: 3' free fall
light vibration, ~~slow~~ no penetration
moderate vibration, slow penetration
full vibration @ 4 moderate rest of core
refusal @ 12.2'

at 3/28/25

Sections To Process:
A: 0-4'
B: 4-8'
C: 8-11'
D: —

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Section. A: grey silt
TOPS B: sand
C: sand, shell fragments
no material in shoe

at 3/28/25

Notes:
no material in core catcher to be sent to processing area.

at 3/28/25

ANCHOR QEA

Sediment Core Collection Log

Page 1 of 1

Job: ~~Blair Channel Deepening~~ TG-Grit
Job No: 240092-03.04
Field Staff: WS EF DD BB WB
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC27
Attempt No: 1
Date: 5/9/2025
Logged By: WS
Horizontal Datum: NAD83 WA State Plane South, feet

Field Collection Coordinates:
Northing: 712150.46
Easting: 1169013.42

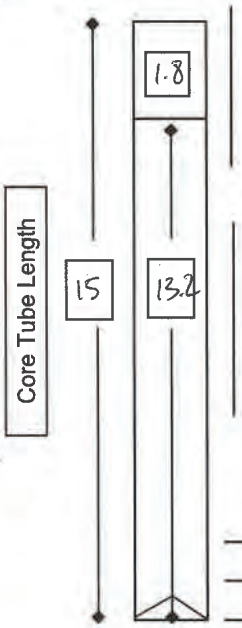
A. Water Depth
DTM Depth Sounder: 25.4
DTM Lead Line: 25.2

B. Water Level Measurements
Time: 09:12
Height: 1.67
Source: NOAA Station # 9446484

C. Mudline Elevation
-23.53

Core Collection Recovery Details:
Core Accepted: Yes / No
Core Tube Length: 15 ft
Drive Penetration: 13.9 ft
Headspace Measurement: 1.8 ft
Recovery Measurement: 13.2 ft
Recovery Percentage: 95%
Total Length of Core To Process: 12.7 ft

Recovery Measurements (prior to cuts)



Sections To Process:
A: 0-4'
B: 4-8'
C: 8-12.7'
D: —

Drive Notes: 2 feet freefall, broke thru @ 2 feet 1/2 throttle @ 3 feet, going down slow. 3/4 throttle @ 4.5 feet. Full throttle @ 5 feet broke thru. Slow & steady to ~ 14 feet. Slow even extraction
Drive Time: 9 minutes

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Intermittant & slow but fairly steady

A: Silt (grey)
B: Silt (black-grey)
C: Silt (black) & some sand

Kept Catcher: contained grey silt

Notes:
Target Mudline: -24.61
Target Rec.: 14.0 ft

ANCHOR QEA

Sediment Core Collection Log

Page 1 of 1

Job: ~~Blair Channel Deepening~~ Tru-Grit
Job No: 240092-03.04
Field Staff: WS EF DD DB WB
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC28
Attempt No. 1
Date: 5/9/2
Logged By: WS
Horizontal Datum: NAD83 WA State Plane South, feet

Field Collection Coordinates:
Northing: 712108.66
Easting: 1168969.47

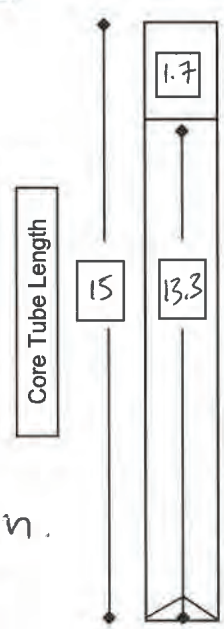
A. Water Depth
DTM Depth Sounder: 36.5
DTM Lead Line: 36.6

B. Water Level Measurements
Time: 09:48
Height: 1.08
Source: NOAA Station # 9446484

C. Mudline Elevation
-35.52

Core Collection/Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15 ft
Drive Penetration: 13.9 ft
Headspace Measurement: 1.7 ft
Recovery Measurement: 13.3 ft
Recovery Percentage: 96%
Total Length of Core To Process: 12.8 ft

Recovery Measurements (prior to cuts)



Sections To Process:
A: 0-4'
B: 4-8'
C: 8-12.8'
D: —

Drive Notes: 4.5 ft freefall 1/4 throttle, driving down well. Slows @ 7 feet, move to 1/2 throttle. Slows again @ ~10.5 ft. 3/4 throttle to full penetration. Fairly easy drive.
Drive Time: 7 minutes

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

Smooth drive & extraction

A: Silt
B: Black sand
C: Grey-black sand

Kept catcher full of grey sand & bits of shell.

Notes:
Target Mudline: 36.84
Target Rec.: 14

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Coat
Job No: 240092.03-06
Field Staff: AW, DM
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC29
Attempt No. 1
Date: 8/25/25
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712073.45
Long/Easting: 1169094.54

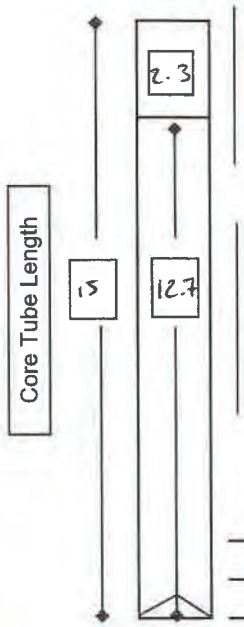
A. Water Depth
DTM Depth Sounder: 29.4
DTM Lead Line: 29.6'

B. Water Level Measurements
Time: 930
Height: 7.1'
Source: NOAA 9446484

C. Mudline Elevation
-22.5'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15'
Drive Penetration: 14'
Headspace Measurement: 2.3'
Recovery Measurement: 12.7'
Recovery Percentage: 90.7 %
Total Length of Core To Process: 12.0'

Recovery Measurements (prior to cuts)



Drive Notes:
3' freefall, light vibration fall to 5.5'
1/4 throttle @ 6', very quick drive from 6 to 8.5', slow steady drive to 9', 1/2 throttle at 9.5'
full penetration

Sections To Process:
A: 0-4
B: 4-8
C: 8 - ~~12.3~~ 12.0
D: catcher

Core Field Observations and Description:
Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

0' SILT
4' sandy SILT
8' silty SAND
12.3' SAND

AW

Notes:
keeping catcher, process catcher for 2-layer

AW

ANCHOR QEA

Sediment Core Collection Log

Job: Tacoma Tar-Grit
Job No: 240092.03-06
Field Staff: AW, NM
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC30
Attempt No. 1
Date: 8/25/25
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712020.37
Long/Easting: 1169059.13

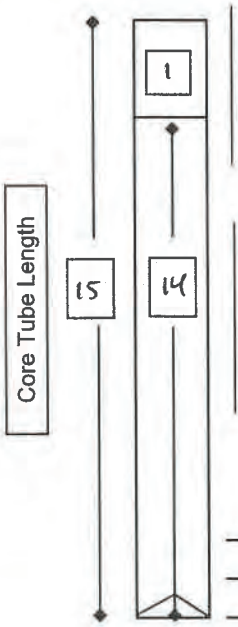
A. Water Depth
DTM Depth Sounder: 38.2'
DTM Lead Line: (42.7')

B. Water Level Measurements
Time: 1000
Height: 5.73
Source: NOAA 9446484

C. Mudline Elevation
-36.97

Core Collection Recovery Details:
Core Accepted: (Yes) No
Core Tube Length: 15'
Drive Penetration: 14'
Headspace Measurement: 1'
Recovery Measurement: 14'
Recovery Percentage: 100%
Total Length of Core To Process: 13.6

Recovery Measurements (prior to cuts)



Drive Notes:
2.4' freefall, light vibration easy drive to 4.5', 1/2 throttle @ 4.5 very slow drive, full throttle @ 7.5', slows @ 9' very slow drive to full penetration

Sections To Process:
A: 0-4
B: 4-8
C: 8-12
D: 12-13.6, catcher

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

0' SAND w/ silt
4' SAND
8 SAND
12 SAND
13.6 SAND

AW

Notes:
keeping catcher

AW

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Grit
Job No: 240092.03-010
Field Staff: AW, NM
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC31
Attempt No. 2
Date: 8/25/25
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712196.73
Long/Easting: 1169058.43

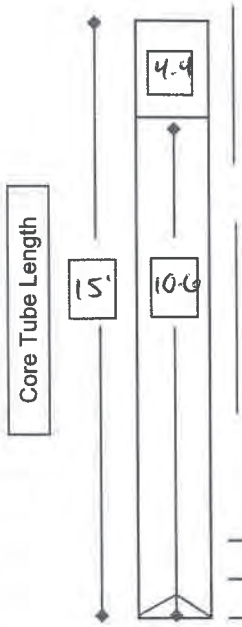
A. Water Depth
DTM Depth Sounder: 20.4'
DTM Lead Line: 18.9'

B. Water Level Measurements
Time: 824
Height: 9.35
Source: NOAA 9446484

C. Mudline Elevation
-9.45'

Core Collection Recovery Details:
Core Accepted: (Yes) / No
Core Tube Length: 15'
Drive Penetration: 12.6
Headspace Measurement: 4.4'
Recovery Measurement: 10.6
Recovery Percentage: 84%
Total Length of Core To Process: 10.2 AS 8/25/25

Recovery Measurements (prior to cuts)



Drive Notes:
3' freefall, light vibration, drop to 4.8', drop to 6' easy penetration 1/4 throttle @ 8', smooth & consistent, 1/2 throttle @ 10', smooth drive 3/4 throttle @ 12' slows @ 18', refusal @ 12.6'

Sections To Process:
A: 0-4
B: 4-8
C: 8-10.2
D: catcher

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

0' SILT
4' dark grey SILT
8' brown SILT
10.2 SILT

AW

Notes:
keeping catcher

AW

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Grit
Job No: 240092.03-06
Field Staff: AW, NM
Contractor: MJS
Vertical Datum: MLLW

Station ID: TG-SC31
Attempt No. 1
Date: 8/25/25
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712197.95
Long/Easting: 1169053.06

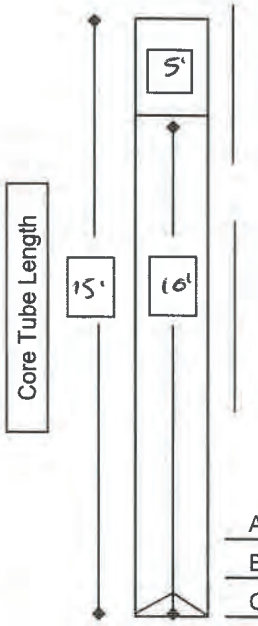
A. Water Depth
DTM Depth Sounder: 20.2'
DTM Lead Line: (20.2')

B. Water Level Measurements
Time: 754
Height: 10.1'
Source: NOAA 9446484

C. Mudline Elevation
-10.1'

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 15'
Drive Penetration: 13.6'
Headspace Measurement: 5'
Recovery Measurement: 10'
Recovery Percentage: 73.5 %
Total Length of Core To Process: 9.6

Recovery Measurements (prior to cuts)



Drive Notes:
2' freefall, vibrating on drop to 5.25'
1/4 throttle easy penetration, tough driving at 11', up to 1/2 throttle @ 11.5', 3/4 throttle @ ~11.8, full throttle, refusal @ 13.6'

Sections To Process:
A: 0-4'
B: 4-8'
C: 8-9.6'
D: catcher

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

0' dark grey SILT
4' grey SILT, sulfur-like odor
8' grey SILT, sulfur-like odor
9.6' SILT

AW

Notes:
keeping catcher

AW

ANCHOR QEA

Sediment Core Collection Log

Job: Tru-Grit
Job No: 240092.03-06
Field Staff: AW, NM
Contractor: MSS
Vertical Datum: MLLW

Station ID: TG-SC31
Attempt No. 3
Date: 8/25/25
Logged By: AW
Horizontal Datum: NAD83 WA State Plane North, feet

Field Collection Coordinates:
Lat/Northing: 712193.60
Long/Easting: 1169055.61

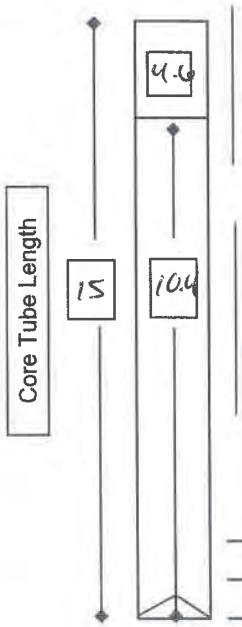
A. Water Depth
DTM Depth Sounder: 18.7'
DTM Lead Line: (18.9')

B. Water Level Measurements
Time: 854
Height: 8.44
Source: NOAA 9446484

C. Mudline Elevation
-10.46

Core Collection Recovery Details:
Core Accepted: Yes / (No)
Core Tube Length: 15'
Drive Penetration: 11.7'
Headspace Measurement: 4.6
Recovery Measurement: 10.4
Recovery Percentage: 88.9%
Total Length of Core To Process: 9.9

Recovery Measurements (prior to cuts)



Drive Notes:
2.9' freefall, light vibration, quick drop to 5.9', slows @ 6', steady penetration with 1/4 throttle to 11' 1/2 throttle @ 11', full throttle @ 11.5' very slow penetration, hard drive refusal @ 11.7'

Sections To Process:
A: 0-4'
B: 4-8'
C: 8-9.9'
D: —

Core Field Observations and Description:

Sediment type, moisture, color, minor modifier, MAJOR modifier, other constituents, odor, sheen, layering, anoxic layer, debris, plant matter, shells, biota

0' SILT
4' sandy SILT
8' SILT
9.9 dark grey SAND

AW

Notes:

AW

(9)

Surface Sediment Collection Log

Job: Tru-Grit
Job No: 240092-03.06
Field Staff: NM, AR, JC
Contractor: MSS

Station: SG06
Date: 8/26/25
Sample Method: Grab
Proposed Coordinates: Lat. 1168871
Long 712374

Water Height
DTM Depth Sounder: —
DTM Lead Line: 17.2, 16.3, 16.3

Tide Measurements
Time: 0912
Height: 9.06

Sample Acceptability Criteria:
1) Overlying water is present
2) Water has low turbidity
3) Sampler is not overfilled
4) Surface is flat
5) Desired penetration depth

Mudline Elevation (datum): calculated after sampling -8.14 ft

Notes: Tide station 9446984

Grab #	Time	Confirmed Coordinates (datum) NAD 83 (N)	Confirmed Coordinates (datum) NAD 83 (E)	Sample Accept (Y/N)	Recovery Depth (in)	Comments: jaws close, good seal, winnowing, overlying water, surface intact, etc
1	0923	1168870.88	712371.65	Y	10	jaws closed, overlying water, surface intact
2	0941	1168870.46	712376.41	N	3	jaws closed, overlying water, surface disturbed
3	0954	1168875.37	712373.70	Y	8	jaws closed, overlying water, surface intact

Sample Description: MAJOR CONSTITUENT GROUP NAME. Moisture content, density/consistency, color, major constituent (%), minor constituents (%), plasticity. Amount and shape of minor constituents (e.g., wood, shells). Biota. Sheen, odor. Structure descriptions

1: Brown silty sand surface, dark grey poorly graded sand, fine, ~~abundant~~ FUM shells (moderate), biota (worms)

2: Brown silty sand surface, dark grey

Sample Depth: 0-10cm

~~Field Measurements~~: temperature: °C; pH: std units; ~~electrical conductivity (salinity)~~: dS/m

Sample Containers: 16oz clear glass, 4oz AG, 4oz clear glass, 2x bags

Analyses: Tier 1, MS/MSD

Surface Sediment Collection Log

Job: Tru-Grit
Station: TG-SG12
Job No: 240092-03.06
Date: 8/26/25
Field Staff: NM, AR,
Sample Method: Grab
Contractor: MSS
Proposed Coordinates: Lat. 1168829
Long. 712330

Water Height
DTM Depth Sounder: —
DTM Lead Line: 23.8, 24.0

Tide Measurements
Time: 1130 / 1148
Height: 4.49 / 3.95

Mudline Elevation (datum): calculated after sampling -20.1 ft

Sample Acceptability Criteria:
1) Overlying water is present
2) Water has low turbidity
3) Sampler is not overfilled
4) Surface is flat
5) Desired penetration depth

Notes: Tide Station 9446484

Grab #	Time	Confirmed Coordinates (datum) NAD 83 (N)	Confirmed Coordinates (datum) NAD 83 (E)	Sample Accept (Y/N)	Recovery Depth (in)	Comments: jaws close, good seal, winnowing, overlying water, surface intact, etc
1	1142	1168829.19	712329.63	Y	9.5	jaws closed, rope and kelp in jaw
2	1205	1168824.87	712329.21	Y	7.5	jaws closed, rope in jaw

Sample Description: MAJOR CONSTITUENT GROUP NAME. Moisture content, density/consistency, color, major constituent (%), minor constituents (%), plasticity. Amount and shape of minor constituents (e.g., wood, shells). Biota. Sheen, odor. Structure descriptions

1: Brown surface silt w/ sand dark grey, trace shells, moderate kelp, rope present, concrete block on surface (10in x 3in)

2: Brown surface silt sporatic, grey sand, trace shells, moderate kelp rope present

Sample Depth: 0-10cm

~~Field Measurements: temperature: °C; pH. std units; electrical conductivity (salinity): dS/m~~

Sample Containers: 16oz clear glass, 4oz AG, 4oz clear glass, 2x bag

Analyses: Tier 1

Surface Sediment Collection Log

Job: TruGrit
Job No: 240092-03.06
Field Staff: NM, AR
Contractor: MSS

Station: SG25
Date: 8/26/25
Sample Method: Grab
Proposed Coordinates: Lat. 1168921
Long. 712242

Water Height
DTM Depth Sounder: —
DTM Lead Line: ~~320~~, 220, 203, 217, 223
Mudline Elevation (datum): calculated after sampling -20.0 ft

Tide Measurements
Time: 1218, 1224
Height: 3.12, 3.01, 2.26 @ 1324

Sample Acceptability Criteria:
1) Overlying water is present
2) Water has low turbidity
3) Sampler is not overfilled
4) Surface is flat
5) Desired penetration depth

Notes: Tide station 9446484

Grab #	Time	Confirmed Coordinates (datum) NAD 83 (N)	Confirmed Coordinates (datum) NAD 83 (E)	Sample Accept (Y/N)	Recovery Depth (in)	Comments: jaws close, good seal, winnowing, overlying water, surface intact, etc
1	1236	1168920.65	712237.26	N	—	jaws ajar w/ rope & steel rod
2	1245	1168919.91	712239.98	N	—	jaws ajar no recovery
3	1310	1168920.96	712243.00	N	—	no recovery, jaws closed
4	1317	1168915.79	712239.64	Y	9	jaws closed, overlying water surface intact
5	1334	1168913.85	712236.67	Y	9.75	jaws closed, overlying water

Sample Description: MAJOR CONSTITUENT GROUP NAME. Moisture content, density/consistency, color, major constituent (%), minor constituents (%), plasticity. Amount and shape of minor constituents (e.g., wood, shells). Biota. Sheen, odor. Structure descriptions

4: some light brown silt on surface, grey sand, trace shells, rainbow sheen blob on surface

5' some light brown silt on surface, grey sand, trace shells, rainbow sheen blob on surface

Sample Depth: 0-10cm

~~Field Measurements: temperature: °C; pH: std units; electrical conductivity (salinity): dS/m~~

Sample Containers: 16oz clear glass, 4oz AG, 4oz clear glass, 2x bag

Analyses: Tier 1

Surface Sediment Collection Log

Job: Tru-Grit
Station: SG27
Job No: 240092-03.06
Date: 8/26/25
Field Staff: NM, AF
Sample Method: Grab
Contractor: MSS
Proposed Coordinates: Lat. 1169013
Long. 712153

Water Height
DTM Depth Sounder: —
DTM Lead Line: 26.0, 26.9, 27.0

Tide Measurements
Time: 1354, 1406
Height: 2.36, 2.49, 2.79 @ 1424

Sample Acceptability Criteria:
1) Overlying water is present
2) Water has low turbidity
3) Sampler is not overfilled
4) Surface is flat
5) Desired penetration depth

Mudline Elevation (datum): calculated after sampling -24.2 ft

Notes: Tide Station 9446484

Grab #	Time	Confirmed Coordinates (datum) NAD 83 (N)	Confirmed Coordinates (datum) NAD 83 (E)	Sample Accept (Y/N)	Recovery Depth (in)	Comments: jaws close, good seal, winnowing, overlying water, surface intact, etc
1	1410	1169012.90	712154.34	N	12+	log in sample lifting sed to overpenetration
2	1418	1169010.44	712152.41	Y	11.5	overlying water jaws closed
3	1432	1169018.36	712152.75	Y	11	jaws closed, overlying water surface intact

Sample Description: MAJOR CONSTITUENT GROUP NAME. Moisture content, density/consistency, color, major constituent (%), minor constituents (%), plasticity. Amount and shape of minor constituents (e.g., wood, shells). Biota. Sheen, odor. Structure descriptions

metal

2: ~~large wood~~ fragment and clam on surface, brown surface silt w/ fine sand, grey, ~~w~~ kelp and root fragments present

3: Brown silt w/ sand surface, grey silt w/ sand, kelp? root fragments same sheen (rainbow) on surface

Sample Depth: 0-10cm

~~Field Measurements: temperature: °C; pH: std units; electrical conductivity (salinity): dS/m~~

Sample Containers: 16oz clear glass, 4oz AG, 4oz clear glass, 2 bags

Analyses: Tier 1

Surface Sediment Collection Log

Job: TNI-Grit
Job No: 240892-03.06
Field Staff: NM AR
Contractor: MSS

Station: SG29
Date: 8/26/25
Sample Method: Grab
Proposed Coordinates: Lat. 1169098
Long. 712072

Water Height
DTM Depth Sounder: —
DTM Lead Line: 28.6, 28.2

Tide Measurements
Time: —
Height: 4.17 / 4.59

Sample Acceptability Criteria:
1) Overlying water is present
2) Water has low turbidity
3) Sampler is not overfilled
4) Surface is flat
5) Desired penetration depth

Mudline Elevation (datum): calculated after sampling -23.61 ft

Notes: Tide station 9446484

Grab #	Time	Confirmed Coordinates (datum) NAD 83 (N)	Confirmed Coordinates (datum) NAD 83 (E)	Sample Accept (Y/N)	Recovery Depth (in)	Comments: jaws close, good seal, winnowing, overlying water, surface intact, etc
1	1520	1169090.22	712072.26	Y	10.5	jaws closed, overlying water surface intact
2	1536	1169094.33	712068.24	Y	11	surface intact, overlying water

Sample Description: MAJOR CONSTITUENT GROUP NAME. Moisture content, density/consistency, color, major constituent (%), minor constituents (%), plasticity. Amount and shape of minor constituents (e.g., wood, shells). Biota. Sheen, odor. Structure descriptions

1: Brown silty surface, grey silt w/ fine sand, trace shell fragment, trace root fragments? kelp fragments

2: Brown silty surface, grey silt w/ fine sand, trace coarse-fine gravel, abundant shell fragments, trace kelp, small starfish

Sample Depth: 0-10 cm

~~Field Measurements: temperature: °C; pH: std units; electrical conductivity (salinity): dS/m~~

Sample Containers: 16oz clear glass, 4oz AG, 4oz clear glass, 2x bags

Analyses: Tier 1

Scanned with CamScanner

Surface Sediment Collection Log

Job: TN-Grit
Station: SG30
Job No: 240092-03.06
Date: 8/26/25
Field Staff: NM, AR
Sample Method: Grab
Contractor: WSS
Proposed Coordinates: Lat. 1169064
Long. 712021

Water Height
DTM Depth Sounder: —
DTM Lead Line: 38.7, 41.4

Tide Measurements
Time: —
Height: 6.19, 6.9

Sample Acceptability Criteria:
1) Overlying water is present
2) Water has low turbidity
3) Sampler is not overfilled
4) Surface is flat
5) Desired penetration depth

Mudline Elevation (datum): calculated after sampling -34.5 ft

Notes:

Grab #	Time	Confirmed Coordinates (datum) NAD 83 (N)	Confirmed Coordinates (datum) NAD 83 (E)	Sample Accept (Y/N)	Recovery Depth (in)	Comments: jaws close, good seal, winnowing, overlying water, surface intact, etc
1	1610	1169064.60	712021.47	Y	11.5	jaws closed overlying water surface intact
2	1627	1169061.99	712015.24	Y	11	jaws closed good seal overlying water

Sample Description: MAJOR CONSTITUENT GROUP NAME. Moisture content, density/consistency, color, major constituent (%), minor constituents (%), plasticity. Amount and shape of minor constituents (e.g., wood, shells). Biota. Sheen, odor. Structure descriptions

1: Brown silty surface, grey silt w/ fine sand, trace root fragments multiple worms

2: Brown silty surface, grey silt w/ fine sand, trace root fragments

Sample Depth: 0-10 cm

~~Field Measurements: Temperature: °C; pH: std units; electrical conductivity (salinity): dS/m~~

Sample Containers: 16oz clear glass, 4oz AG, 4oz clear glass, 3x bags

Analyses: Tier 1

Scanned with CamScanner

Surface Sediment Collection Log

Job: Tru-Grit
Station: SG31
Job No: 240092-03.06
Date: 8/26/25
Field Staff: NM, AB, JC
Sample Method: Grab
Contractor: MSS
Proposed Coordinates: Lat. 1169055
Long. 712197

Water Height
DTM Depth Sounder: —
DTM Lead Line: 16.8, 17.7

Tide Measurements
Time: 1012
Height: 7.29

Sample Acceptability Criteria:
1) Overlying water is present
2) Water has low turbidity
3) Sampler is not overfilled
4) Surface is flat
5) Desired penetration depth

Mudline Elevation (datum): calculated after sampling -10.4 ft

Notes: Tide station 9446484

Grab #	Time	Confirmed Coordinates (datum) NAD 83 (N)	Confirmed Coordinates (datum) NAD 83 (E)	Sample Accept (Y/N)	Recovery Depth (in)	Comments: jaws close, good seal, winnowing, overlying water, surface intact, etc
1	1025	1169056.32	712199.70	Y	11.5	jaws closed, overlying water, surface intact
2	1042	1169055.63	712195.76	Y	11.5	jaws closed overlying water surface intact

Sample Description: MAJOR CONSTITUENT GROUP NAME. Moisture content, density/consistency, color, major constituent (%), minor constituents (%), plasticity. Amount and shape of minor constituents (e.g., wood, shells). Biota. Sheen, odor. Structure descriptions

1: Brown silty sand surface, dark grey silt w/ sand, moderate shells, ~~no~~ biota (worms)
2: Brown silty sand surface, dark grey silt w/ sand, moderate shells biota (worms)

Sample Depth: 0-10 cm
~~Field Measurements: temperature: °C; pH: std units; electrical conductivity (salinity): dS/m~~

Sample Containers: 16 oz clear glass, 4oz AG, 4oz clear glass, 2x bags

Analyses: Tier 2, Field duplicate collected

Surface Sediment Collection Log

Job: TIV-Grit
Job No: 240092-03.06
Field Staff: NM, AR, JC
Contractor: MSS

Station: TG-SG32
Date: 8/26/25
Sample Method: Grab
Proposed Coordinates: Lat 1168964
Long. 712287

Water Height
DTM Depth Sounder: —
DTM Lead Line: 11.9, 11.4, 11.1

Tide Measurements
Time: 0800
Height: 10.4

Sample Acceptability Criteria:
1) Overlying water is present
2) Water has low turbidity
3) Sampler is not overfilled
4) Surface is flat
5) Desired penetration depth

Mudline Elevation (datum): calculated after sampling -1.5 ft

Notes: Tide station 9446484

Grab #	Time	Confirmed Coordinates (datum) NAD 83 (N)	Confirmed Coordinates (datum) NAD 83 (E)	Sample Accept (Y/N)	Recovery Depth (in)	Comments: jaws close, good seal, winnowing, overlying water, surface intact, etc
1	0813	1168968.5	712286.69	Y	4	Jaws closed, surface intact overlying water.
2	0836	1168965.8	712290.24	N	—	Jaws stuck open, I beam
3	0845	1168969.83	712289.34	Y	9.5	Jaws closed, surface intact, overlying water

Sample Description: MAJOR CONSTITUENT GROUP NAME. Moisture content, density/consistency, color, major constituent (%), minor constituents (%), plasticity. Amount and shape of minor constituents (e.g., wood, shells). Biota. Sheen, odor. Structure descriptions

1: Abundant shells, poorly graded sand (sp) fine, dark grey, surface brown, worms, trace fines

3: Light brown silty sand surface, dark grey poorly graded sand (sp) worms, abundant shells

Sample Depth: 0-10cm

~~Field Measurements: temperature: °C; pH: std units; electrical conductivity (salinity): dS/m~~

Sample Containers: 16oz clear glass, 4oz amber glass, 4oz amber clear, 2x bags

Analyses:
Tier 1: TS, metals, SVOCs, pesticides, PCBs, butyltins, D/F, TOC, TVS

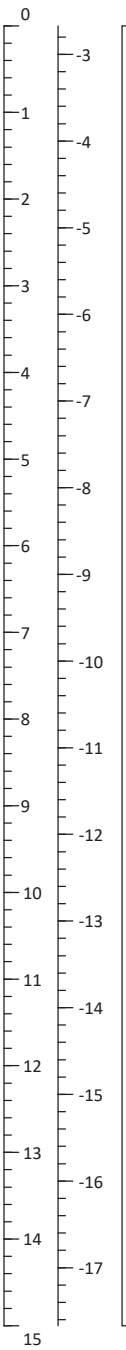
Appendix C-4
Processing Logs

Sediment Core Log

TG-SC01

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712752.49**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168428.72**
Client: **Port of Tacoma**	Drive Length (feet): **5.1**	Mudline Elevation (feet): **-2.67 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **1**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **19**	Core Collection Date/Time: **11/13/2024 10:30**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1	-3 to -4		95	5	0 to 1.0: POORLY GRADED SAND (SP), medium dense, wet, gray, sand is fine to medium, trace shell debris throughout. @ 0.3 to 1.0: organic root-like fibers End of core at 1.0 feet.		-2.67 to -3.67	TG-SC01-00-01-241113



ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Sample TG-SC01-00-01-241113 (0 to 1 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC02

Project: **Tru-Grit Sediment Characterization**	Logged By: **Ry Pearson**	Latitude: **712723.21**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168498.06**
Client: **Port of Tacoma**	Drive Length (feet): **3**	Mudline Elevation (feet): **-6.7 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **1.7**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **56**	Core Collection Date/Time: **11/8/2024 13:00**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1.7	-6.7 to -8.4	10	80	10	0 to 1.7: POORLY GRADED SAND WITH SILT (SP-SM), medium dense to dense, wet, very dark gray, sand is fine, trace shell debris. @1.2 to 1.4: concrete chunk		-6.7 to -8.4	TG-SC02-00 -1.7-241108
					End of core at 1.7 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Sample TG-SC02-00-1.7-241108 (0 to 1.7 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC03

Project: **Tru-Grit Sediment Characterization**	Logged By: **Ry Pearson**	Latitude: **712621.92**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168576.22**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-12.09 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6.3**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **78**	Core Collection Date/Time: **11/8/2024 13:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0			95	5	0 to 0.8: POORLY GRADED SAND (SP), medium dense, wet, black gray with trace multicolored grains (red and white), sand fine to medium. @0.2 to 0.3: coarse sand pocket, white		-12.09 to -14.09	TG-SC03-00-02-241108
1	-13				0.8 to 6.3: CLAY (CL), soft to medium stiff, moist, tan, low plasticity, wood chunks, strong H2S-like odor.			
2	-14						-14.09 to -16.09	TG-SC03-02-04-241108
3	-15			100				
4	-16						-16.09 to -18.09	TG-SC03-04-06-241108
5	-17							
6	-18						- 18.09 to - 19.20	TG-SC03-06-6.3-241108
7	-19				End of core at 6.3 feet.			
8	-20							
9	-21							
10	-22							
11	-23							
12	-24							
13	-25							
14	-26							
15	-27							

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Samples TG-SC03-00-0.8-241108 (0 to 0.8 feet) and TG-SC03-0.8-6.3-241108 (0.8 to 6.3 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC04

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712520.13**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168652.63**
Client: **Port of Tacoma**	Drive Length (feet): **7**	Mudline Elevation (feet): **0.1 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6.8**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **97**	Core Collection Date/Time: **10/24/2024 11:30**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	0		95	5	0 to 5.7: WELL GRADED SAND (SW), very loose, wet, black, sand is fine to coarse, trace gravel throughout. @3.8 to 4.5: trace shell debris, white		0.1 to -1.9	TG-SC04-00-02 -241029
							-1.9 to -3.9	TG-SC04-02-04 -241029
							-3.9 to -5.9	TG-SC04-04-06 -241029
6	-6		95	5	5.7 to 6.8: POORLY GRADED SAND (SP), medium dense, wet, gray with trace multicolored grains (red and white), sand is fine. @5.8 to 6.0: silt layer, gray @5.9: 0.5" wood piece, brown			
7	-7				End of core at 6.8 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Samples TG-SC04-02-04-241029 (2 to 4 feet) and TG-SC04-04-06-241029 (4 to 6 feet) taken and tested for grain size distribution.
Sample TG-SC04-5.8-06-241029 (5.8 to 6 feet) taken and tested for Atterberg limits.

Sediment Core Log

TG-SC05

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712461.22**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168779.18**
Client: **Port of Tacoma**	Drive Length (feet): **1.3**	Mudline Elevation (feet): **-0.47 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **1.6**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **123**	Core Collection Date/Time: **11/13/2024 09:50**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 25	-1 to -25		90	10	0 to 1.6: POORLY GRADED SAND WITH SILT (SP-SM), loose, wet, dark gray with trace red grains, sand is fine. @0.0: 0" to 2" wood debris @0.7: 0.5" wood debris @1.2: piece of plastic End of core at 1.6 feet.		-0.47 to -2.07	TG-SC05-00-1.6-241113

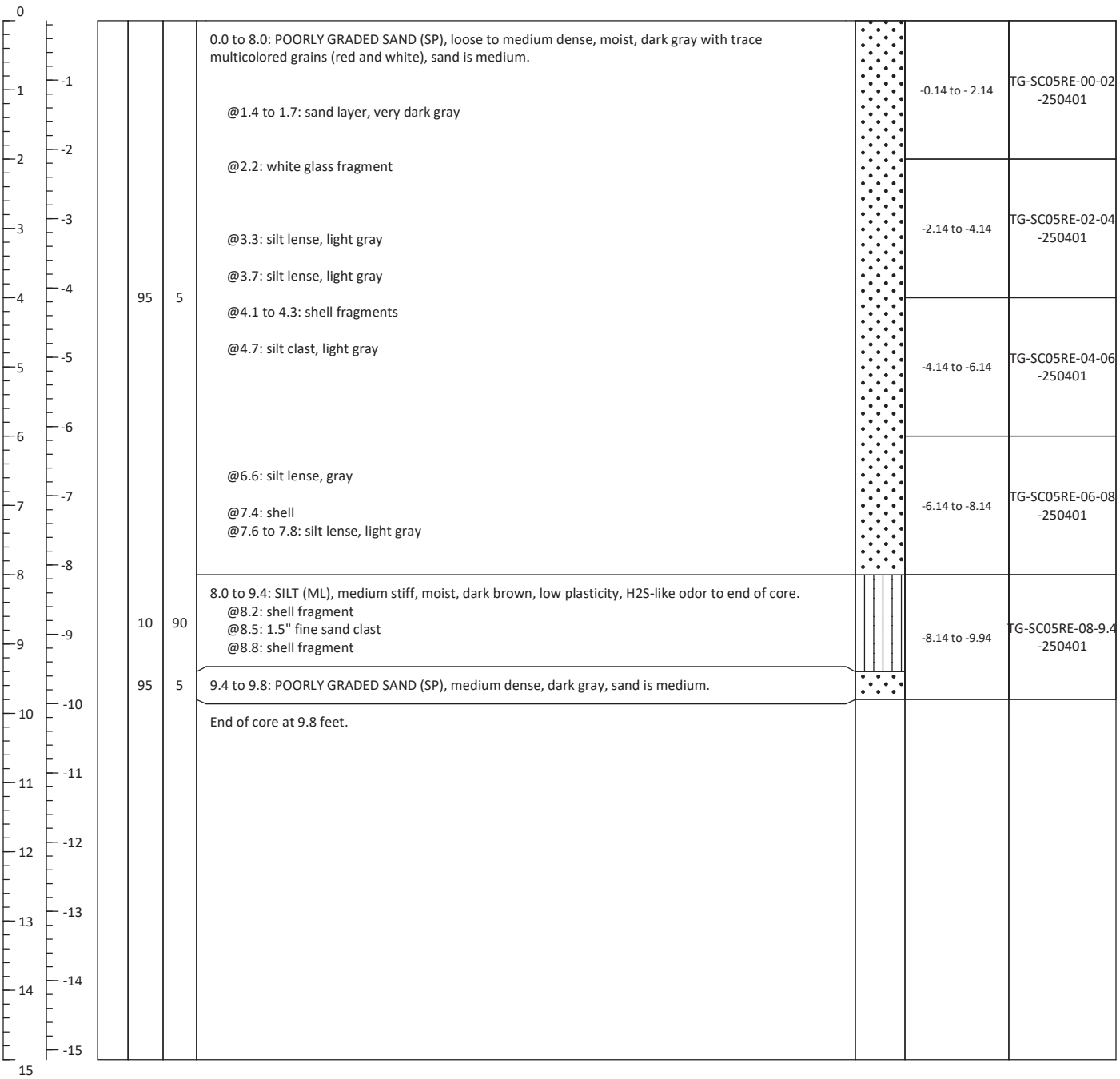
ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Sample TG-SC05-00-1.6-241113 (0 to 1.6 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC05RE

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712454.66**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168779.01**
Client: **Port of Tacoma**	Drive Length (feet): **14**	Mudline Elevation (feet): **-0.14 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **9.8**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **70**	Core Collection Date/Time: **4/1/2025 08:49**



In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0.0	-0.14				0.0 to 8.0: POORLY GRADED SAND (SP), loose to medium dense, moist, dark gray with trace multicolored grains (red and white), sand is medium. @1.4 to 1.7: sand layer, very dark gray @2.2: white glass fragment		-0.14 to - 2.14	TG-SC05RE-00-02 -250401
2.0	-2.14				@3.3: silt lense, light gray @3.7: silt lense, light gray		-2.14 to -4.14	TG-SC05RE-02-04 -250401
4.0	-4.14		95	5	@4.1 to 4.3: shell fragments @4.7: silt clast, light gray		-4.14 to -6.14	TG-SC05RE-04-06 -250401
6.0	-6.14				@6.6: silt lense, gray @7.4: shell @7.6 to 7.8: silt lense, light gray		-6.14 to -8.14	TG-SC05RE-06-08 -250401
8.0	-8.14		10	90	8.0 to 9.4: SILT (ML), medium stiff, moist, dark brown, low plasticity, H2S-like odor to end of core. @8.2: shell fragment @8.5: 1.5" fine sand clast @8.8: shell fragment		-8.14 to -9.94	TG-SC05RE-08-9.4 -250401
9.4	-9.94		95	5	9.4 to 9.8: POORLY GRADED SAND (SP), medium dense, dark gray, sand is medium.			
9.8	-10.08				End of core at 9.8 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.

Sediment Core Log

TG-SC06

Project: **Tru-Grit Sediment Characterization**	Logged By: **Ry Pearson**	Latitude: **712371.62**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168845.29**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-11.24 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **7**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **87**	Core Collection Date/Time: **11/8/2024 10:55**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1	-11.24 to -12	15	15	70	0 to 1.2: SANDY SILT WITH GRAVEL (ML), soft, wet, black gray, non-plastic, sand is fine to medium, gravel is fine. @0.6: grades from soft to medium stiff @1: rainbow sheen bleb		-11.24 to -13.24	TG-SC06-00-02-241108
1 to 2	-12 to -13		95	5	1.2 to 2.7: POORLY GRADED SAND (SP), medium dense, moist, dark gray, sand is fine, trace H2S-like oder.			
2 to 5	-13 to -16			100	2.7 to 7: CLAY (CL), soft, moist, tan, non-plastic, trace wood fibers, moderate to strong H2S-like odor. @2.7: shell fragment		-13.24 to -15.24	TG-SC06-02-04-241108
5 to 6	-16 to -17						-15.24 to -17.24	TG-SC06-04-06-241108
6 to 7	-17 to -18				@6: grades to trace wood fibers		-17.24 to -18.24	TG-SC06-06-07-241108
7 to 15	-18 to -26				End of core at 7.0 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Samples TG-SC06-1.5-2.7-241108 (1.5 to 2.7 feet) and TG-SC06-3.1-06-241108 (3.1 to 6 feet) taken and tested for grain size distribution.
Samples TG-SC06-3.1-06-241108 (3.1 to 6 feet) taken and tested for Atterberg limits.

Sediment Core Log

TG-SC07

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712767.11**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168359.21**
Client: **Port of Tacoma**	Drive Length (feet): **6.8**	Mudline Elevation (feet): **-18.96 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **5.9**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **86**	Core Collection Date/Time: **11/13/2024 10:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 3.6	-18.96 to -22.96	10	10	80	0 to 3.6: SILT (ML), soft, wet, black, non-plastic, sand is fine, fine to coarse gravel, moderate shell hash throughout. @0.0 to 0.4: subrounded fine gravel @0.4: 2.5" shell @3.3 to 3.6: 4 pieces of coarse subrounded gravel		-18.96 to -20.96	TG-SC07-00-02-241113
							-20.96 to -22.96	TG-SC07-02-04-241113
3.6 to 5.9	-22.96 to -24.96		60	40	3.6 to 5.9: SILTY SAND (SM), medium dense, wet, light gray, sand is fine. @3.9 to 4.5: laminations of silt and fine sand @5.4: 4" stick, brown		-22.96 to -24.96	TG-SC07-04-5.9-241113
					End of core at 5.9 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC07-00-3.6-241113 (0 to 3.6 feet) and TG-SC07-3.6-5.9-241113 (3.6 to 5.9 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC08

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712691.57**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168463.08**
Client: **Port of Tacoma**	Drive Length (feet): **7.9**	Mudline Elevation (feet): **-25.3 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **75**	Core Collection Date/Time: **11/14/2024 08:20**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-25.3		5	95	0 to 4.9: SILT (ML), soft, wet, very dark gray, non-plastic. @0 to 0.9: trace shell debris @1.3: 2.5" concrete chunk @1.7: 2" wood chunk @1.9: glass bottle top @2.1: wood debris, brown		-25.3 to -27.3	TG-SC08-00-02-241114
2	-27.3						-27.3 to -29.3	TG-SC08-02-04-241114
4	-29.3		95	5	4.9 to 6.0: POORLY GRADED SAND (SP), medium dense, wet, dark gray with trace multicolored grains (red and white), sand is fine to medium. @5.1 to 5.4: trace wood debris @5.1: clay pocket, tan @5.4: clay pocket, tan		-29.3 to -31.3	TG-SC08-04-06-241114
6	-31.3				End of core at 6.0 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC08-00-4.9-241114 (0 to 4.9 feet) and TG-SC08-4.9-06-241114 (4.9 to 6 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC09

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712596.74**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168550.16**
Client: **Port of Tacoma**	Drive Length (feet): **7.9**	Mudline Elevation (feet): **-26.43 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6.7**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **84**	Core Collection Date/Time: **11/13/2024 08:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-26.43				0 to 5.8: SILT (ML), soft, wet, dark gray, non-plastic. @0.4 to 1.8: wood chunks throughout		-26.43 to -28.43	TG-SC09-00-02-241113
1	-27							
2	-28				@2.3: clay pocket, light gray @2.5: clay pocket, light gray		-28.43 to -30.43	TG-SC09-02-04-241113
3	-29		5	95				
4	-30				@3.5 to 3.8: clay pocket with wood fragments, light tan			
5	-31				@4.0 to 4.3: medium sand layer @4.4 to 5.6: silty clay layer with fine sand, light gray		-30.43 to -32.43	TG-SC09-04-06-241113
6	-32				@5.1: shell hash, white			
7	-33		95	5	5.8 to 6.7: POORLY GRADED SAND (SP), dense, wet, dark gray with trace multicolored grains (red and white), sand is fine. @6.2: shell debris, white		-32.43 to -33.13	TG-SC09-06-6.7-241113
8	-34				End of core at 6.7 feet.			
9	-35							
10	-36							
11	-37							
12	-38							
13	-39							
14	-40							
15	-41							

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC09-00-5.8-241113 (0 to 5.8 feet) and TG-SC09-5.8-6.7-241113 (5.8 to 6.7 feet) taken and tested for grain size distribution.
Sample TG-SC09-4.4-5.8-241113 (4.4 to 5.8 feet) taken and tested for Atterberg limits.

Sediment Core Log

TG-SC09RE

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712592.18**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168547.81**
Client: **Port of Tacoma**	Drive Length (feet): **14**	Mudline Elevation (feet): **-26.53 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **12.4**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **89**	Core Collection Date/Time: **3/27/2025 12:04**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-27		5	95	0.0 to 2.6: SILT (ML), soft, moist, dark gray, low plasticit , trace roots throughout. @2.0: silt clast, olive gray		-26.53 to -28.53	TG-SC09RE-00-02-250327
2	-29		85	15	2.6 to 4.1: SILTY SAND (SM), loose, moist, dark gray, sand is fine. @3.8: silt clast, yellow-brown		-28.53 to -30.53	TG-SC09RE-02-04-250327
4	-31		5	95	4.1 to 5.8: SILT (ML), soft to medium stiff, moist, yellow-brown to 5.0', low plasticity, trace organic debris to 5.0'. @4.2 to 4.3: silt lense, dark gray @5.0: silt transitions to light gray		-30.53 to -32.53	TG-SC09RE-04-06-250327
6	-33		95	5	5.8 to 6.9: POORLY GRADED SAND (SP), dark gray, sand is medium.		-32.53 to -34.53	TG-SC09RE-06-08-250327
7	-34		5	95	6.9 to 8.3: SILT (ML), soft to medium stiff, moist, yellow-brown to 5.0', low plasticity. @6.7: moderate to abundant wood debris (sticks and bark)			
8	-35		95	5	8.3 to 9.4: POORLY GRADED SAND (SP), dark gray, sand is medium.		-34.53 to -36.53	TG-SC09RE-08-10-250327
9	-36		5	95	9.4 to 10.6: SILT (ML), soft to medium stiff, moist, yellow-brown to 5.0', low plasticity. @10.0 to 10.2: fine sand layer, dark gray			
11	-38		80	20	10.6 to 12.0: SILTY SAND (SM): medium dense, moist, dark gray, sand is fine. @11.1 to 11.2: trace shell fragments		-36.53 to -38.53	TG-SC09RE-10-12-250327
12	-39				End of core at 12.0 feet.			
15	-41							

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC10

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712514.63**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1162646.82**
Client: **Port of Tacoma**	Drive Length (feet): **7.2**	Mudline Elevation (feet): **-19.27 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **5.2**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **72**	Core Collection Date/Time: **11/12/2024 12:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 5.2	-19.27 to -24.47	10	10	80	0 to 5.2: SILT (ML), medium stiff, wet, very dark gray, non-plastic, sand is fine, gravel is fine, moderate shell debris, trace metalic-like shavings, trace root fibers. @0.5: subrounded cobble @.2.2: 1" subrounded coarse gravel peice @2.7 to 2.9: fine to coarse gravel layer @3.1: clay layer with wood chunks, tan @3.6 to 3.9: wood chunks @3.9 to 5.2: trace wood chunks @4.5: 1" subrounded coarse gravel piece @5.1: 1" clay pocket		-19.27 to -21.27	TG-SC10-00-02-241112
							-21.27 to -23.27	TG-SC10-02-04-241112
							-23.27 to -24.47	TG-SC10-04-5.2-241112
					End of core at 5.2 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Sample TG-SC10-00-5.2-241112 (0 to 5.2 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC10RE

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712504.21**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168649.95**
Client: **Port of Tacoma**	Drive Length (feet): **14**	Mudline Elevation (feet): **-19.28 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **7.3**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **52**	Core Collection Date/Time: **3/28/2025 12:35**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 2.1	-19.28 to -21.28		10	90	0 to 2.1: SILT (ML), soft, moist, dark gray, low plasticity, abundant shell debris to 1.9'.		-19.28 to -21.28	TG-SC10RE-00-02-250328
2.1 to 7.3	-21.28 to -23.28		90	10	2.1 to 7.3: POORLY GRADED SAND WITH SILT (SP-SM), medium dense, moist, dark gray, sand is medium. @2.8: 3"x2" plastic piece, black @2.9 to 3.4: silt layer, gray to dark gray @4.1 to 4.3: silt layer, and shell fragment @4.5 to 4.8: silt layer @6.1 to 6.2: silt layer @6.8: shell fragment @6.9 to 7.3: woody debris, bark		-21.28 to -23.28	TG-SC10RE-02-04-250328
	-23.28 to -25.28						-23.28 to -25.28	TG-SC10RE-04-06-250328
	-25.28 to -26.58						-25.28 to -26.58	TG-SC10RE-06-6.9-250328
7.3	-26.58				End of core at 7.3 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC11

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712411.84**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168739.86**
Client: **Port of Tacoma**	Drive Length (feet): **6**	Mudline Elevation (feet): **-18.14 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **4.4**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **73**	Core Collection Date/Time: **11/11/2024 9:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1	-19 to -20		10	90	0 to 1.9: SILT (ML), soft, wet, dark gray, non-plastic, sand is fine, trace shell debris. @1.6: wood fragment		-18.14 to -20.14	TG-SC11-00-02-241111
2 to 4	-20 to -22		95	5	1.9 to 4.4: POORLY GRADED SAND (SP), dense, wet, gray with multicolored grains (red and white), sand is fine to medium. @2.3: silt layer, light gray @3.8: wood fragments @4.1: wood fragments		-20.14 to -22.58	TG-SC11-02-4.4-241111
					End of core at 4.4 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC11-00-02-241111 (0 to 2 feet) and TG-SC11-02-4.4-241111 (2 to 4.4 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC11RE

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712425.22**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168728.15**
Client: **Port of Tacoma**	Drive Length (feet): **14**	Mudline Elevation (feet): **-17.65 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **11.6**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **83**	Core Collection Date/Time: **3/27/2025 14:22**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0–6	-18 to -23		10	90	0.0 to 6.0: SILT (ML), soft, moist, dark gray, low plasticity. @0.0 to 1.4: abundant shell debris @1.4 to 3.4: moderate shell debris @3.8: 3.5"x2" plastic or wood fragments, black and brown @4.0 to 4.4: fine sand layer, dark gray @4.5: silt layer, light gray		-17.65 -19.65	TG-SC11RE-00-02-250327
							-19.65 to -21.65	TG-SC11RE-02-04-250327
							-21.65 to -23.65	TG-SC11RE-04-06-250327
6–11.3	-23 to -28		90	10	6.0 to 11.3: POORLY GRADED SAND WITH SILT (SP-SM), loose to medium dense, moist, dark gray, sand is fine. @6.0: shell fragment @6.7: silt lense, light gray @8.8 to 9.1: silt lense, light gray @8.9: shell fragment @9.9 to 10.2: silt layer, light gray @10.2: shell fragments @10.8: shell fragments @11.1: silt clast, light gray		-23.65 to -25.65	TG-SC11RE-06-08-250327
							-25.65 to -27.65	TG-SC11RE-08-10-250327
							-27.65 t0 -27.95	TG-SC11RE-10-11.3-250327
11.3–15	-28 to -32				End of core at 11.3 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC12

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712329.32**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168829.62**
Client: **Port of Tacoma**	Drive Length (feet): **5**	Mudline Elevation (feet): **-20.33 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **5**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **100**	Core Collection Date/Time: **11/11/2024 10:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-20.33		20	80	0 to 0.9: SILT WITH SAND (ML), soft, wet, dark gray, non-plastic, sand is fine. @0.4: one piece, coarse gravel			
1	-21						-20.33 to -22.33	TG-SC12-00-02-241111
2	-22				0.9 to 4.5: POORLY GRADED SAND (SP), dense, wet, dark gray with multicolored grains (red and white), sand is fine. @1.3: trace shell debris @1.6: plastic bag debris			
3	-23		95	5			-22.33 to -24.83	TG-SC12-02-4.5-241111
4	-24				@3.2: shell debris			
5	-25				End of core at 4.5 feet.			
6	-26							
7	-27							
8	-28							
9	-29							
10	-30							
11	-31							
12	-32							
13	-33							
14	-34							
15	-35							

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC12-00-0.9-241111 (0 to 0.9 feet) and TG-SC12-0.9-4.5-241111 (0,9 to 4.5 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC12RE

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712339.01**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168828.17**
Client: **Port of Tacoma**	Drive Length (feet): **12.4**	Mudline Elevation (feet): **-18.48 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **11.6**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **94**	Core Collection Date/Time: **3/28/2025 11:00**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1	-19 to -20		20	80	0 to 1.9: SILT WITH SAND (ML), soft, moist, dark gray, grades to darker with depth, low plasticity, roots and shell fragments throughtout.		-18.48 to -20.48	TG-SC12RE-00-02-250328
2 to 3	-21 to -22		85	15	1.9 to 4.3: SILTY SAND (SM), medium dense, moist, dark gray, sand is fine to medium. @2.1 to 2.5: grit-like material, very dark gray @4.1: shell fragments		-20.48 to -22.48	TG-SC12RE-02-04-250328
4 to 5	-23 to -24		25	75	4.3 to 6.2: SILT WITH SAND (ML), medium stiff, moist, gray, low plasticity. @4.6: shell fragment @4.9: silt clast, light gray @5.9 to 6.2: fine sand layer		-22.48 to -24.48	TG-SC12RE-04-06-250328
6 to 7	-25 to -26		5	95	6.2 to 9.0: SILT (ML), medium stiff, moist, light gray, low plasticity. @6.8 to 9.0: trace roots		-24.48 to -26.48	TG-SC12RE-06-08-250328
8 to 9	-27 to -28		95	5	9.0 to 11.6: POORLY GRADED SAND (SP), medium dense, moist, dark gray, sand is medium. @9.6: silt clast, light gray		-26.48 to -28.48	TG-SC12RE-08-10-250328
10 to 11	-29 to -30						-28.48 to -30.08	TG-SC12RE-10-11.6-250328
12 to 13	-31 to -32				End of core at 11.6 feet.			
14 to 15	-33							

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC13

Sheet 1 of 1

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712727.26**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168332.41**
Client: **Port of Tacoma**	Drive Length (feet): **3.6**	Mudline Elevation (feet): **-34.24 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **3.3**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **91**	Core Collection Date/Time: **11/13/2024 14:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1	-35 to -36		15	85	0 to 1.9: SILT WITH SAND (ML), very soft, wet, gray with dark gray mottling, non-plastic, sand is fine. @1.8: 1.5" concrete chunk		-34.24 to -36.24	TG-SC13-00-02 -241113
2 to 3	-36 to -37		90	10	1.9 to 3.3: POORLY GRADED SAND WITH SILT (SP-SM), loose, wet, dark gray, sand is fine, trace shell debris. @2.9 to 3.2: one 2" concrete chunk with smaller 0.5" to 1" concrete chunks		-36.24 to -37.54	TG-SC13-02-3.3 -241113
3 to 15	-37 to -49				End of core at 3.3 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC13-00-1.9-241113 (0 to 1.9 feet) and TG-SC13-1.9-3.3-241113 (1.9 to 3.3 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC14

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712643.01**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168418.29**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-28.96 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6.1**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **76**	Core Collection Date/Time: **11/14/2024 09:10**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 6.1	-29 to -35.06		80 5	20 95	0 to 3.6: SILTY SAND (SM), very soft, wet, gray with trace red grains, sand is fine, trace shell debris. @2.1: one piece of coarse gravel @2.4: one piece of coarse gravel @3.0 to 3.3: root-like fibers		-28.96 to -30.96	TG-SC14-00-02-241114
							-30.96 to -32.96	TG-SC14-02-04-241114
					3.6 to 6.1: LEAN CLAY (CL), soft, wet, tan, low plasticity, trace wood debris.		-32.96 to -35.06	TG-SC14-04-6.1-241114
					End of core at 6.1 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC14-00-3.6-241114 (0 to 3.6 feet) and TG-SC14-4.9-06-241114 (4.1 to 6.1 feet) taken and tested for grain size distribution.
Sample TG-SC14-4.1-6.1-241114 (4.1 to 6.1 feet) taken and tested for Atterberg limits.

Sediment Core Log

TG-SC15

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712550.13**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168507.69**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-32.1 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **3.2**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **40**	Core Collection Date/Time: **11/13/2024 14:05**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 2	-33 to -34		80	20	0 to 1.9: SILTY SAND (SM), very loose, wet, dark gray, sand is fine to medium, trace rainbow and gray sheen-like spots.		-32.1 to -34.1	TG-SC15-00-02 -241113
2 to 3.2	-34 to -35.2		95	5	1.9 to 3.2: POORLY GRADED SAND (SP), dense, wet, very dark gray with trace multicolored grains (red and white), sand is fine to medium, trace shell debris. @2.1 to 3.0: flat metal peice with concrete on both ends @2.4 to 2.7: 2" subrounded gravel @2.9: silt lense, gray		-34.1 to -35.3	TG-SC15-02-3.2 -241113
					End of core at 3.2 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC15-00-1.9-241113 (0 to 1.9 feet) and TG-SC15-1.9-3.2-241113 (1.9 to 3.2 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC15RE

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712550.48**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168509.47**
Client: **Port of Tacoma**	Drive Length (feet): **12.5**	Mudline Elevation (feet): **-31.36 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **11.2**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **90**	Core Collection Date/Time: **3/28/2025 08:30**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-31.36		25	75	0.0 to 2.9: SILT WITH SAND (ML), soft, very moist to moist, dark gray, low plasticity, trace shell debris throughout. @2.1 to 2.9: grit-like material, coarse, very dark gray, sharp grains, slight sheen		-31.36 to -33.36	TG-SC15RE-00-02-250328
2.9	-34.26		95	5	2.9 to 5.1: POORLY GRADED SAND (SP), medium dense, moist, dark gray, sand is medium. @3.0 & 3.2: silt lenses, light gray		-33.36 to -35.36	TG-SC15RE-02-04-250328
5.1	-36.26		5	95	5.1 to 8.1: SILT (ML), medium stiff, moist, light gray, low plasticity. @5.4 to 5.5: fine sand layer, gray @5.9 to 6.5: fine sand, gray @7.2: intact clam shells, and shell fragments		-35.36 to -37.36	TG-SC15RE-04-06-250328
8.1	-39.26		85	15	8.1 to 10.6: SILTY SAND (SM), medium dense, moist, dark gray, sand is fine, trace clam shells and shell debris throughout.		-37.36 to -39.36	TG-SC15RE-06-08-250328
10.6	-41.76		95	5	10.6 to 11.2: POORLY GRADED SAND (SP), medium dense, moist, dark gray, sand is medium. @10.7: silt lense, light gray @11.0: silt clast, light gray		-39.36 to -41.36	TG-SC15RE-08-10-250328
11.2	-42.56				End of core at 11.2 feet.		-41.36 to -42.56	TG-SC15RE-10-10.9-250328
15	-46.36							

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC16

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712458.18**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168611.80**
Client: **Port of Tacoma**	Drive Length (feet): **6.5**	Mudline Elevation (feet): **-34.4 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **5.4**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **83**	Core Collection Date/Time: **11/14/2024 10:00**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-34.4		10	90	0.0 to 1.1: SILT (ML), very loose, wet, dark gray, non-plastic, sand is fine.		-34.4 to -36.4	TG-SC16-00-02-241114
1	-35		5	95	1.1 to 2.1: CLAY (CL), loose, wet, tan, low plasticity, sand is fine, trace shredded wood chunks.			
2	-36		95	5	2.1 to 2.6: POORLY GRADED SAND (SP). medium dense, wet, dark gray, sand is fine. @2.2: 1" clay pocket @2.4: 1" clay pocket		-36.4 to -38.4	TG-SC16-02-04-241114
3	-37		5	95	2.6 to 3.6: CLAY (CL), medium siff, wet, light gray, low plasticity, sand is fine. @3.3: 0.5" fine sand pocket			
4	-38		95	5	3.6 to 4.6: POORLY GRADED SAND (SP), dense, wet, dark gray, sand is fine to medium. @4.1: 0.5" clay pocket		-38.4 to -39.8	TG-SC16-04-5.4-241114
5	-39		10	90	4.6 to 5.1: CLAY (CL), medium stiff, wet, tan, low plasticity, sand is fine.			
6	-40		95	5	5.1 to 5.4: POORLY GRADED SAND (SP), dense, wet, dark gray, sand is fine to medium, trace shell debris.			
7	-41				End of core at 5.4 feet.			
8	-42							
9	-43							
10	-44							
11	-45							
12	-46							
13	-47							
14	-48							
15	-49							

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC16-00-02-241114 (0 to 2 feet) TG-SC16-03-05-241114 (3 to 5 feet) taken and tested for grain size distribution.
Sample TG-SC16-2.6-3.6-241114 (2.6 to 3.6 feet) taken and tested for Atterberg limits.

Sediment Core Log

TG-SC17

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712380.55**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168696.21**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-36.0 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6.2**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **77**	Core Collection Date/Time: **11/14/2024**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-36		10	90	0.0 to 4.2: SILT (ML), very loose, wet, dark gray, non-plastic, sand is fine. @2.1: trace shell hash		-36.0 to - 38.0	TG-SC17-00-02 -241114
4	-40						-38.0 to -40.0	TG-SC17-02-04 -241114
5	-41		95	5	4.2 to 6.2: POORLY GRADED SAND (SP), loose, wet, gray with multicolored grains (red and white), sand is fine to medium, trace shell debris. @5.6 to 6.2: grades to medium dense		-40.0 to -42.2	TG-SC17-04-6.2 -241114
6	-42				End of core at 6.2 feet.			
15	-51							

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC17-00-4.2-241114 (0 to 4.2 feet) and TG-SC17-4.2-6.2-241114 (4.2 to 6.2 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC18

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712283.28**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168785.78**
Client: **Port of Tacoma**	Drive Length (feet): **10.9**	Mudline Elevation (feet): **-35.64 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **9.9**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **90**	Core Collection Date/Time: **11/1/2024 11:35**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-36		5	95	0.0 to 4.0: SILT (ML), very soft, wet, dark gray, non-plastic, sand is fine.		-35.64 to -37.64	TG-SC18-00-02-241101
1	-37							
2	-38						-37.64 to -39,64	TG-SC18-02-04-241101
3	-39				@3.1-3.3: clay layer, light gray @3.3 to 3.7: fine sand layer with red and white grains @3.7 to 3.9: clay layer, light gray			
4	-40				4.0 to 9.9: POORLY GRADED SAND (SP), dense, wet, dark gray with multicolored grains (red and white), sand is fine to medium, trace shell debris.		-39.64 to -41.64	TG-SC18-04-06-241101
5	-41							
6	-42				@6.1: 0.5" shell, white		-41.64 to -43.64	TG-SC18-06-08-241101
7	-43		95	5	@6.7: 0.5" shell, white @7.2: 1.0" shell, white			
8	-44				@8.0: 1" to 2" shells, white		-43.64 to -45.54	TG-SC18-08-9.9-241101
9	-45							
10	-46				End of core at 9.9 feet.			
11	-47							
12	-48							
13	-49							
14	-50							
15								

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC18-00-02-241101 (0 to 2 feet) and TG-SC18-06-08-241101 (6 to 8 feet) taken and tested for grain size distribution.
Sample TG-SC18-03-04-241101 (3 to 4 feet) taken and tested for Atterberg limits.

Sediment Core Log

TG-SC19

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712691.87**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168287.19**
Client: **Port of Tacoma**	Drive Length (feet): **9**	Mudline Elevation (feet): **-49.76 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **5.4**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **60**	Core Collection Date/Time: **11/12/2024 14:15**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-50		5	95	0.0 to 2.6: SILT (ML), very soft, wet, dark gray with black mottling, non-plastic, sand is fine. @0.0 to 5.4: mild H2S-like odor throughout @1.1: one stick @2.5: wood chunk		-49.76 to -51.76	TG-SC19-00-02-241112
2.6	-52.6		95	5	2.6 to 5.4: POORLY GRADED SAND (SP), loose, wet, gray with trace multicolored grains (red and white), sand is fine to medium, trace shell debris. @2.9: wood debris		-51.76 to -53.76	TG-SC19-02-04-241112
5.4	-55.4				End of core at 5.4 feet.		-53.76 to -55.16	TG-SC19-04-5.4-241112

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC19-00-2.6-241112 (0 to 2.6 feet) and TG-SC19-2.6-6.4-241112 (2.6 to 5.4 feet) taken and tested for grain size distribution.
Samples TG-SC19-2.6-5.4-241112 (2.6 to 5.4 feet) taken and tested for Atterberg limits.

Sediment Core Log

TG-SC20

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712597.36**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168378.61**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-49.89 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **4.8**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **60**	Core Collection Date/Time: **11/14/2024 12:20**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 2.1	-49.89 to -51.89		10	90	0.0 to 2.1: SILT (ML), soft, wet, dark gray, non-plastic, sand is fine. @0.0 to 0.5: trace medium sand, white @1.1: bark chunk @1.5: shell debris		-49.89 to -51.89	TG-SC20-00-02-241114
2.1 to 4.8	-51.89 to -54.69		90	10	2.1 to 4.8: POORLY GRADED SAND WITH SILT (SP-SM), loose, wet, dark gray, sand is fine to medium. @3.5 to 4.8: grades to medium dense @4.2: trace medium sand lense, white		-51.89 to -53.89	TG-SC20-02-04-241114
							-53.89 to -54.69	TG-SC20-04-4.8-241114
					End of core at 4.8 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC20-00-2.1-241114 (0 to 2.1 feet) and TG-SC20-2.1-4.8-241114 (2.1 to 4.8 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC21

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712521.37**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168483.16**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-49.65 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **75**	Core Collection Date/Time: **11/13/2024 11:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 4	-50 to -54		5	95	0.0 to 3.8: SILT (ML), soft, wet, dark gray with very dark gray mottling, low plasticity, sand is fine.		-49.65 -51.65	TG-SC21-00-02-241113
							-51.65 to -53.65	TG-SC21-02-04-241113
4 to 6	-54 to -56		95	5	3.8 to 6.0: POORLY GRADED SAND (SP), medium dense, wet, dark gray with multicolored grains (red and white), sand is fine. @4.5: 0.5" silt pocket		-53.65 to -55.65	TG-SC21-04-06-241113
6 to 15	-56 to -64				End of core at 6.0 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC21-00-3.8-241113 (0 to 3.8 feet) and TG-SC21-3.8-06-241113 (3.8 to 06 feet) taken and tested for grain size distribution.
Sample TG-SC21-00-02-241113 (0 to 2 feet) taken and tested for Atterberg limits.

Sediment Core Log
TG-SC22

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712422.35**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168563.30**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-50.3 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6.8**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **85**	Core Collection Date/Time: **11/14/2024 12:50**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1	-50.3 to -51.3		10	90	0.0 to 1.9: SILT (ML), soft, wet, dark gray, non-plastic, sand is fine.		-50.3 to -52.3	TG-SC22-00-02-241114
1 to 3	-51.3 to -53.3		95	5	1.9 to 6.8: POORLY GRADED SAND (SP), medium dense, wet, gray, sand is fine. @2: wood fragments @2.1 to 5.2: trace medium sand, white		-52.3 to -54.3	TG-SC22-02-04-241114
3 to 5	-53.3 to -55.3				@4.7: trace wood fragments		-54.3 to -56.3	TG-SC22-04-06-241114
5 to 6	-55.3 to -56.3				@5.1 to 5.3: trace wood fragments @4.9: 2" wood chunk, brown			
6 to 6.8	-56.3 to -57.1				@6.1: shell debris, white		-56.3 to -57.1	TG-SC22-06-6.8-241114
6.8	-57.1				End of core at 6.8 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC22-00-1.9-241114 (0 to 1.9 feet) and TG-SC22-1.9-5.8-241114 (1.9 to 5.8 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC23

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712330.16**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168657.10**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-50.14 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **5.5**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **68**	Core Collection Date/Time: **11/13/2024 13:05**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 4	-50.14 to -54.14		5	95	0.0 to 3.9: SILT (ML), very soft, wet, dark gray, non-plastic, sand is fine. @2.9 to 3.9: grades to light gray		-50.14 to -52.14	TG-SC23-00-02-241113
							-52.14 to -54.14	TG-SC23-02-04-241113
4 to 5.5	-54.14 to -55.64		95	5	3.9 to 5.5: POORLY GRADED SAND (SP). dense, wet, dark gray with trace multicolored grains (red and white), sand is fine.		-54.14 to -55.64	TG-SC23-04-5.5-241113
5.5	-55.64				End of core at 5.5 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC23-00-3.9-241113 (0 to 3.9 feet) and TG-SC23-3.9-5.5-241113 (3.9 to 5.5 feet) taken and tested for grain size distribution.
Sample TG-SC23-2.9-3.9-241113 (2.9 to 3.9 feet) taken and tested for Atterberg limits.

Sediment Core Log

TG-SC24

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712248.08**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168741.59**
Client: **Port of Tacoma**	Drive Length (feet): **12**	Mudline Elevation (feet): **-50.61 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **11.2**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **93**	Core Collection Date/Time: **10/28/2024 11:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 2.6	-50.61 to -53.21		5	95	0.0 to 2.6: SILT (ML): very soft, wet, gray, non-plastic, sand is fine.		-50.61 to -52.61	TG-SC24-00-02-241028
2.6 to 8.0	-53.21 to -58.61		95	5	2.6 to 8.0: POORLY GRADED SAND (SP), medium dense, wet, gray with trace multicolored grains (red and white), sand is fine to medium. @6.8 to 7.0: two pieces of subrounded coarse gravel		-52.61 to -54.61	TG-SC24-02-04-241028
							-54.61 to -56.61	TG-SC24-04-06-241028
							-56.61 to -58.61	TG-SC24-06-08-241028
8.0 to 11.2	-58.61 to -61.81		80	20	8.0 to 11.2: SILTY SAND (SM), medium dense, wet, gray with trace white grains, sand is fine to medium, layers of fines throughout. @8.3: silt pocket, gray @8.9 to 9.1: silt layer, gray @10.4 to 10.5: silt pocket, gray		-58.61 to -60.61	TG-SC24-08-10-241028
							-60.61 to -61.81	TG-SC24-10-11.2-241028
11.2	-61.81				End of core at 11.2 feet.			

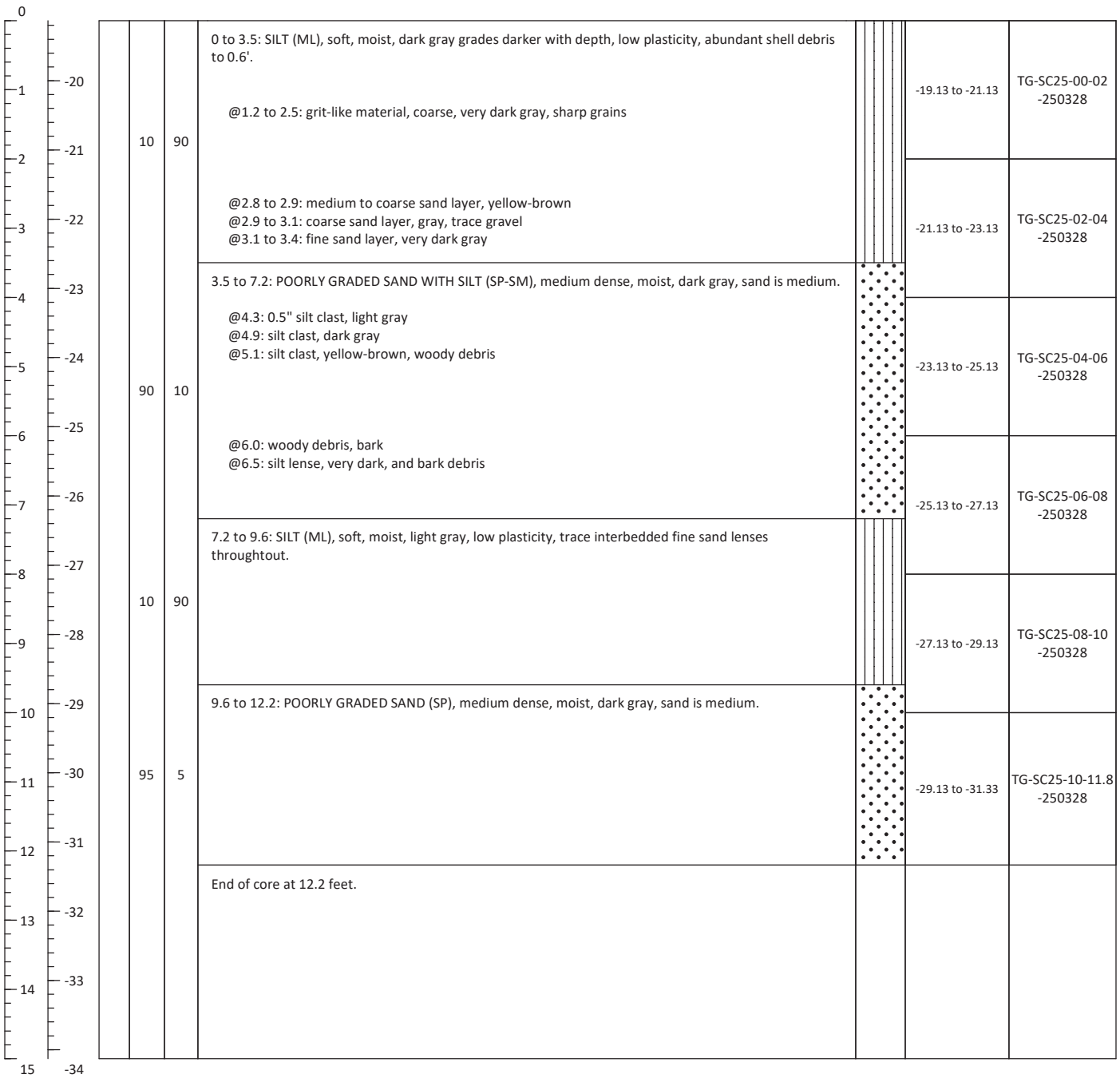
ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples TG-SC24-02-04-241028 (2 to 4 feet) and TG-SC24-06-08-241028 (6 to 8 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC25

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712237.89**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168921.79**
Client: **Port of Tacoma**	Drive Length (feet): **14**	Mudline Elevation (feet): **-19.13 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **12.2**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **87**	Core Collection Date/Time: **3/28/2025 14:15**



In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 2	-19.13 to -21.13		10	90	0 to 3.5: SILT (ML), soft, moist, dark gray grades darker with depth, low plasticity, abundant shell debris to 0.6'. @1.2 to 2.5: grit-like material, coarse, very dark gray, sharp grains		-19.13 to -21.13	TG-SC25-00-02 -250328
2 to 4	-21.13 to -23.13				@2.8 to 2.9: medium to coarse sand layer, yellow-brown @2.9 to 3.1: coarse sand layer, gray, trace gravel @3.1 to 3.4: fine sand layer, very dark gray		-21.13 to -23.13	TG-SC25-02-04 -250328
4 to 6	-23.13 to -25.13		90	10	3.5 to 7.2: POORLY GRADED SAND WITH SILT (SP-SM), medium dense, moist, dark gray, sand is medium. @4.3: 0.5" silt clast, light gray @4.9: silt clast, dark gray @5.1: silt clast, yellow-brown, woody debris		-23.13 to -25.13	TG-SC25-04-06 -250328
6 to 7	-25.13 to -27.13				@6.0: woody debris, bark @6.5: silt lense, very dark, and bark debris		-25.13 to -27.13	TG-SC25-06-08 -250328
7 to 9	-27.13 to -29.13		10	90	7.2 to 9.6: SILT (ML), soft, moist, light gray, low plasticity, trace interbedded fine sand lenses throughtout.		-27.13 to -29.13	TG-SC25-08-10 -250328
9 to 11	-29.13 to -31.33		95	5	9.6 to 12.2: POORLY GRADED SAND (SP), medium dense, moist, dark gray, sand is medium.		-29.13 to -31.33	TG-SC25-10-11.8 -250328
11 to 12.2	-31.33 to -32.53				End of core at 12.2 feet.			

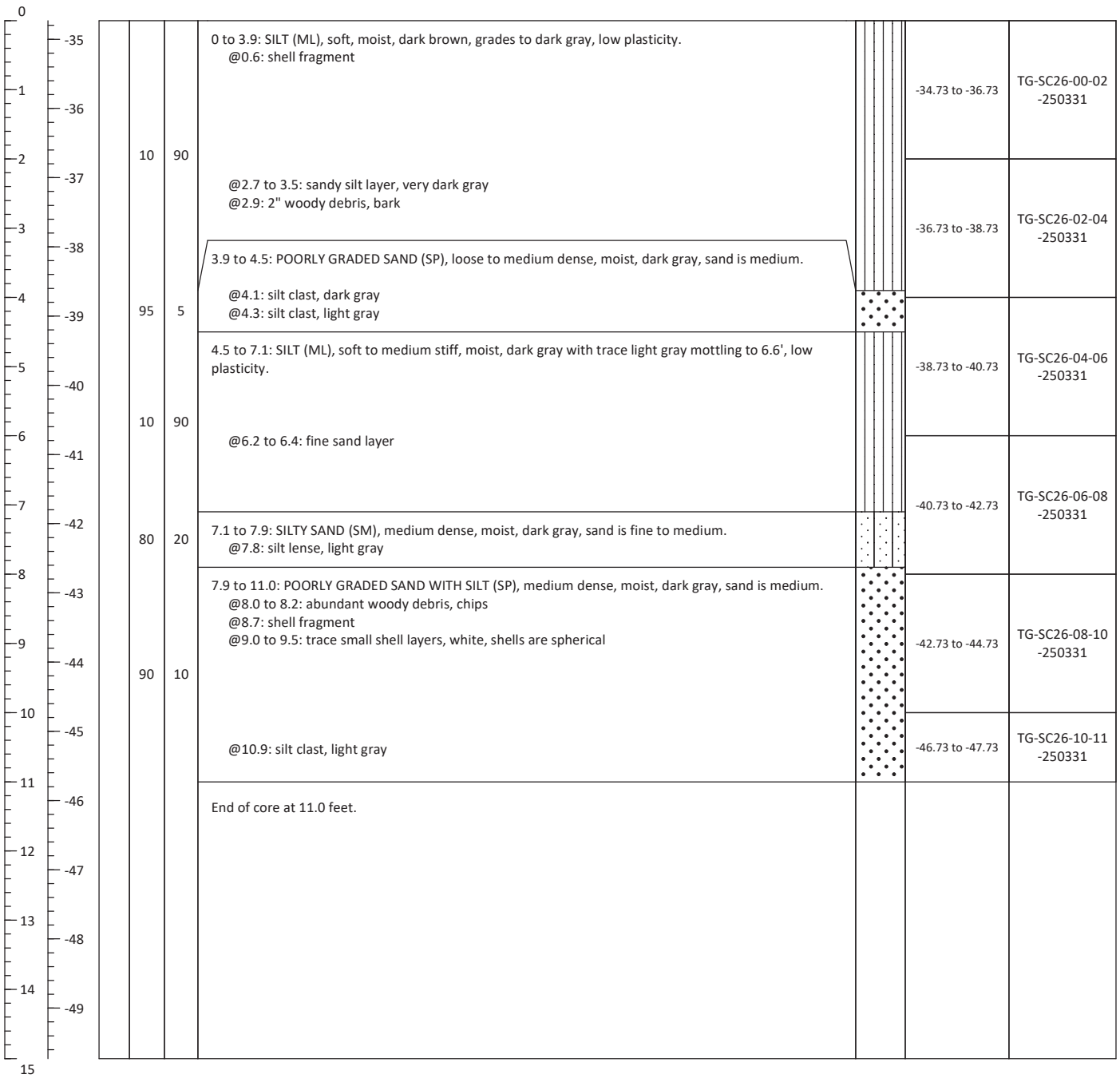
ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC26

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712198.41**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168874.40**
Client: **Port of Tacoma**	Drive Length (feet): **12.2**	Mudline Elevation (feet): **-34.73 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **11.5**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **94**	Core Collection Date/Time: **3/31/2025 09:30**



In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 4	-35 to -39		10	90	0 to 3.9: SILT (ML), soft, moist, dark brown, grades to dark gray, low plasticity. @0.6: shell fragment @2.7 to 3.5: sandy silt layer, very dark gray @2.9: 2" woody debris, bark		-34.73 to -36.73	TG-SC26-00-02-250331
							-36.73 to -38.73	TG-SC26-02-04-250331
4 to 5	-39 to -40		95	5	3.9 to 4.5: POORLY GRADED SAND (SP), loose to medium dense, moist, dark gray, sand is medium. @4.1: silt clast, dark gray @4.3: silt clast, light gray		-38.73 to -40.73	TG-SC26-04-06-250331
5 to 7	-40 to -42		10	90	4.5 to 7.1: SILT (ML), soft to medium stiff, moist, dark gray with trace light gray mottling to 6.6', low plasticity. @6.2 to 6.4: fine sand layer		-40.73 to -42.73	TG-SC26-06-08-250331
7 to 8	-42 to -43		80	20	7.1 to 7.9: SILTY SAND (SM), medium dense, moist, dark gray, sand is fine to medium. @7.8: silt lense, light gray			
8 to 11	-43 to -46		90	10	7.9 to 11.0: POORLY GRADED SAND WITH SILT (SP), medium dense, moist, dark gray, sand is medium. @8.0 to 8.2: abundant woody debris, chips @8.7: shell fragment @9.0 to 9.5: trace small shell layers, white, shells are spherical @10.9: silt clast, light gray		-42.73 to -44.73	TG-SC26-08-10-250331
							-46.73 to -47.73	TG-SC26-10-11-250331
11	-46				End of core at 11.0 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC27

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712150.46**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1169013.42**
Client: **Port of Tacoma**	Drive Length (feet): **13.9**	Mudline Elevation (feet): **-23.53 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **13.2**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **95**	Core Collection Date/Time: **5/12/2025 08:52**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-23.53		10	90	0.0 to 3.1: SILT (ML), soft, moist, dark gray with very dark gray mottling, sand is fine, non-plastic. @0.5: worm @2.8: wood debris		-23.53 to -25.53	TG-SC27-00-02-250512
3	-27		90	10	3.1 to 5.7: POORLY GRADED SAND (SP), dense, moist, dark gray with multicolored grains (red and white), sand is fine.		-25.53 to -27.53	TG-SC27-02-04-250512
5	-29						-27.53 to -29.53	TG-SC27-04-06-250512
6	-30				5.7 to 8.8: SILT (ML), soft, moist, dark gray with very dark gray mottling, sand is fine, low plasticity.		-29.53 to -31.53	TG-SC27-06-08-250512
7	-31		10	90	@7.3 to 7.7: fine sand layer @8.3 and 8.4: fine sand lense @8.7: fine sand lense			
8	-32						-31.53 to -33.53	TG-SC27-08-10-250512
9	-33				8.8 to 13.0: POORLY GRADED SAND (SP), medium dense, moist, dark gray with multicolored grains (red and white), sand is fine. @9.2: silt lense, light gray			
10	-34						-33.53 to -35.53	TG-SC27-10-12-250512
11	-35		95	5	@11.6: silt clast, olive gray @12.2: silt clast, light brown @12.4: silt clast, light gray @12.6: silt lense, light gray and one shell @12.9: silt layer			
12	-36						-35.53 to -36.53	TG-SC27-12-13-250512
13	-37				End of core at 13.0 feet.			
14	-38							
15								

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC28

Project: **Tru-Grit Sediment Characterization**	Logged By: **Arno Riolo**	Latitude: **712108.66**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168969.47**
Client: **Port of Tacoma**	Drive Length (feet): **13.9**	Mudline Elevation (feet): **-35.52 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **13.3**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **96**	Core Collection Date/Time: **5/12/2025 09:06**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-36		5	95	0.0 to 7.7: SILT (ML), soft, moist, dark gray with very gark gray mottling, sand is fine, non-plastic. @1.0: worm @2.2: shell debris @2.9: subrounded fine gravel piece @3.1 to 3.3: root debris @3.9 to 4.1: fine sand layer, dark gray with multicolored grains (red and white) @7.1: fine sand lense		-35.52 to -37.52	TG-SC28-00-02-250512
2	-38						-37.52 to -39.52	TG-SC28-02-04-250512
4	-40						-39.52 to -41.52	TG-SC28-04-06-250512
6	-42						-41.52 to -43.52	TG-SC28-06-08-250512
8	-44		95	5	7.7 to 13.3: POORLY GRADED SAND (SP), dense, moist, gray with multicolored grains (red and white), sand is fine, trace shell hash. @8.6 & 8.7: silt lense @10.5: shell lense, white @10.6: silt lense @12.3 to 13.3: moderate shell debris		-42.52 to -44.52	TG-SC28-08-10-250512
10	-46						-44.52 to -46.52	TG-SC28-10-12-250512
12	-48						-46.52 to -47.52	TG-SC28-12-13.3-250512
13	-49				End of core at 13.3 feet.			
14	-50							
15								

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC29

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712073.45**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1169094.50**
Client: **Port of Tacoma**	Drive Length (feet): **14**	Mudline Elevation (feet): **-22.5 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **12.7**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **90.7**	Core Collection Date/Time: **8/26/2025 10:00**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-22.5		10	90	0.0 to 2.3: SILT (ML), soft, moist, gray to very dark gray, low plasticity.		-22.5 to -24.5	TG-SC29-00-02 -250826
1	-23							
2	-24				@2.1: 2" silt clast, white		-24.5 to -26.5	TG-SC29-02-04 -250826
3	-25				2.3 to 12.5: POORLY GRADED SAND (SP), loose, moist, very dark gray grades to dark gray at 6.3' with multicolored grains (red and white), sand is medium.			
4	-26				@3.1 and 3.2: silt lenses, white		-26.5 to -28.5	TG-SC29-04-06 -250826
5	-27				@3.5 to 3.6: medium sand layer, whitish gray			
6	-28				@5.6: silt layer, dark gray		-28.5 to -30.5	TG-SC29-06-08 -250826
7	-29				@5.9: silt layer, dark gray			
8	-30		95	5	@6.6 to 8.1: moderate to abundant 0.5" to 1" silt clasts, gray		-30.5 to -32.5	TG-SC29-08-10 -250826
9	-31				@8.0 to 8.5: 0.5' void, material consistant at each end of void (void closed end of core adjusted)			
10	-32				@8.8 to 10.8: 0.5" silt clast, gray to light gray		-32.5 to -34.5	TG-SC29-10-12 -250826
11	-33							
12	-34						-34.5 to -35	TG-SC29-12-12.5 -250826
13	-35				End of core at 12.5 feet.			
14	-36							
15	-37							

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC30

Sheet 1 of 1

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712020.37**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1169059.13**
Client: **Port of Tacoma**	Drive Length (feet): **14**	Mudline Elevation (feet): **-36.97 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **14**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **100**	Core Collection Date/Time: **8/26/2025 08:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-37		95	5	0.0 to 0.9: POORLY GRADED SAND (SP), loose, moist, dark gray with multicolored grains (red and white), sand is medium.			
1	-38		20	80	0.9 to 2.4: SILT WITH SAND (ML), soft, moist, gray with dark gray mottling, fine to medium sand, low plasticity.		-36.97 to -38.97	TG-SC30-00-02 -250826
2	-39							
3	-40				2.4 to 13.7: POORLY GRADED SAND (SP), loose, moist, dark gray with multicolored grains (red and white), sand is medium.		-38.87 to -40.97	TG-SC30-02-04 -250826
4	-41				@3.4: silt clast, light gray			
5	-42				@5.1: silt clast, light gray @5.2 to 8.0: trace shell debris		-40.97 to -42.97	TG-SC30-04-06 -250826
6	-43							
7	-44						-42.97 to -44.97	TG-SC30-06-08 -250826
8	-45		95	5	@7.9: 2" intact bivalve, brown			
9	-46						-44.97 to -46.97	TG-SC30-08-10 -250826
10	-47				@9.9 to 10.5: abundant shell debris, white			
11	-48				@10.4: 1" wood fragment, light brown		-46.97 to -48.97	TG-SC30-10-12 -250826
12	-49							
13	-50						-48.97 to -50.67	TG-SC30-12-13.7 -250826
14	-51				End of core at 13.7 feet.			
15								

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes:

Sediment Core Log

TG-SC31

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712196.73**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1169058.43**
Client: **Port of Tacoma**	Drive Length (feet): **12.6**	Mudline Elevation (feet): **-9.45 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **10.6**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **84**	Core Collection Date/Time: **8/26/2025 11:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 3.4	-9.45 to -12.85		10	90	0.0 to 3.4: SILT (ML), soft, moist, very dark gray, low plasticity, abundant shell debris to 1.9'. @0.6: 1.5" intact bivalve @2.6 to 2.9: sub-angular gravel layer, light gray		-9.45 to -11.45	TG-SC31-00-02 -250826
3.4 to 5.0	-12.85 to -14.45		80	20	3.4 to 5.0: SILTY SAND (SM), loose, moist, dark gray, sand is fine to medium.		-11.45 to -13.45	TG-SC31-02-04 -250826
5.0 to 5.9	-14.45 to -15.35		95	5	5.0 to 5.9: POORLY GRADED SAND (SP), loose, moist, dark gray with multicolored grains (red and white), sand is medium.		-13.45 to -15.45	TG-SC31-04-06 -250826
5.9 to 10.7	-15.35 to -20.15		5	95	5.9 to 10.7: SILT (ML), medium stiff, moist, brown with trace gray mottling to 7.0', abundant fibrous woody debris, trace to moderate H2S-like odor.		-15.45 to -17.45	TG-SC31-06-08 -250826
							-17.45 to -19.45	TG-SC31-08-10 -250826
							-19.45 to -20.15	TG-SC31-10-10.7 -250826
10.7 to 12.6	-20.15 to -22.05				End of core at 10.7 feet.			

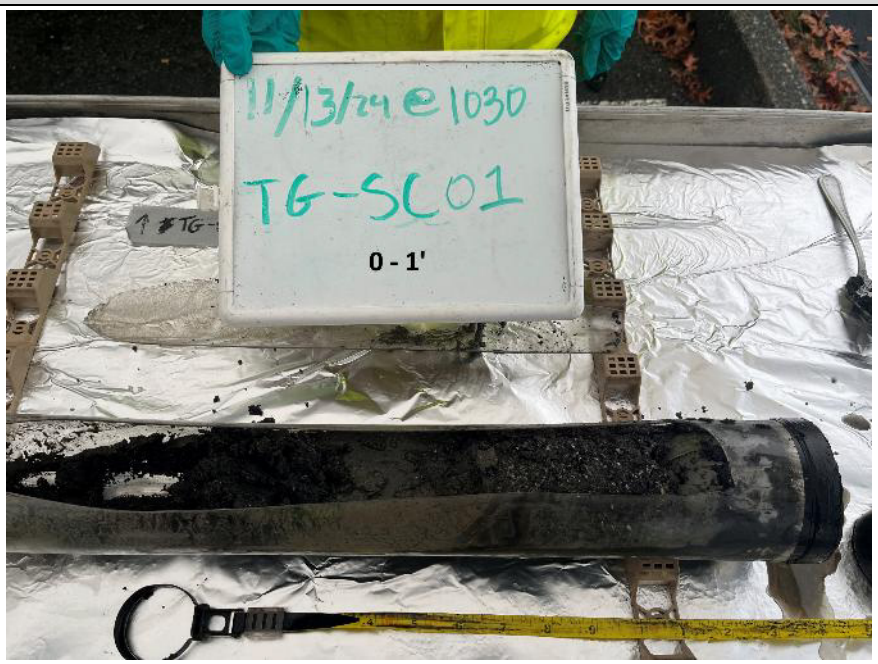
ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.

Appendix C-5
Photo Log

Sediment Cores

TG-SC01 **11/13/2024**

0-1 ft


TG-SC02 **11/8/2024**

0-2 ft


TG-SC03 **11/8/2024**

0-1 ft


1-2 ft


2-3 ft

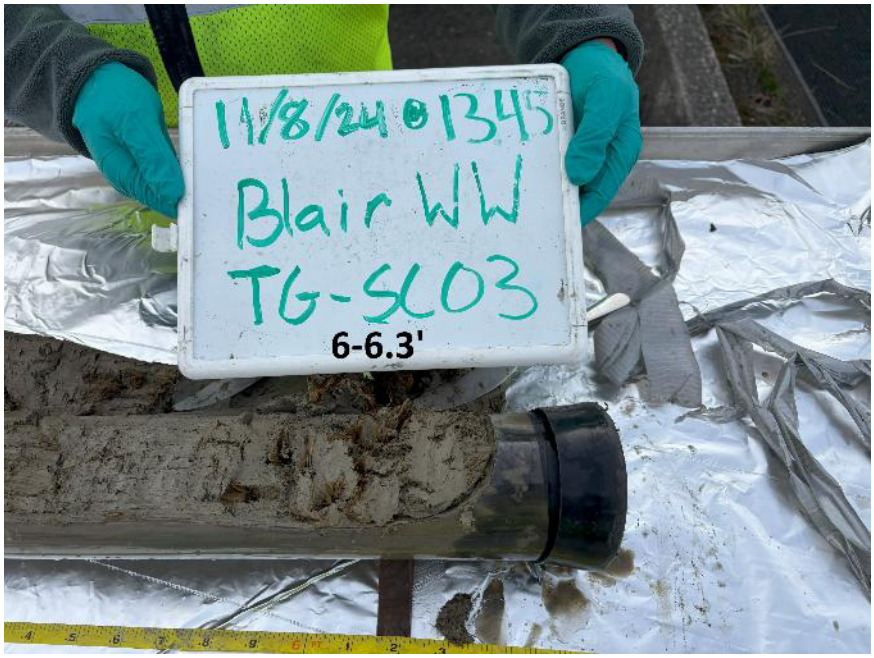


3-4 ft



4-5 ft
 11/8/24 @ 1345 Blair WW TG-SC03 4-5'

5-6 ft
 11/8/24 @ 1345 Blair WW TG-SC03 5-6'

6-6.3 ft


TG-SC04 **10/29/2024**

0-1 ft


1-2 ft


10/29/24 @ 1130
Blair WW
TG-SC04
1-2'

2-3 ft


10/29/24 @ 1130
Blair WW
TG-SC04
2-3'

3-4 ft
 10/29/24 @ 1130 Blair WW TG-SC04 3-4'

4-5 ft
 10/29/24 @ 1130 Blair WW TG-SC04 4-5'

5-6 ft


10/29/24 @ 1130
Blair WW
TG-SC04
5-6'

6-6.8 ft


10/29/24 @ 1130
Blair WW
TG-SC04
6-6.8'

TG-SC05 **11/13/2024**

0-1.6 ft


TG-SC05RE **4/1/2025**

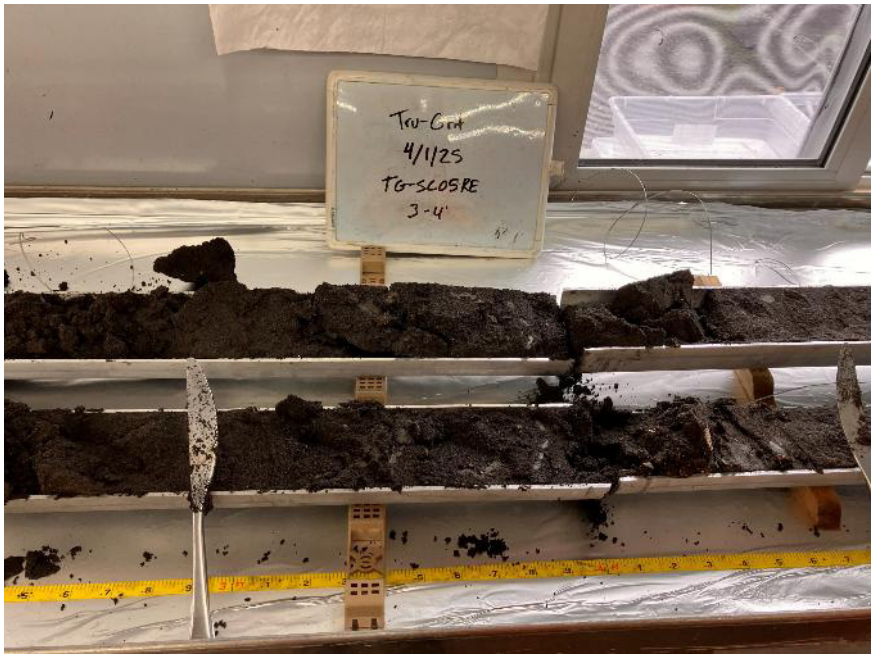
0-1 ft


1-2 ft



2-3 ft



3-4 ft
 Tru-Grit 4/1/25 TG-SCOSRE 3-4'

4-5 ft
 Tru-Grit 4/1/25 TG-SCOSRE 4-5'

5-6 ft



6-7 ft



7-8 ft



8-9.4 ft



TG-SC06 **11/8/2024**

0-1 ft


1-3 ft


3-4 ft



4-6 ft



6-7 ft



TG-SC07 **11/13/2024**

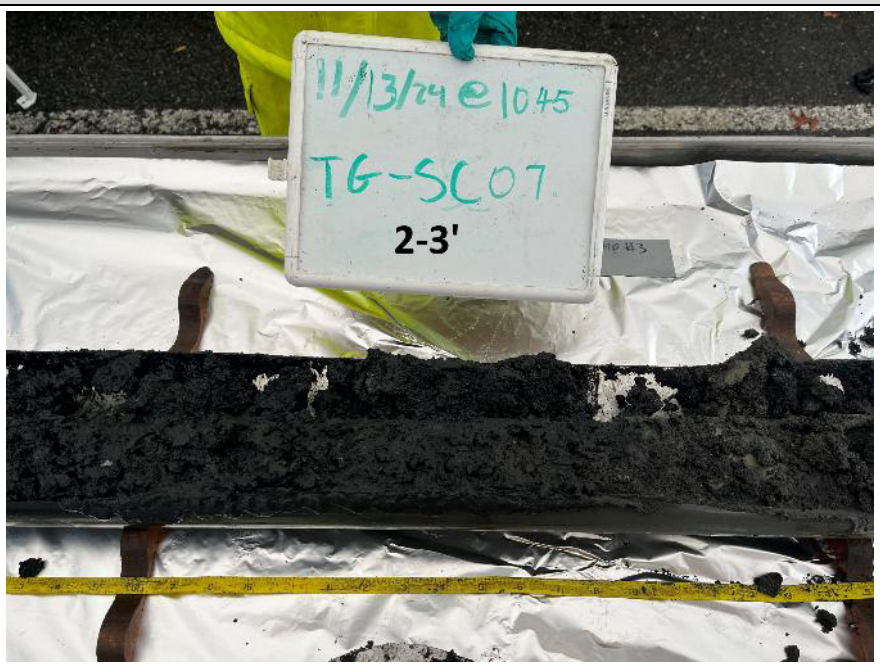
0-1 ft



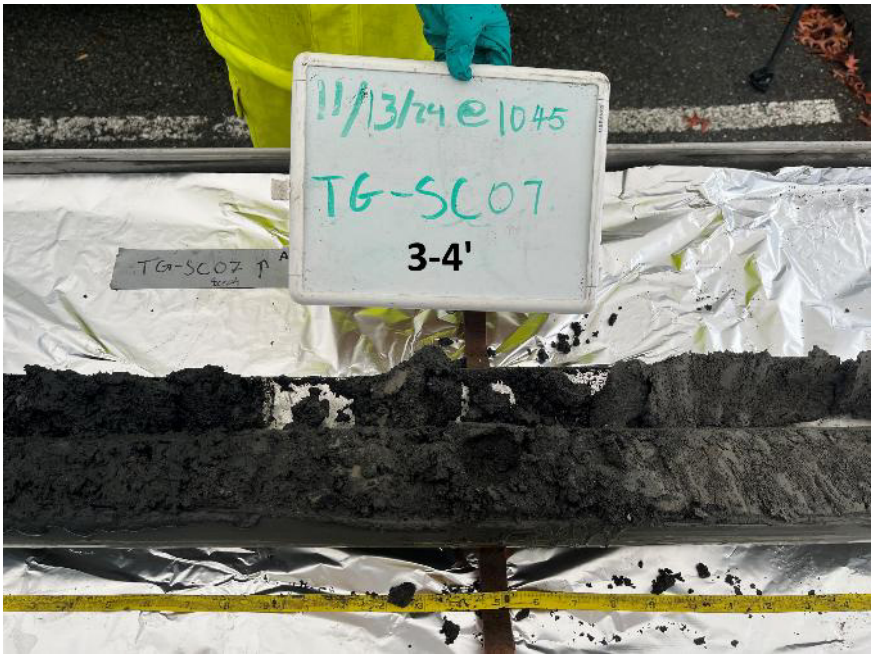
1-2 ft



2-3 ft



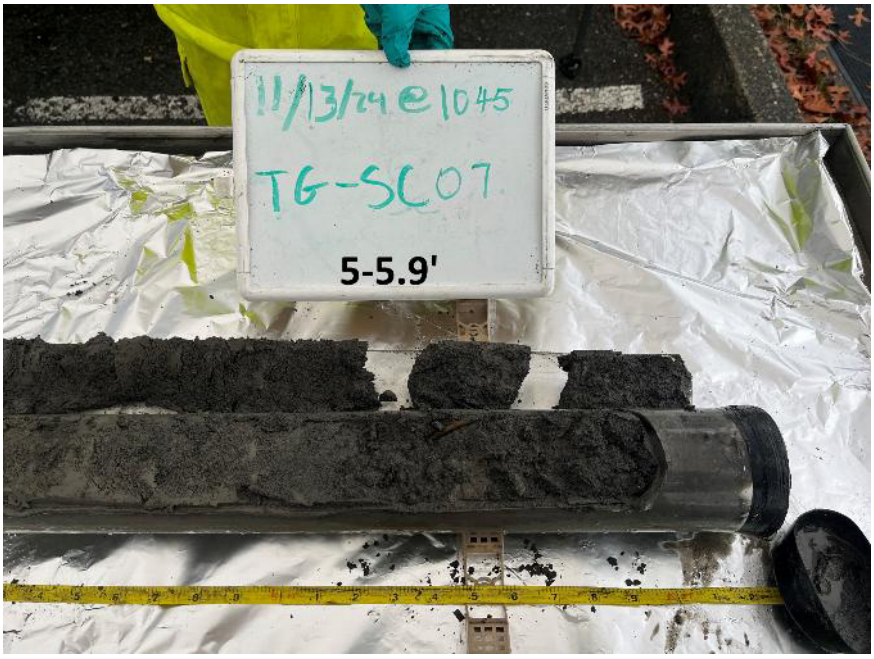
3-4 ft



4-5 ft

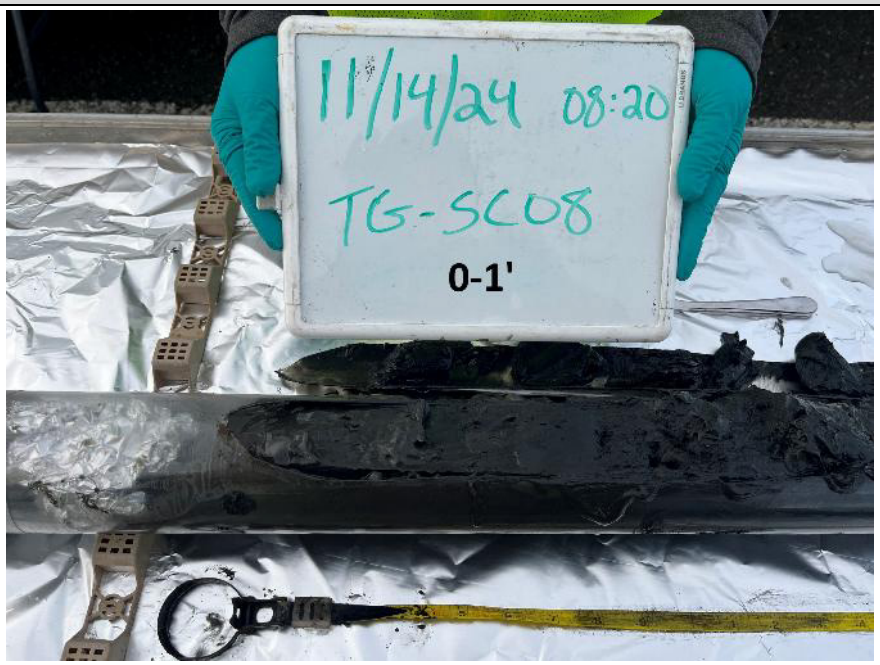


5-5.9 ft



TG-SC08 **11/14/2024**

0-1 ft



1-2 ft



2-3 ft



3-4 ft



4-5 ft



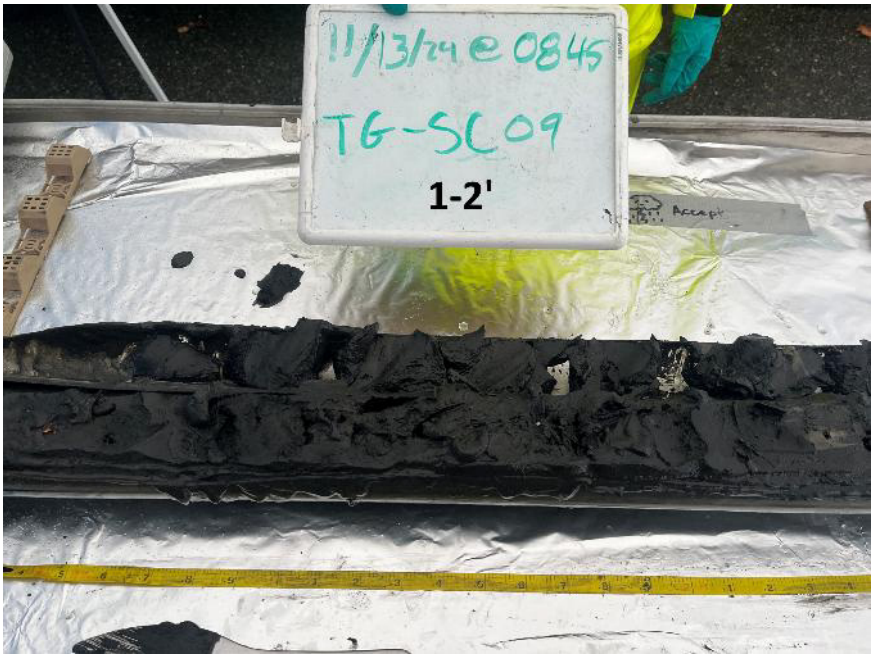
5-6 ft

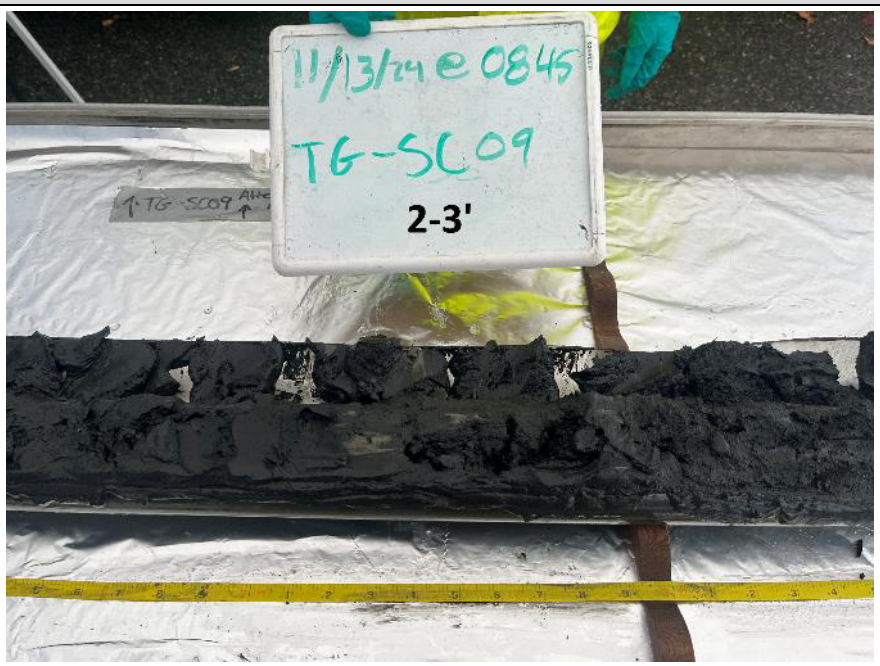


TG-SC09 **11/13/2024**

0-1 ft



1-2 ft


2-3 ft


3-4 ft



4-5 ft



5-6 ft



6-6.7 ft



TG-SC09RE **3/27/2025**

0-1 ft


1-2 ft


2-3 ft



3-4 ft



4-5 ft



5-6 ft



6-7 ft



7-8 ft



8-9 ft
 Tru-Grit 3/27/25 TG-SC09RE 8-9'

9-10 ft
 Tru-Grit 3/27/25 TG-SC09RE 9-10'

10-11 ft



11-12 ft



0-1 ft



1-2 ft



2-3 ft



3-4 ft



4-5 ft



5-5.2 ft



TG-SC10RE **3/28/2025**

0-1 ft


1-2 ft


2-3 ft



3-4 ft



4-5 ft



5-6 ft



6-7 ft



7-7.3 ft



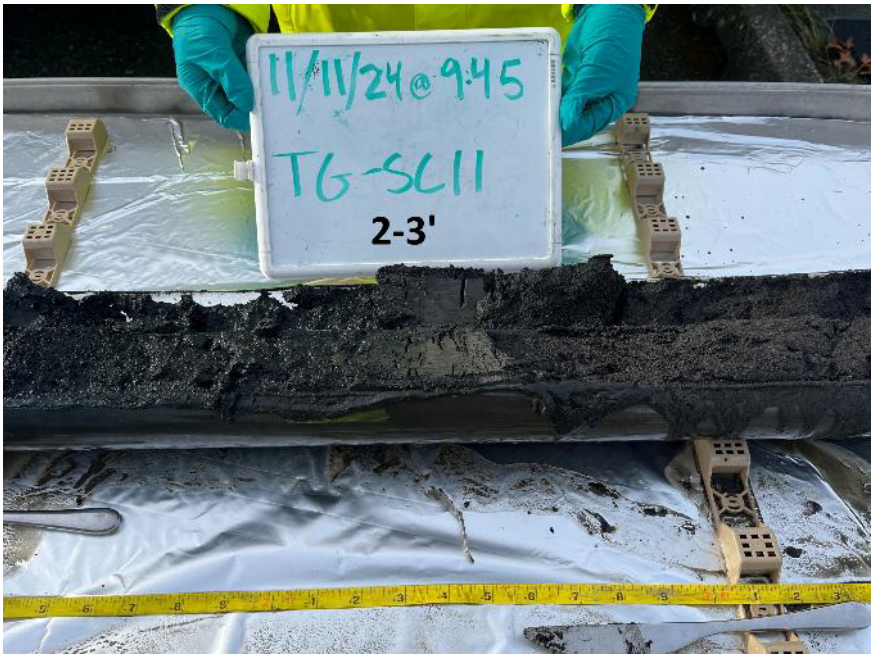
0-1 ft



1-2 ft



2-3 ft



3-4 ft



4-4.4 ft

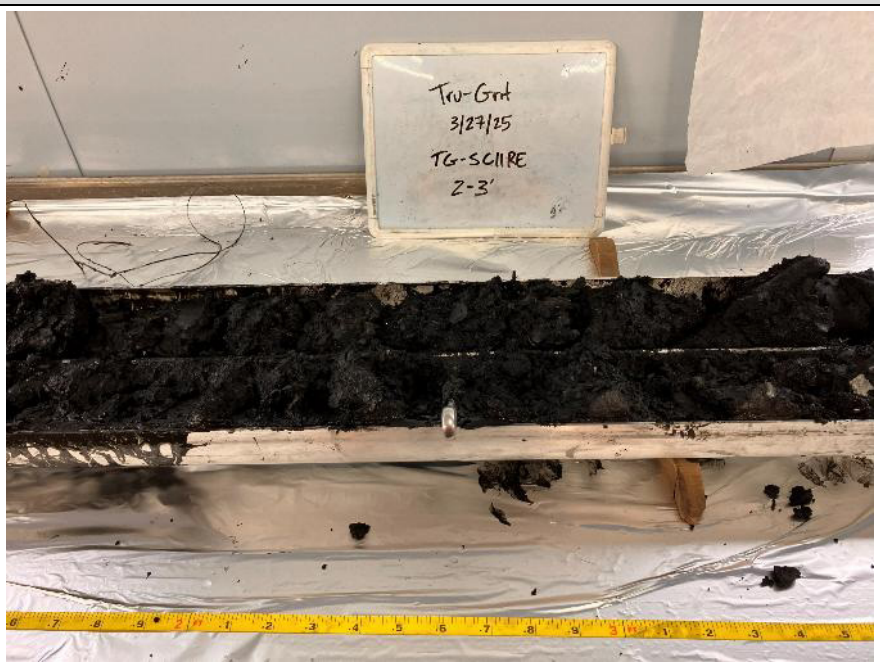

TG-SC11RE **3/27/2025**

0-1 ft


1-2 ft



2-3 ft



3-4 ft
 Tru-Grit 3/27/25 TG-SCIIRE 3-4'

4-5 ft
 Tru-Grit 3/27/25 TG-SCIIRE 4-5'

5-6 ft



6-7 ft



7-8 ft


8-9 ft


9-10 ft



10-11.3 ft



TG-SC12 **11/11/2024**

0-1 ft

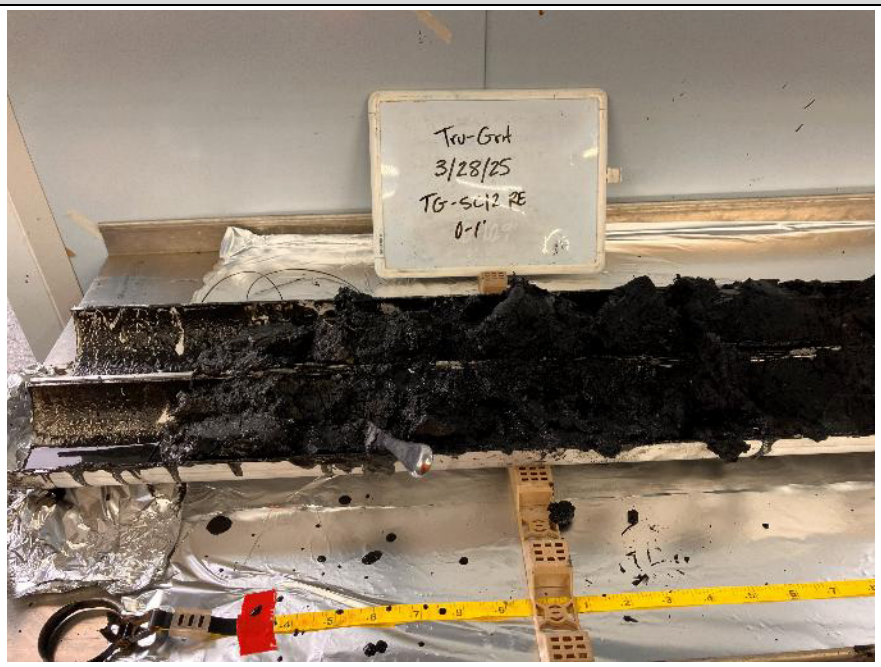

1-2 ft


2-3 ft

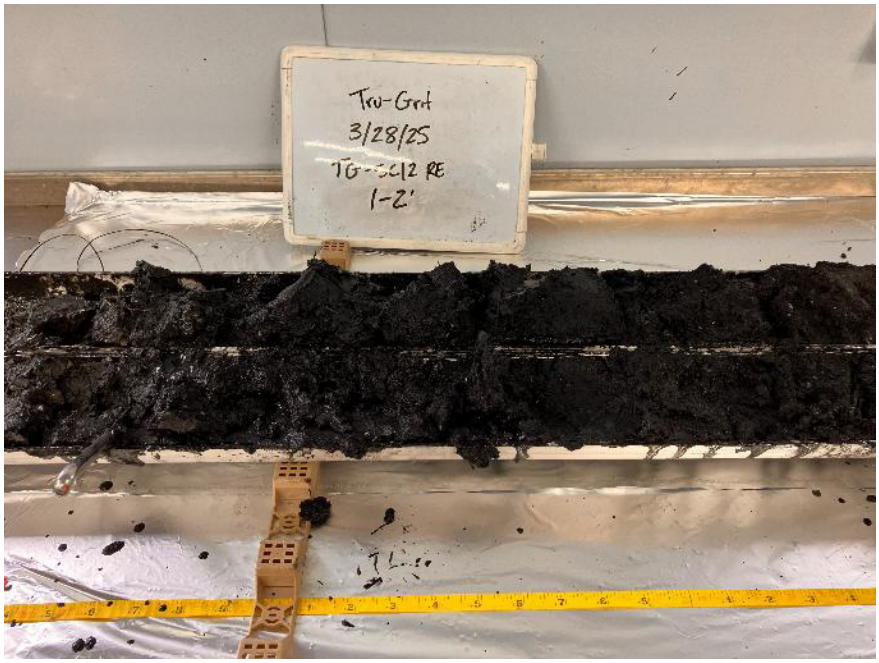

3-4 ft


4-4.5 ft


TG-SC12RE **3/28/2025**

0-1 ft


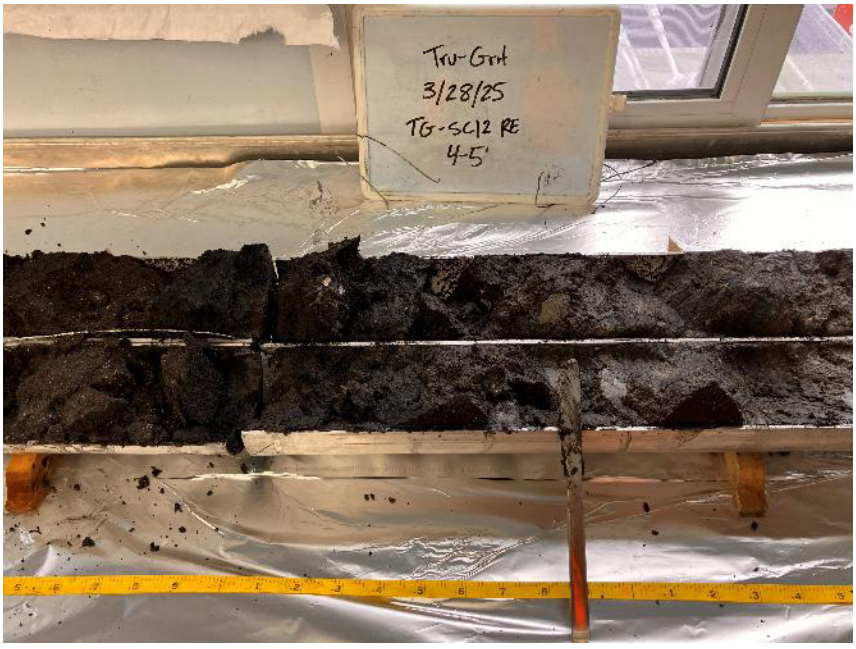
1-2 ft



2-3 ft



3-4 ft
 Tru-Grit 3/28/25 TG-SC12 RE 3-4'

4-5 ft
 Tru-Grit 3/28/25 TG-SC12 RE 4-5'

5-6 ft
 Tru-Grit 3/28/25 TG-SC12 RE 5-6'

6-7 ft
 Tru-Grit 3/28/25 TG-SC12 RE 6-7'

7-8 ft
 Tru-Grit 3/28/25 TG-SC12 RE 7-8'

8-9 ft
 Tru-Grit 3/28/25 TG-SC12 RE 8-9'

9-10 ft


10-11.2 ft


0.5-2 ft



2-3 ft



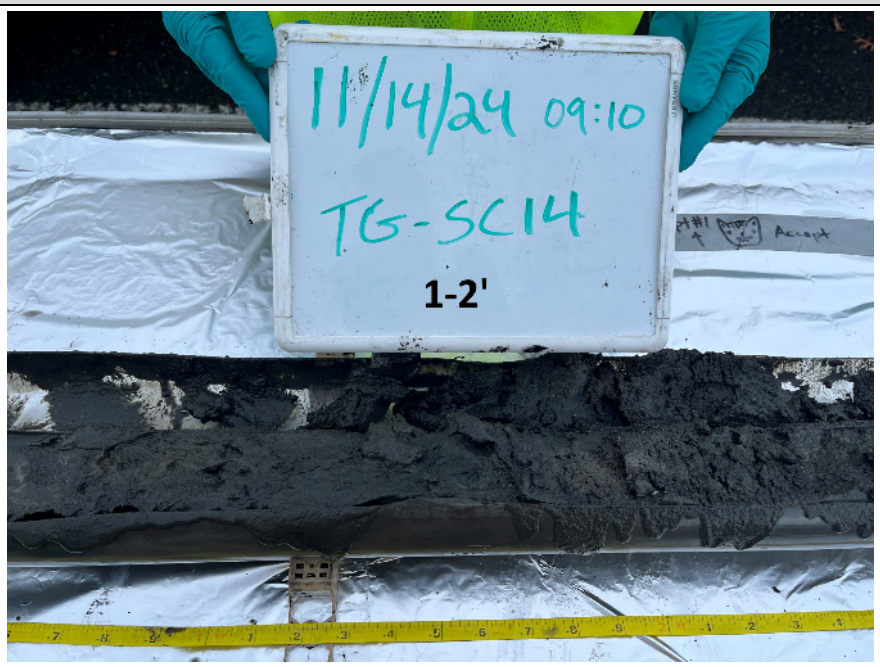
3-3.3 ft


TG-SC14 **11/14/2024**

0-1 ft



1-2 ft



2-3 ft



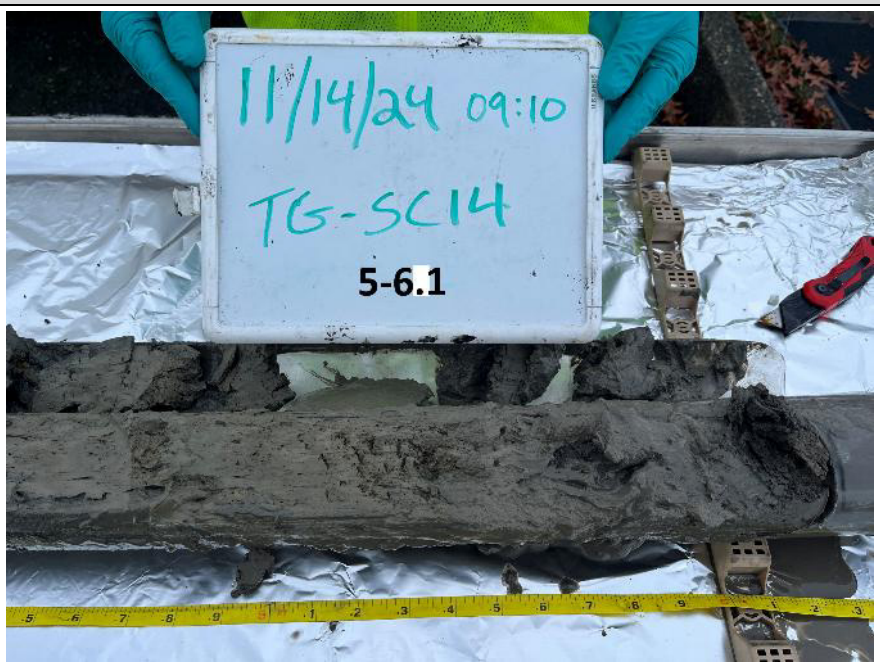
3-4 ft



4-5 ft



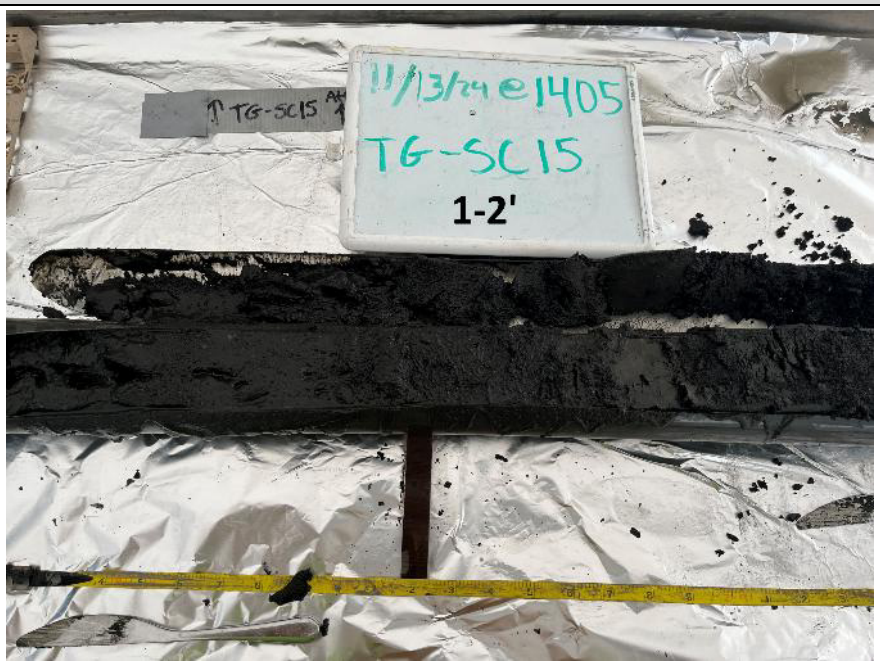
5-6.1 ft



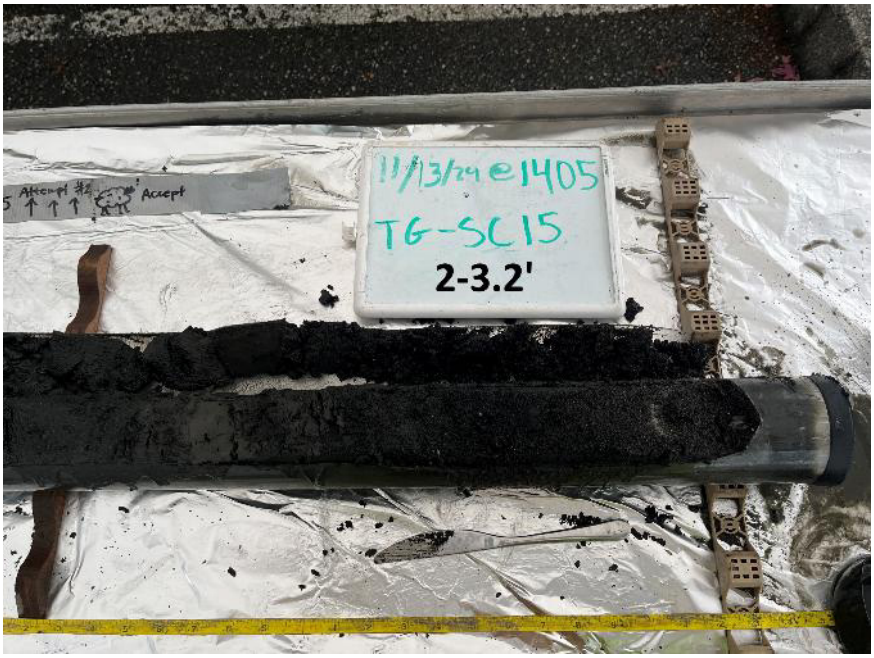
0-1 ft


11/13/24 e1405
TG-SC15
0-1'
Accept

1-2 ft


TG-SC15
11/13/24 e1405
TG-SC15
1-2'

2-3.2 ft



TG-SC15RE **3/28/2025**

0-1 ft



1-2 ft
 Tru-Grit 3/28/25 TG-SC15 RE 1-2'

2-3 ft
 Tru-Grit 3/28/25 TG-SC15 RE 2-3'

3-4 ft



4-5 ft



5-6 ft



6-7 ft



7-8 ft
 Tru-Grit 3/28/25 TG-SC15 RE 7-8'

8-9 ft
 Tru-Grit 3/28/25 TG-SC15 RE 8-9'

9-10 ft



10-10.9 ft



0-1 ft



1-2 ft



2-3 ft



3-4 ft



4-5 ft



5-5.4 ft



0-1 ft



1-2 ft



2-3 ft



3-4 ft

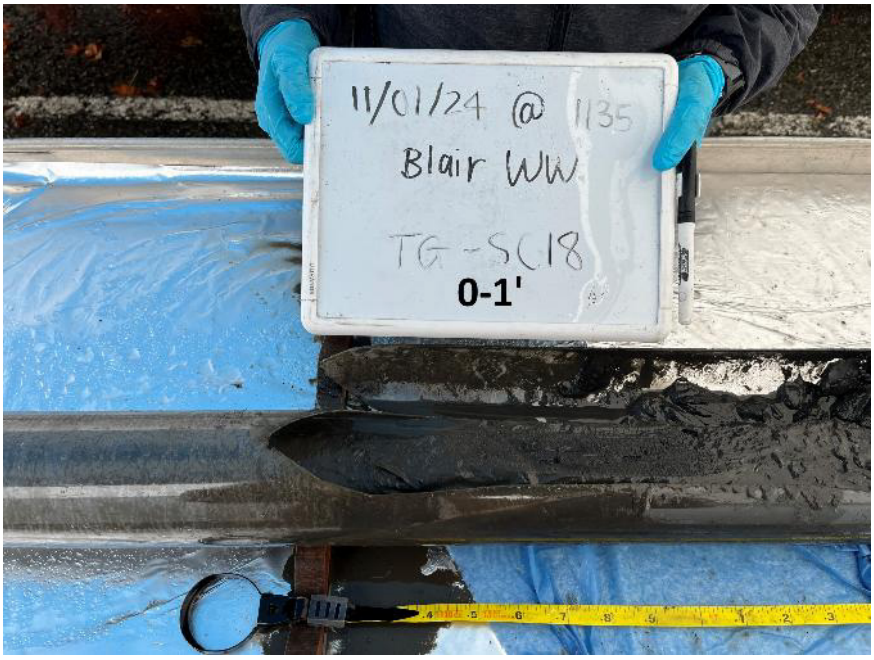


4-5 ft

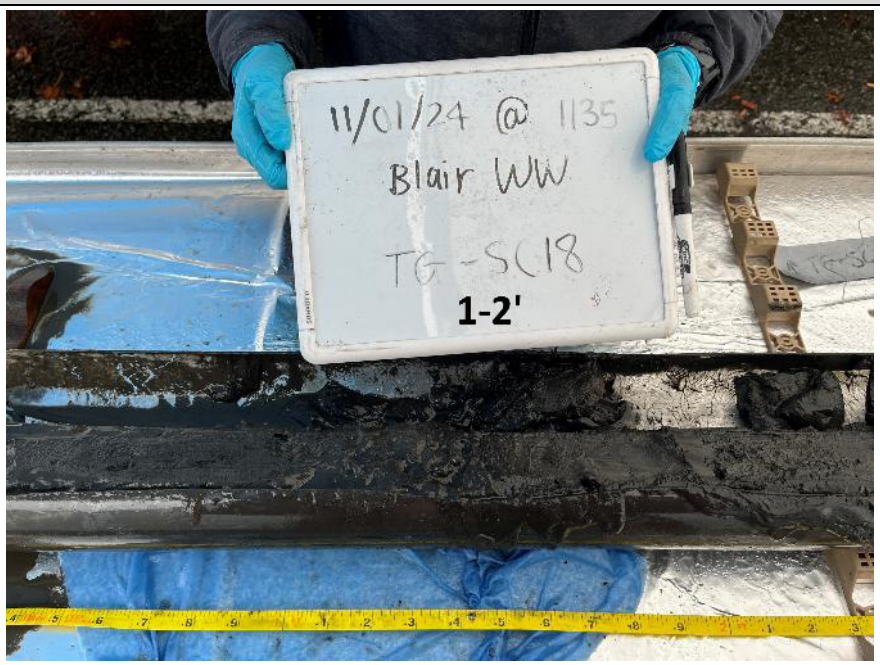


5-6.2 ft



0-1 ft


11/01/24 @ 1135
Blair WW
TG-SC18
0-1'

1-2 ft


11/01/24 @ 1135
Blair WW
TG-SC18
1-2'

2-3 ft


11/01/24 @ 1135
Blair WW
TG-SC18
2-3'

3-4 ft


11/01/24 @ 1135
Blair WW
TG-SC18
3-4'

4-5 ft


11/01/24 @ 1135
Blair WW
TG-SC18
4-5'

5-6 ft


11/01/24 @ 1135
Blair WW
TG-SC18
5-6'

6-7 ft


11/01/24 @ 1135
Blair WW
TG-SC18
6-7'

7-8 ft


11/01/24 @ 1135
Blair WW
TG-SC18
7-8'

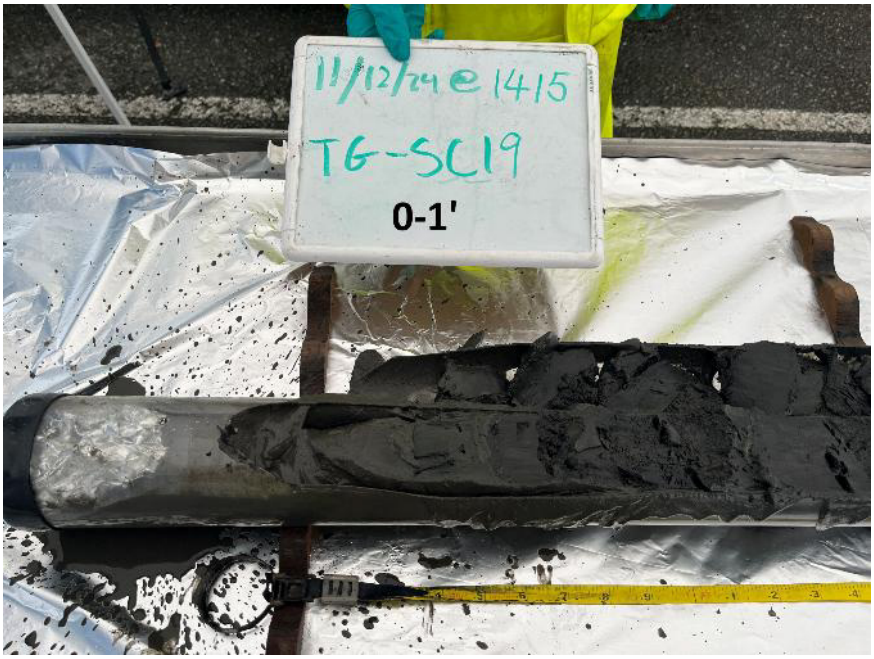
8-9 ft


11/01/24 @ 1135
Blair WW
TG-SC18
8-9'

9-9.9 ft


11/01/24 @ 1135
Blair WW
TG-SC18
9-9.9'

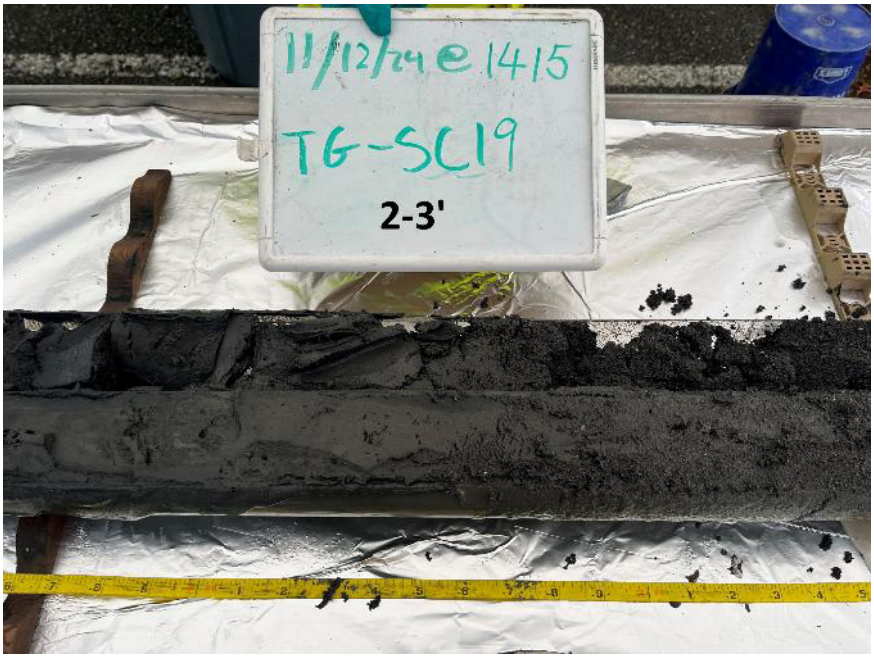
0-1 ft



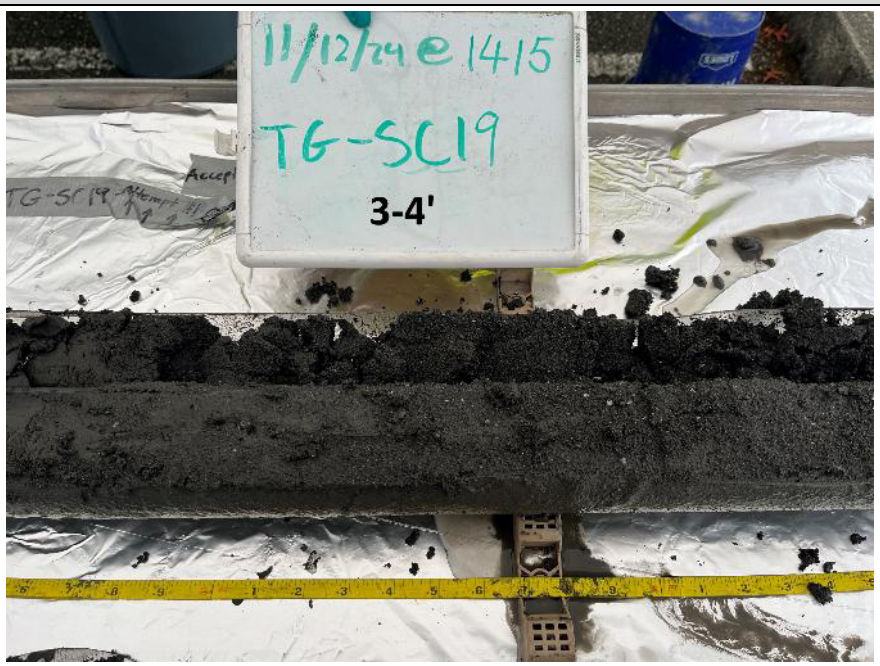
1-2 ft



2-3 ft



3-4 ft



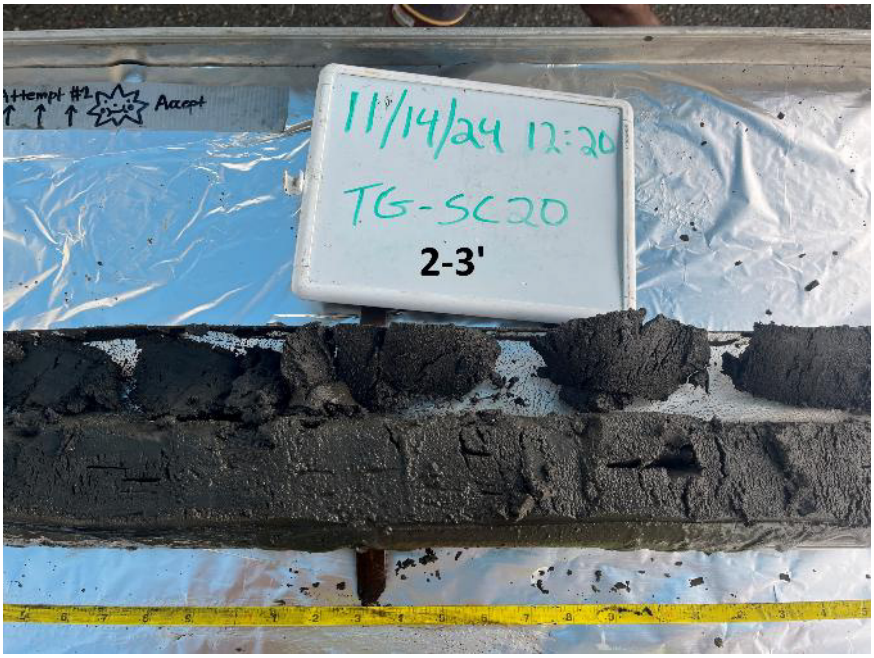
4-5 ft
 11/12/24 @ 1415 TG-SC19 4-5'

5-5.4 ft
 11/12/24 @ 1415 TG-SC19 5-5.4' DEWALT 100'

0-1 ft


1-2 ft


2-3 ft

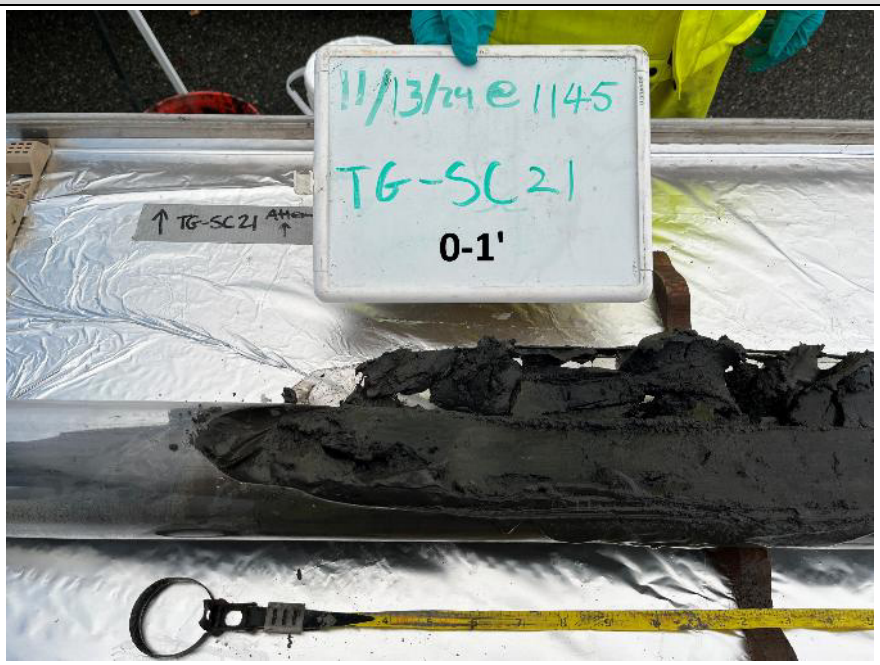

Attempt #2
Accept
11/14/24 12:20
TG-SC20
2-3'

3-4 ft


11/14/24 12:20
TG-SC20
3-4'

4-4.8 ft


TG-SC21 **11/13/2024**

0-1 ft


1-2 ft



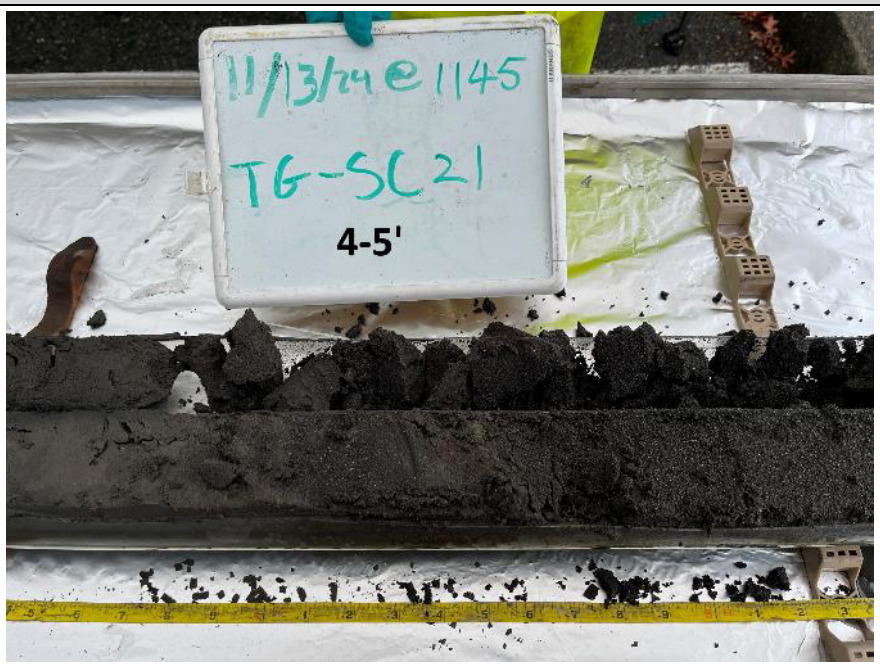
2-3 ft



3-4 ft



4-5 ft



5-6 ft



TG-SC22 **11/14/2024**

0-1 ft



1-2 ft



2-3 ft



3-4 ft



4-5 ft



5-6 ft



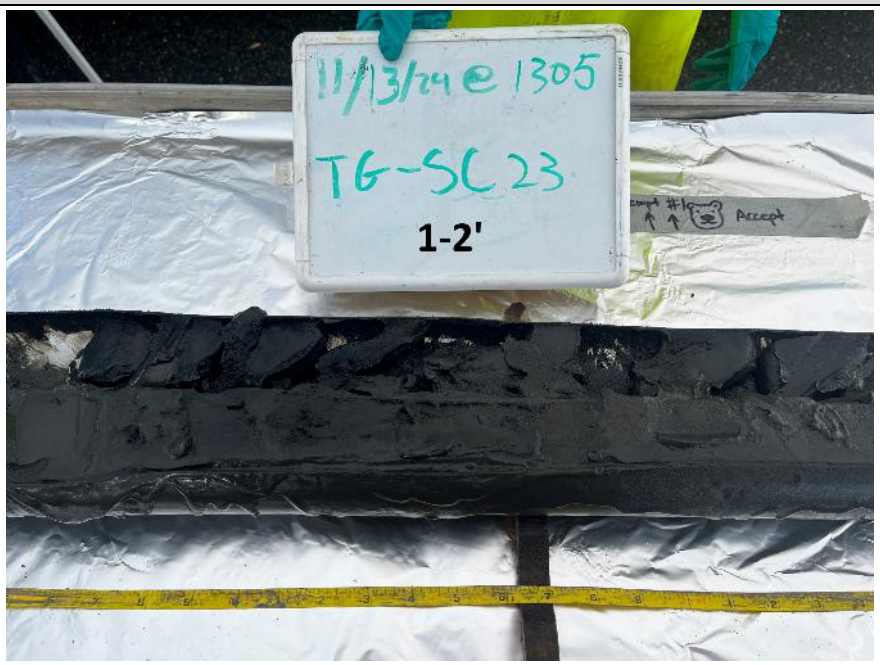
6-6.8 ft



0-1 ft



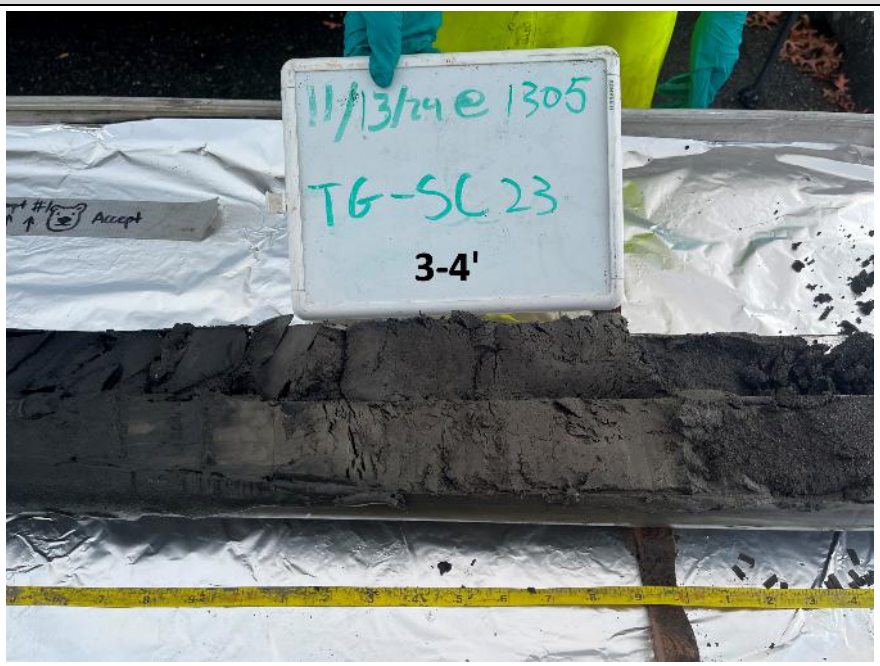
1-2 ft



2-3 ft


11/13/24 e 1305
TG-SC23
2-3'
TG-SC23

3-4 ft


11/13/24 e 1305
TG-SC23
3-4'
Accept

4-5 ft



5-5.5 ft



0-1 ft


10/28/24 @ 1145
Blair WW
TG-SC24
0-1'

1-2 ft


10/28/24 @ 1145
Blair WW
TG-SC24
1-2'

2-3 ft


10/28/24 @ 1145
Blair WW
TG-SC24
2-3'

3-4 ft


10/28/24 @ 1145
Blair WW
TG-SC24
3-4'

4-5 ft


10/28/24 @ 1145
Blair WW
TG-SC24
4-5'

5-6 ft


10/28/24 @ 1145
Blair WW
TG-SC24
5-6'

6-7 ft


10/28/24 @ 1145
Blair WW
TG-SC24
6-7'

7-8 ft


10/28/24 @ 1145
Blair WW
TG-SC24
7-8'

8-9 ft
 10/28/24 @ 1145 Blair WW TG-SC24 8-9'

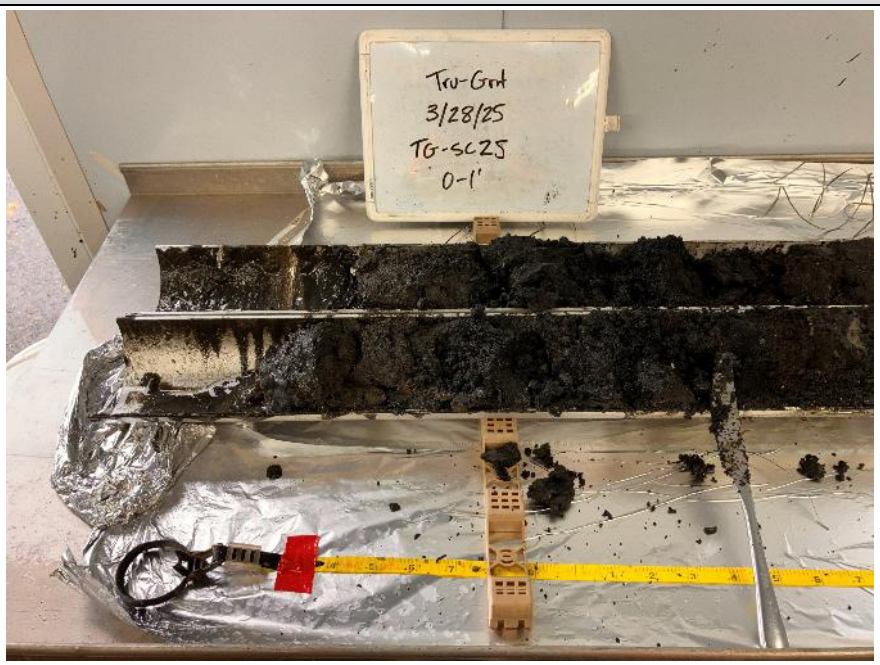
9-10 ft
 10/28/24 @ 1145 Blair WW TG-SC24 9-10'

10-11.2 ft

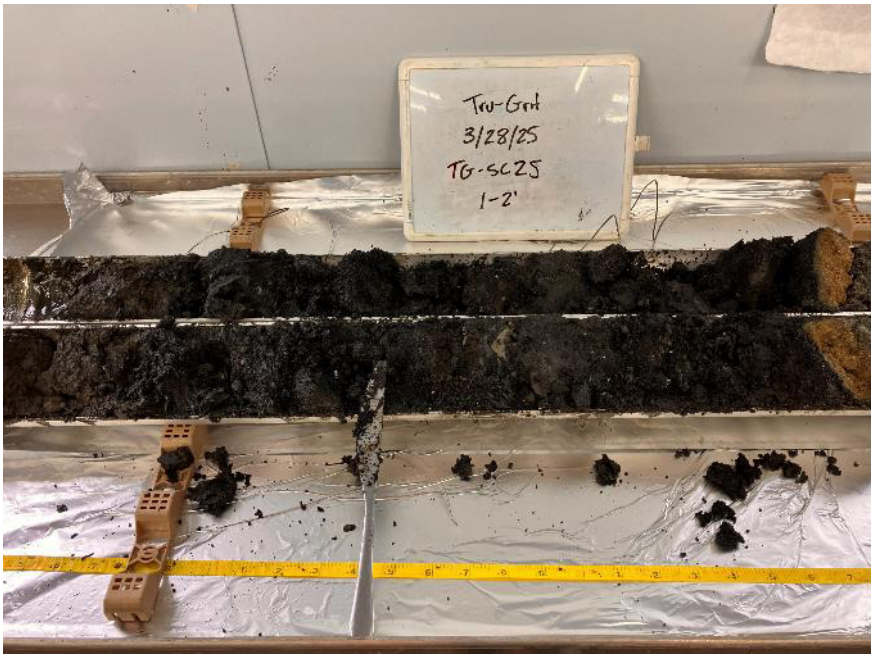


TG-SC25 **3/28/2025**

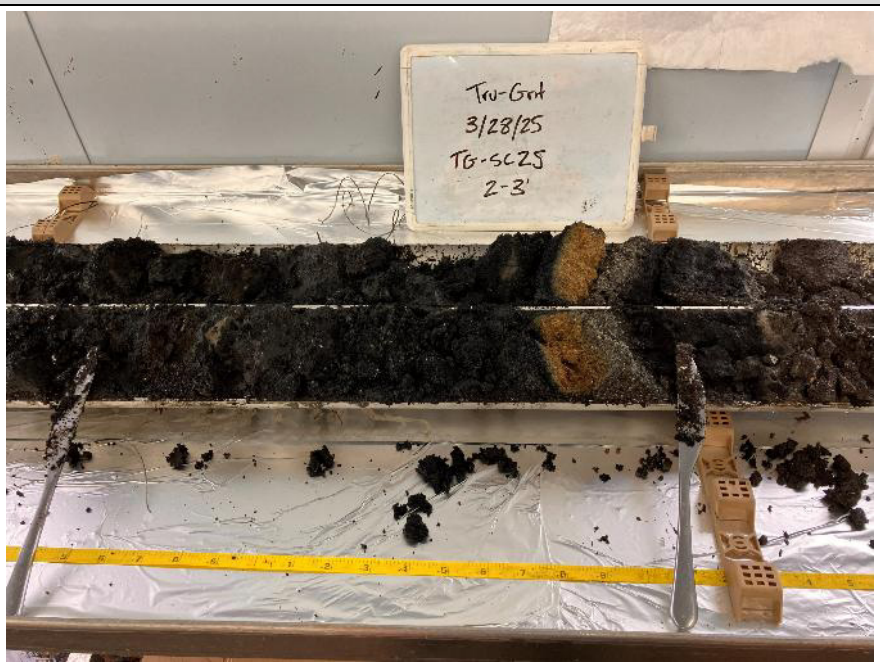
0-1 ft



1-2 ft



2-3 ft



3-4 ft
 Tru-Grit 3/28/25 TG-SC25 3-4'

4-5 ft
 Tru-Grit 3/28/25 TG-SC25 4-5'

5-6 ft
 Tru-Grit 3/28/25 TG-SC25 5-6'

6-7 ft
 Tru-Grit 3/28/25 TG-SC25 6-7'

7-8 ft



8-9 ft



9-10 ft



10-11 ft



11-12.2 ft


TG-SC26 **3/31/2025**

0-1 ft


1-2 ft



2-3 ft



3-4 ft
 Tru-Grit 3/31/25 TG-SC26 3-4'

4-5 ft
 Tru-Grit 3/31/25 TG-SC26 4-5'

5-6 ft



6-7 ft



7-8 ft
 Tru-Grit 3/31/25 TG-SC26 7-8'

8-9 ft
 Tru-Grit 3/31/25 TG-SC26 8-9' DEWALT 100

9-10 ft

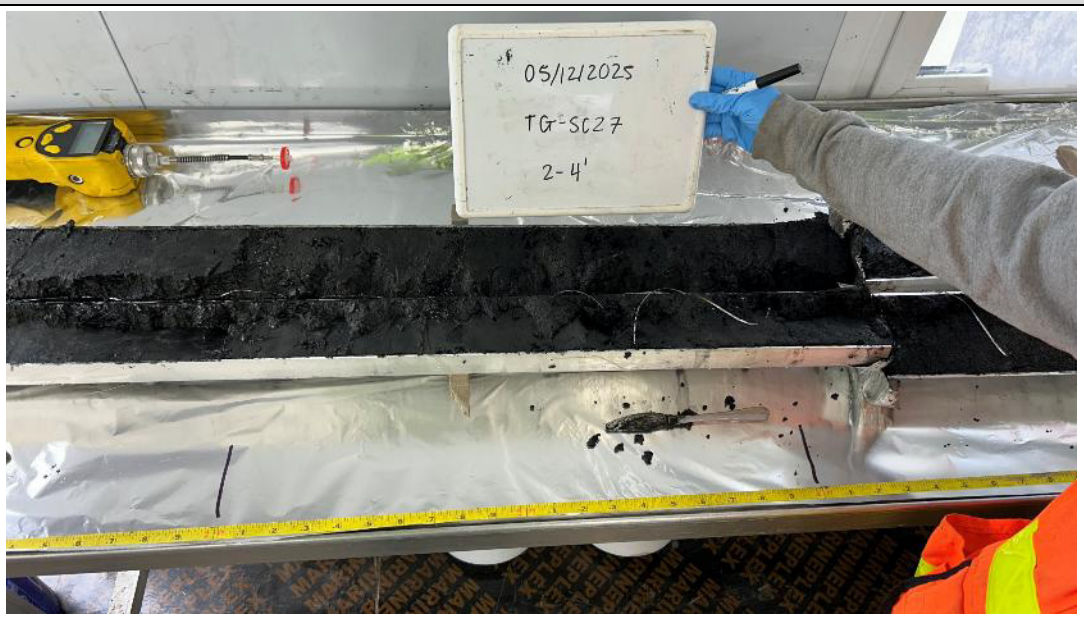


10-11 ft

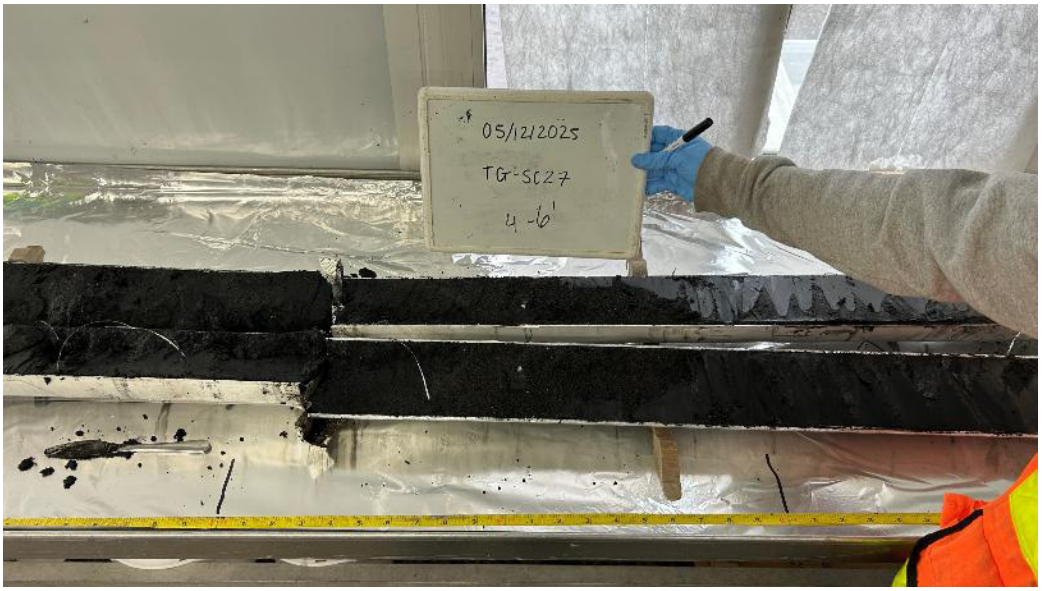


TG-SC27 **5/12/2025**

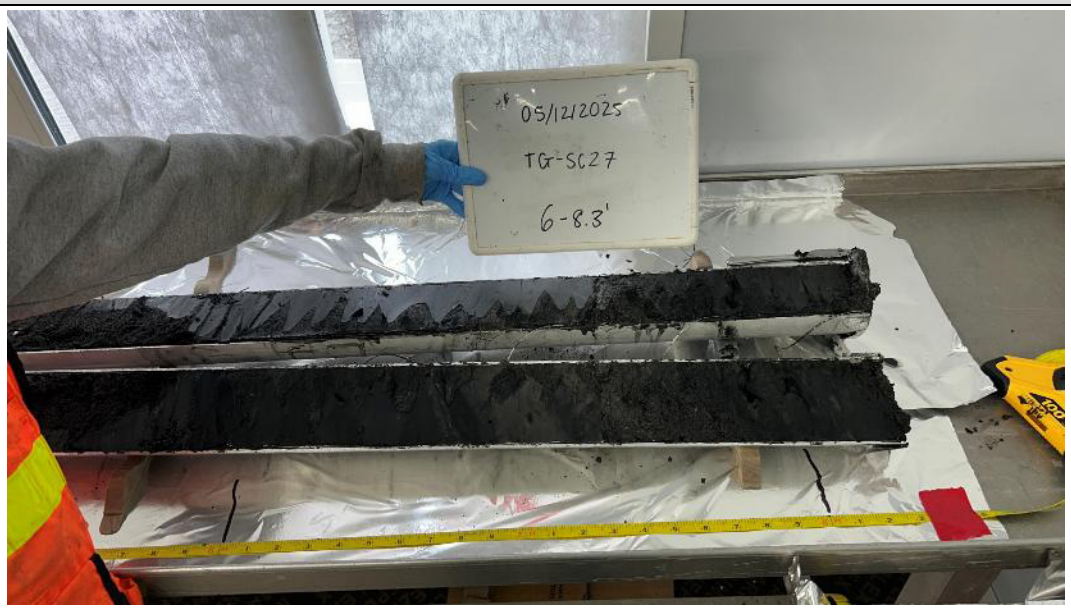
0-2 ft


2-4 ft


4-6 ft



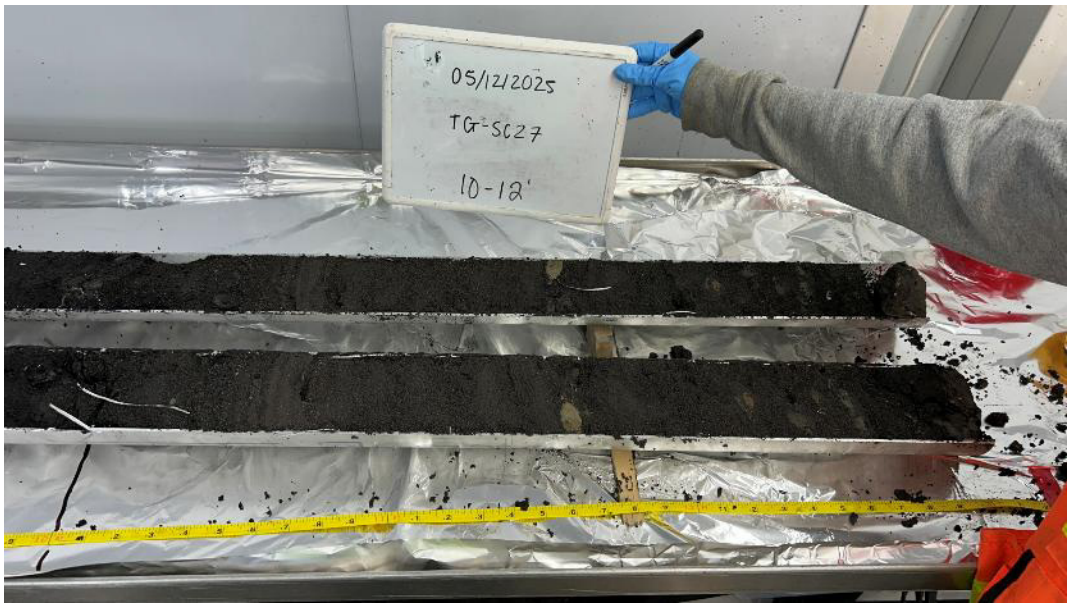
6-8.3 ft



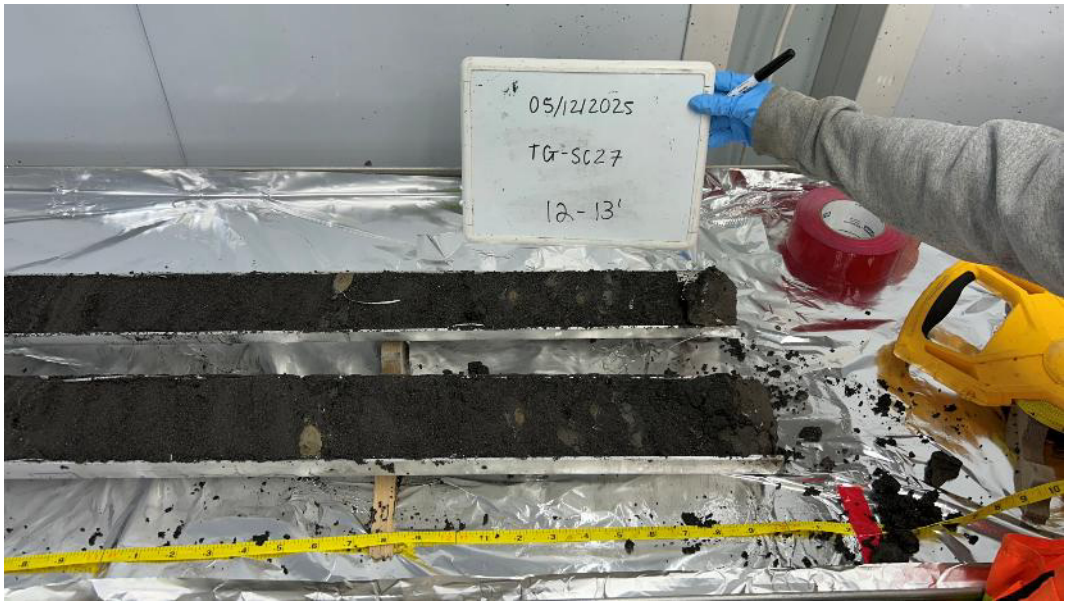
8.3-10 ft



10-12 ft

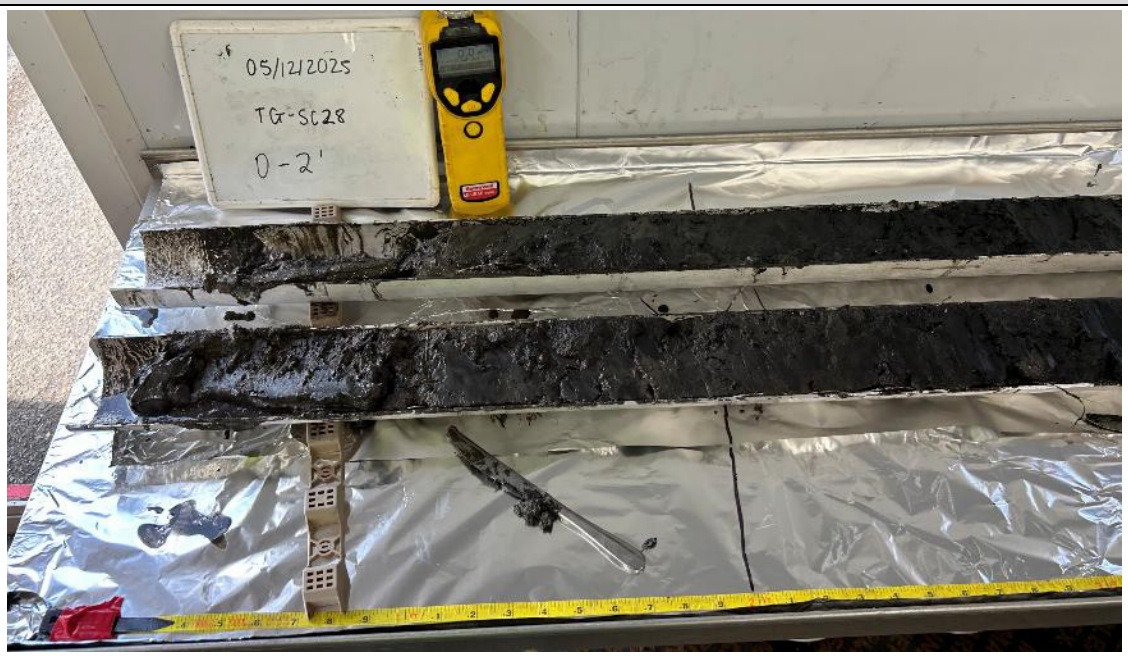


12-13 ft



TG-SC28 **5/12/2025**

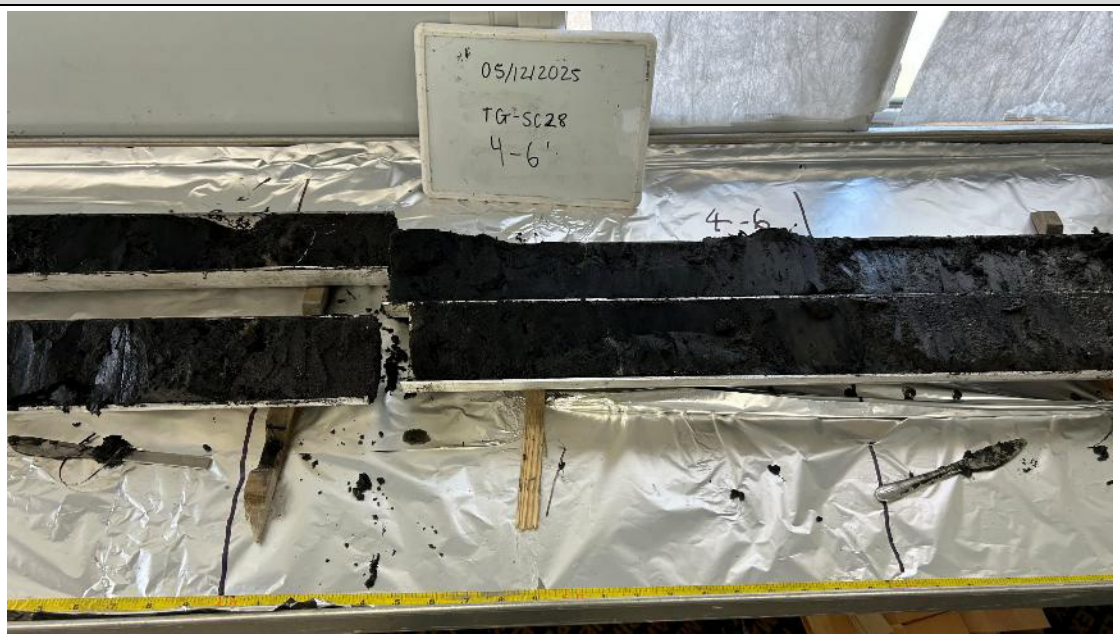
0-2 ft



2-4 ft



4-6 ft



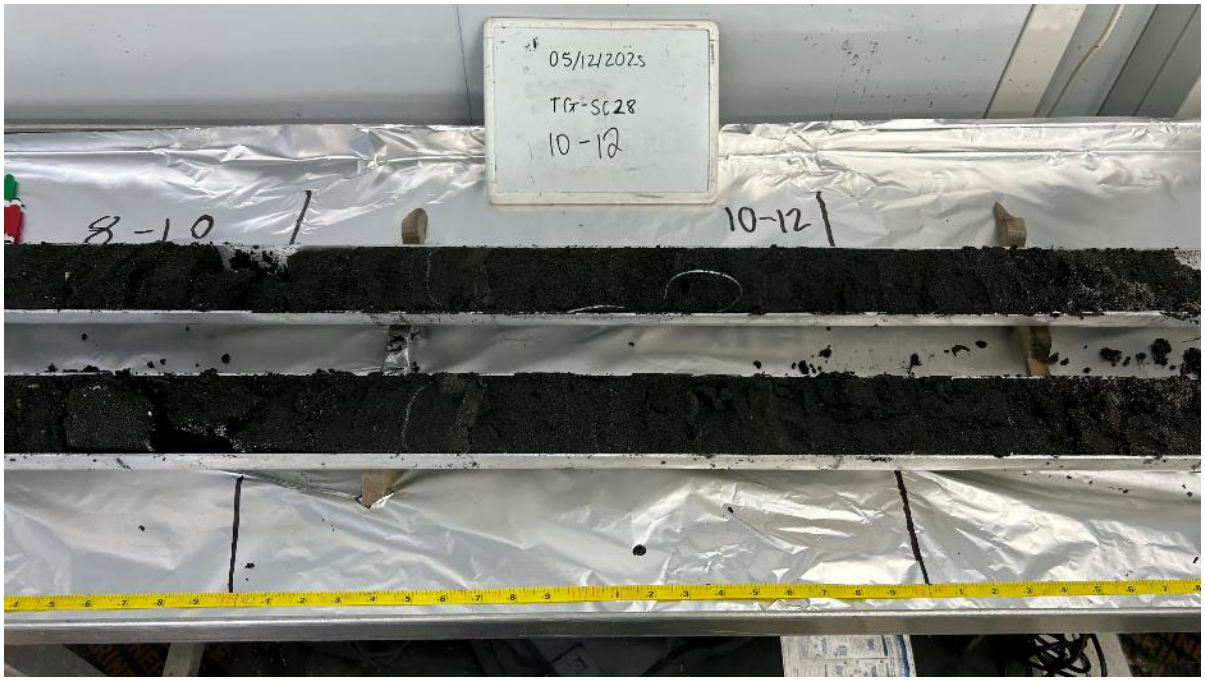
6-8.4 ft



8.4-10 ft



10-12 ft



12-13.3 ft



TG-SC29 **8/26/2025**

0-1 ft


1-2 ft

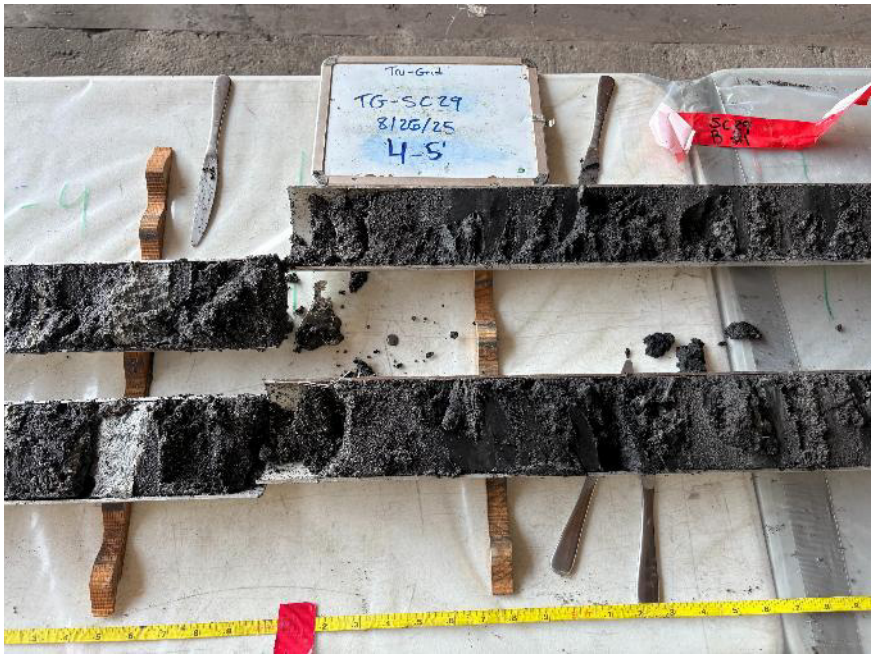

2-3 ft



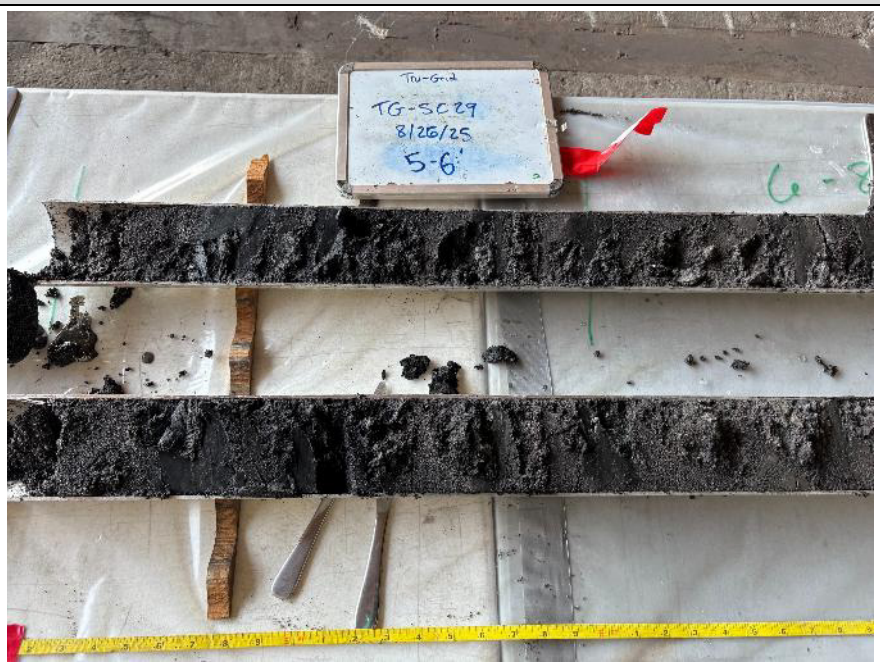
3-4 ft



4-5 ft



5-6 ft



6-7 ft
 Tru-Grit TG-SC29 8/26/25 6-7'

7-8 ft
 Tru-Grit TG-SC29 8/26/25 7-8'

8-9 ft



9-10 ft



10-11 ft


11-12.5 ft


TG-SC30 **8/26/2025**

0-1 ft


1-2 ft


2-3 ft



3-4 ft



4-5 ft
 Tru-Grit TG-SC30 8/26/25 4-5'

5-6 ft
 Tru-Grit TG-SC30 8/26/25 5-6'

6-7 ft



7-8 ft



8-9 ft



9-10 ft



10-11 ft


11-12 ft


12-13.7 ft



TG-SC31 **8/26/2025**

0-1 ft



1-2 ft



2-3 ft



3-4 ft
 Tru-Grit TG-SC31 8/26/25 3-4

4-5 ft
 Tru-Grit TG-SC31 8/26/25 4-5'

5-6 ft



6-7 ft



7-8 ft



8-9 ft



9-10.7 ft


Surface Sediment Grabs

TG-SG06 **8/26/2025**

Attempt #1


Attempt #2



Attempt #3



Attempt #1



Attempt #2



TG-SG25 **8/26/2025**

Attempt #1


Attempt #4


Attempt #5



TG-SG27 **8/26/2025**

Attempt #2



Attempt #3



TG-SG29 **8/26/2025**

Attempt #1



Attempt #2



TG-SG30 **8/26/2025**

Attempt #1



Attempt #2



TG-SG31 **8/26/2025**

Attempt #1



Attempt #2



TG-SG32 **8/26/2025**

Attempt #1



Attempt #2



Attempt #3



Appendix D
Archaeological Monitoring Results Memoranda

Appendix D-1
2024 Archaeological Monitoring Results Memorandum

949 Market Street, Suite 700
Tacoma, Washington 98402
206.287.9130

ANCHOR QEA

Memorandum

March 5, 2025

To: Tony Warfield, Port of Tacoma

From: Austin Jenkins and Jordan Cooper, Anchor QEA

cc: Norman Gilbert, Sara Potter, and Rob Healy, Port of Tacoma
Dan Berlin and Christine Simmons, Anchor QEA

Re: Archaeological Monitoring Results Memorandum
Blair Waterway Tacoma Harbor Deepening Program – Berths and Tru-Grit Sediment Sampling

Introduction

The Port of Tacoma (Port) conducted a sediment sampling program within the Blair Waterway to inform future dredging of the Washington United Terminals (WUT), Husky Terminal (Husky), and Tru-Grit Abrasives, Inc. (Tru-Grit) site under the Tacoma Harbor Deepening Program (Project). The Project is in Tacoma, Pierce County, Washington, in Sections 27, 34, and 35 of Township 21 North, Range 3 East and Sections 1 and 2 of Township 20 North, Range 3 East. Ground-disturbing activities took place within three sampling areas, as outlined by the Husky and WUT Berth Deepening Sediment Characterization Sampling and Quality Assurance Project Plan (Anchor QEA 2024a), and the Tru-Grit Site Data Gaps Field Investigation Sampling and Quality Assurance Project Plan (Anchor QEA 2024b). The program consisted of the following sampling activities:

- WUT
  - 24 borings (vibracores)
- Husky
  - 3 grab samples (box cores)
  - 27 borings (vibracores)
- Tru-Grit
  - 12 borings (vibracores) on the Upper Slope
  - 12 borings (vibracores) on the Lower Slope

This memorandum summarizes the results of archaeological monitoring completed pursuant to the Archaeological Monitoring and Inadvertent Discovery Plan (MIDP; Anchor QEA 2024c).

Regulatory Context

The sampling is permitted by the U.S. Army Corps of Engineers (USACE) under Nationwide Permit 6 (NWP 6). As such, it is subject to review by USACE under Section 106 of the National Historic Preservation Act (Section 106). Under Section 106 and its implementing regulations (36 *Code of*

Federal Regulations [CFR] Part 800), USACE must consider the effects of their undertakings on historic properties, which include "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places" (36 CFR 800.16[l][1]). Citing stipulations of NWP 6, USACE has determined that the Port's activities will comply with Section 106, provided that the Port report any post-review discovery of historical or archaeological resources. Continued coordination between the Port and the Puyallup Tribe of Indians Tribal Historic Preservation Office (THPO) determined that monitoring would be required. The MIDP (Anchor QEA 2024c) was developed to comply with NWP 6 stipulations and was submitted to THPO.

Methods

The MIDP (Anchor QEA 2024c) established a threshold for archaeological monitoring for any sampling and ground disturbance above approximately -10 feet mean lower low water (MLLW). Borings maps below -10 feet MLLW were expected to have all Holocene deposits removed prior to sampling and thus were not monitored. The MIDP outlined monitoring that would take place and adopted the Puyallup Tribe's Inadvertent Discovery Plan (IDP) with procedures to follow in the event of an inadvertent discovery of archaeological resources or human remains.

Austin Jenkins oversaw the implementation of field methods, and Jordan Cooper conducted the archaeological monitoring. Jenkins meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology. If cultural resources had been encountered, work stoppage, collection, communication, and documentation procedures outlined by Anchor QEA 2024c would have been implemented. None were encountered; therefore, those steps are not recapitulated here.

Results and Conclusions

Jordan Cooper observed and photographed all required sampling activities and made stratigraphic notes. No cultural resources were observed during these activities. A summary of the monitoring conducted for each site is provided in the following sections. Representative core photographs are included in Attachment 1 and core logs are included in Attachment 2.

Washington United Terminals

Within the WUT sampling program, six cores were mapped to meet the -10 feet MLLW threshold and were monitored November 5 to 6, 2024:

- WUT-SC01
- WUT-SC02
- WUT-SC03
- WUT-SC04
- WUT-SC05
- WUT-SC06

Observed sediments across all six cores remained relatively consistent, with generally dark grey medium to coarse sand (Attachment 1, Figures 1 and 2) and varying levels of silt, gravels, and shell content. In the cores that reached at least 6 feet in length, the sand became noticeably coarser around 6 feet (Attachment 1, Figure 1). Trace shell fragments were generally located in the top 2 feet. Core depths ranged from 2.4 feet (WUT-SC06; Attachment 1, Figure 3) to 11.2 feet (WUT-SC04).

Husky Terminal

Of the 30 cores collected at Husky, none fell within the -10 feet MLLW threshold and, as such, none were monitored for cultural resources. All cores collected and sampled at Husky followed the IDP, and no inadvertent discoveries were reported.

Tru-Grit

Within Tru-Grit, six cores were mapped to meet the -10 feet MLLW threshold and were monitored October 29, November 8, and November 13, 2024:

- TG-SC01
- TG-SC02
- TG-SC03
- TG-SC04
- TG-SC05
- TG-SC06

Observed sediments across all six cores remained relatively consistent, with generally dark grey (Attachment 1, Figure 4) or dark brown (Attachment 1, Figure 5), medium to coarse sand and varying levels of silt, gravels, and shell content. Trace shell fragments were generally concentrated in the top 4 feet. TG-SC02 contained a modern concrete chunk at 2 feet, and TG-SC03 and TG-SC06 (Attachment 1, Figures 5 and 6) both contained woody debris starting at approximately 2 feet and continuing to their final depths of 6.3 feet and 7.0 feet, respectively. Core depths ranged from 1 foot (TG-SC01) to 7 feet (TG-SC06).

References

Anchor QEA, 2024a. *Sampling and Quality Assurance Project Plan*. Husky and Washington United Terminals Berth Deepening Sediment Characterization. Prepared for Port of Tacoma. October 2024.

Anchor QEA, 2024b. *Sampling and Quality Assurance Project Plan*. Tru-Grit Site Data Gaps Field Investigation. Prepared for Port of Tacoma. July 2024.

Jenkins, Austin and Jordan Cooper, 2024. Anchor QEA. *Archaeological Monitoring and Inadvertent Discovery Plan.* Blair Waterway Tacoma Harbor Deepening Program [Berths and Tru-Grit] Sediment Sampling. Prepared for Port of Tacoma. October 2024.

Attachment 1
Core Photographs

Figure 1
Representative photograph of WUT-SC01; reaching a depth of 7.0 feet.



Figure 2
Representative photograph of WUT-SC03; reaching a depth of 6.3 feet.

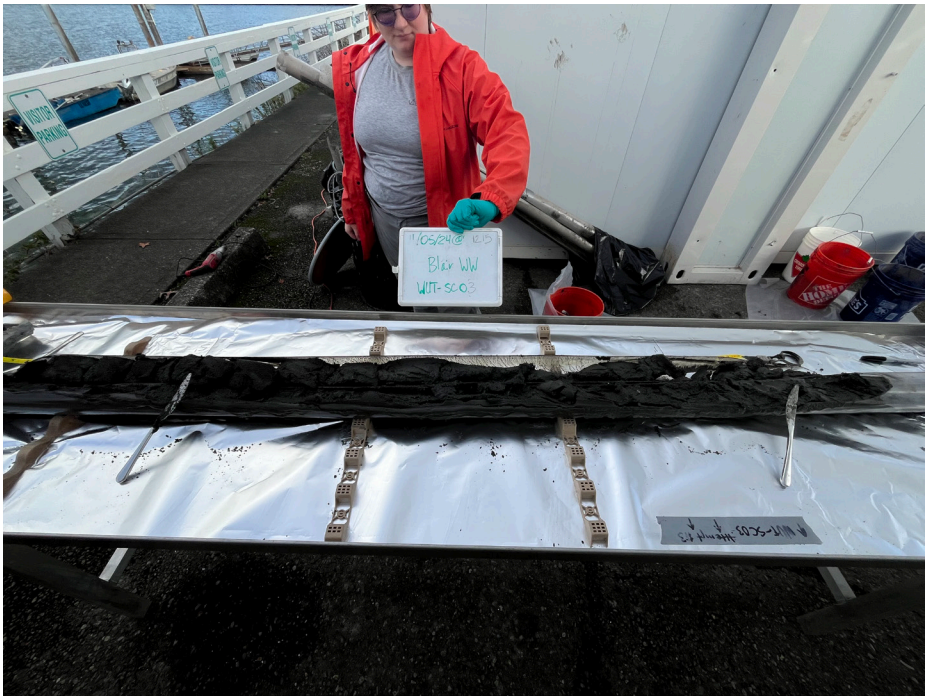


Figure 3
Representative photograph of WUT-SC06; reaching a depth of 2.4 feet.



Figure 4
Representative photograph of TG-SC01; reaching a depth of 1.0 foot.

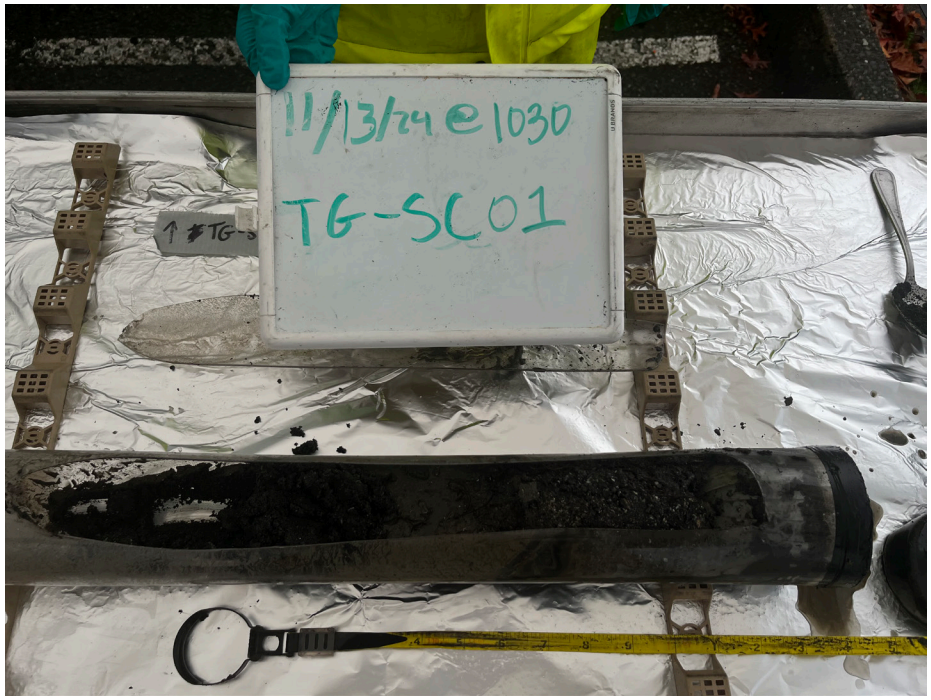


Figure 5
Representative photograph of TG-SC03; reaching a depth of 6.3 feet.



Figure 6
Representative photograph of TG-SC06; reaching a depth of 7.0 feet.



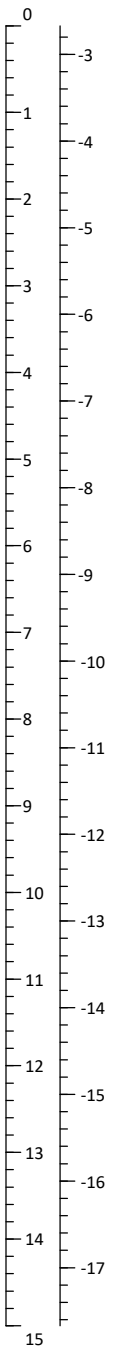
Attachment 2
Core Logs

Sediment Core Log

TG-SC01

Project: **Blair Waterway Deepening Program**	Logged By: **Arno Riolo**	Latitude: **712752.49**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168428.72**
Client: **Port of Tacoma**	Drive Length (feet): **5.1**	Mudline Elevation (feet): **-2.67 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **1**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **19**	Core Collection Date/Time: **11/13/2024 10:30**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1.0	-2.67 to -3.67		95	5	0 to 1.0: POORLY GRADED SAND (SP), medium dense, wet, gray, 95% fine to medium sand, 5% fines, trace shell hash throughout. @ 0.3 to 1.0: organic root-like fibers. End of core at 1.0 feet.		-2.67 to -3.67	TG-SC01-A



ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

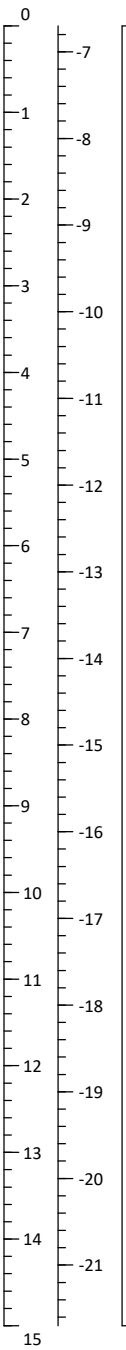
Notes: Archaeological monitoring completed by J. Cooper.
Sample TG-SC01-00-01-241113 (0 to 1 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC02

Project: **Blair Waterway Deepening Program**	Logged By: **Ry Pearson**	Latitude: **712723.21**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168498.06**
Client: **Port of Tacoma**	Drive Length (feet): **3**	Mudline Elevation (feet): **-6.7 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **1.7**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **56**	Core Collection Date/Time: **11/8/2024 13:00**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1.7	-6.7 to -8.4	10	80	10	0 to 1.7: POORLY GRADED SAND WITH SILT (SP-SM), medium dense to dense, wet, black gray, 80% fine sand, 10% gravel, 10% fines, trace shell hash throughout. @1.2 to 1.4: concrete chunk.		-6.7 to -8.4	GT-SC02
					End of core at 1.7 feet.			



ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Sample TG-SC02-00-1.7-241108 (0 to 1.7 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC03

Project: **Blair Waterway Deepening Program**	Logged By: **Ry Pearson**	Latitude: **712621.92**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168576.22**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-12.09 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6.3**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **78**	Core Collection Date/Time: **11/8/24 13:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0			95	5	0 to 0.8: POORLY GRADED SAND (SP), medium dense, wet, black gray with trace red and white grains, 95% fine to medium sand, 5% fines, trace fines. @0.2 to 0.3: white coarse sand pocket.		-12.09 to -14.09	TG-0-2
1	-13				0.8 to 6.3: CLAY (CL), soft to medium stiff, moist, tan, 100% fines, wood chunks throughout, strong H2S-like odor.			
2	-14						-14.09 to -16.09	TG-2-4
3	-15			100				
4	-16						-16.09 to -18.09	TG-4-6
5	-17							
6	-18				End of core at 6.3 feet.			
7	-19							
8	-20							
9	-21							
10	-22							
11	-23							
12	-24							
13	-25							
14	-26							
15	-27							

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Samples TG-SC03-00-0.8-241108 (0 to 0.8 feet) and TG-SC03-0.8-6.3-241108 (0.8 to 6.3 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC04

Project: **Blair Waterway Deepening Program**	Logged By: **Arno Riolo**	Latitude: **712520.13**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168652.63**
Client: **Port of Tacoma**	Drive Length (feet): **7**	Mudline Elevation (feet): **0.1 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6.8**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **97**	Core Collection Date/Time: **10/24/2024 11:30**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 6.8	0.1 to -6.7		95	5	0 to 5.7: WELL GRADED SAND (SW), very loose, wet, black, 95% fine to coarse sand, 5% fines, trace gravel throughout. @3.8 to 4.5: trace white shell hash.		0.1 to -1.9	TG-0-2
							-1.9 to -3.9	TG-2-4
							-3.9 to -5.9	TG-4-6
			95	5	5.7 to 6.8: POORLY GRADED SAND (SP), medium dense, wet, gray with trace red and white sand throughout, 95% sand, 5% fines. @5.8 to 6.0: gray silt layer. @5.9: brown wood piece, 0.5 inches.			
					End of core at 6.8 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Samples TG-SC04-02-04-241029 (2 to 4 feet) and TG-SC04-04-06-241029 (4 to 6 feet) taken and tested for grain size distribution.
Sample TG-SC04-5.8-06-241029 (5.8 to 6 feet) taken and tested for Atterberg limits.

Sediment Core Log

TG-SC05

Project: **Blair Waterway Deepening Program**	Logged By: **Arno Riolo**	Latitude: **1168779.18**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168779.18**
Client: **Port of Tacoma**	Drive Length (feet): **1.3**	Mudline Elevation (feet): **-0.47**
Location: **Tacoma, Washington**	Recovery Length (feet): **1.6**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **123**	Core Collection Date/Time: **11/13/2024 09:50**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1.6	-0.47 to -2.07		90	10	0 to 1.6: POORLY GRADED SAND WITH SILT (SP-SM), loose, wet, dark gray with trace red sand throughout, 90% sand, 10% fines, @0.0: wood debris, 0 to 2 inches in size. @0.7: wood debris, 0.5 inches. @1.2: piece of plastic. End of core at 1.6 feet.		-0.47 to -2.07	TG-SC05

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Sample TG-SC05-00-1.6-241113 (0 to 1.6 feet) taken and tested for grain size distribution.

Sediment Core Log

TG-SC06

Project: **Blair Waterway Deepening Program**	Logged By: **Ry Pearson**	Latitude: **712371.62**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168845.29**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-11.24 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **7**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **87**	Core Collection Date/Time: **11/8/2024 10:55**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 7	-11.24 to -18.24	15	15	70	0 to 1.2: SANDY SILT WITH GRAVEL (ML), soft, wet, black gray, 70% fines, 15, fine to medium sand, 15% fine gravel sized metal shavings. @0.6: grades from soft to medium stiff. @1: rainbow sheen bleb.		-11.24 to -13.24	TG-0-2
1 to 2	-12.24 to -13.24		100		1.2 to 2.7: POORLY GRADED SAND (SP), medium dense, moist, dark gray, 100% fine sand, trace fines, faint H2S-like oder.			
2 to 4	-13.24 to -15.24				2.7 to 7: CLAY (CL), soft, moist, tan, 100% fines, trace wood fibers throughout, moderate to strong H2S-like odor. @2.7: shell fragment.		-13.24 to -15.24	TG-2-4
4 to 6	-15.24 to -17.24			100			-15.24 to -17.24	TG-4-6
6 to 7	-17.24 to -18.24				@6: grades to moderate wood fibers.		-17.24 to -18.24	TG-6-7
7	-18.24				End of core at 7.0 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Samples TG-SC06-1.5-2.7-241108 (1.5 to 2,7 feet) and TG-SC06-3.1-06-241108 (3.1 to 6 feet) taken and tested for grain size distribution.
Samples TG-SC06-3.1-06-241108 (3.1 to 6 feet) taken and tested for Atterberg limits.

Sediment Core Log

WUT-SC01

Project: **Blair Waterway Deepening Program**	Logged By: **Ry Pearson**	Latitude: **7.8196.45**
Project #: **240092-03.03**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1172423.30**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-49.8 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **7.6**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **95**	Core Collection Date/Time: **11/5/2024 09:15**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-50		95	5	0 to 7: POORLY GRADED SAND (SP), loose, moist, dark gray, 95% fine to medium sand, 5% fines, multicolored flecks throughout. @1.1: grades to medium dense to dense.			
1	-51							
2	-52		85	15	@ 2.0: grades to with silt.		-49.8 to -55	WUT-SC01-A
3	-53							
4	-54		95	5	@3.7 grades to trace silt.			
5	-55				@5.6: grades from loose to loose to medium dense.			
6	-56				@6.0: grades from fine to medium sand to medium to coarse sand.		-55 to -56.8	WUT-SC01-B
7	-57				End of core at 7.0 feet.			
8	-58							
9	-59							
10	-60							
11	-61							
12	-62							
13	-63							
14	-64							
15								

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Samples WUT-SC01-00-5.2-241105 (0 to 5.2 feet) and WUT-SC01-5.2-07-241105 (5.2 to 7 feet) taken and tested for grain size distribution.

Sediment Core Log

WUT-SC02

Sheet 1 of 1

Project: **Blair Waterway Deepening Program**	Logged By: **Arno Riolo**	Latitude: **708179.04**
Project #: **240092-03.03**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1172328.04**
Client: **Port of Tacoma**	Drive Length (feet): **7**	Mudline Elevation (feet): **-48.5 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6.7**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **95.7**	Core Collection Date/Time: **11/5/2024 11:00**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-49		20	80	0 to 0.8: SILT WITH SAND (ML), soft, wet, dark gray brown, 80% nonplasic fines, 20% fine to medium sand.			
			40	60	@0.4: shell fragment.			
1	-50				0.8 to 2.2: SANDY SILT (ML) grades to higher sand content 60% fines, 40% sand.			
2	-51		80	20	2.2 to 6.7: SILTY SAND (SM), grades to medium dense, higher sand content, moist. 80% sand fine to medium sand, 20% fines.		-48.5 to -55	WUT-SC02-A
3	-52							
4	-53							
5	-54							
6	-55							
7	-56				End of core at 6.7 feet.			
8	-57							
9	-58							
10	-59							
11	-60							
12	-61							
13	-62							
14	-63							
15								

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.

Sediment Core Log

WUT-SC03

Project: **Blair Waterway Deepening Program**	Logged By: **Ry Pearson**	Latitude: **1172238.36**
Project #: **240092-03.03**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **708266.40**
Client: **Port of Tacoma**	Drive Length (feet): **8**	Mudline Elevation (feet): **-53.98 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **6.7**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **83.8**	Core Collection Date/Time: **11/5/2024 12:00**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-54		85	15	0 to 6.3: SILTY SAND (SM): loose, wet, dark gray, 85% sand, 15% fines, trace shell fragments throughout, moderate H2S-like oder. @0.3: 1.5 to 2.5 inch shells. @1.0: grades from moist to wet.		-53.98 to -54.98	WUT-SC03-A
1	-55						-54.98 to -59.98	WUT-SC03-B
2	-56							
3	-57							
4	-58							
5	-59						-59.98 to -61.28	WUT-SC03-Z
6	-60				End of core at 6.3 feet.			
7	-61							
8	-62							
9	-63							
10	-64							
11	-65							
12	-66							
13	-67							
14	-68							
15								

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.

Sediment Core Log

WUT-SC04

Sheet 1 of 1

Project: **Blair Waterway Deepening Program**	Logged By: **Ry Pearson**	Latitude: **1172241.90**
Project #: **240092-03.03**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **708375.78**
Client: **Port of Tacoma**	Drive Length (feet): **12**	Mudline Elevation (feet): **-53.33 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **12**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **100**	Core Collection Date/Time: **11/5/2024 13:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 15	0 to -15		95	5	0 to 11.2: POORLY GRADED SAND (SP), loose to medium dense, wet, gray black, 95% medium to coarse sand, 5% fines, trace shell hash throughout. @4.3: grades to trace silt. @7 to 8.9: well graded sand.		-53.33 to -55.0	WUT-SC04-A
							-55.03 to -59.03	WUT-SC04-B
							-59.03 to -60.43	WUT-SC04-Z
					End of core at 11.2 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.
Samples WUT-SC04-00-1.7-241105 (0 to 1.7 feet), WUT-SC04-1.7-5.7-241105 (1.7 to 5.7 feet), and WUT-SC04-5.7-7.7-241105 (5.7 to 7.7 feet) taken and tested for grain size distribution.
@3.0 to 3.8: Void in core from partial sloughing. Following depths have been adjusted.

Sediment Core Log

WUT-SC05

Sheet 1 of 1

Project: **Blair Waterway Deepening Program**	Logged By: **Arno Riolo**	Latitude: **708455.48**
Project #: **240092-03.03**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1172053.61**
Client: **Port of Tacoma**	Drive Length (feet): **6.8**	Mudline Elevation (feet):**-50.42 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **5.9**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%):**86.7**	Core Collection Date/Time: **11/06/2024 10:20**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 to 1	-51 to -52		20	80	0 to 1.6: SILT WITH SAND (ML), very soft, wet, brown, 80% nonplastic fines, 20% fine to medium sand, grading sandier downward.			
1 to 4	-52 to -55		60	40	1.6 to 4.6: SILTY SAND (SM), grades from previous unit, gray brown, 60% sand, 40% fines. @2.4 grades to loose. @4.0 grades to medium dense.		-50.42 to -55.02	WUT-SC05-A
4 to 5	-55 to -56		90	10	4.6 to 5.9: POORLY GRADED SAND WITH SILT (SP-SM), grades from previous unit, 90% sand, 10 % silt @5.3 grades to dense.		-55.02 to -56.32	WUT-SC05-B
5 to 6	-56 to -57				End of core @5.9 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Samples WUT-SC05-00-4.6-241106 (0 to 4.6 feet) and WUT-SC05-4.6-5.9-241106 (4.6 to 5.9 feet) taken and tested for grain size distribution. Archaeological monitoring completed by J. Cooper.

Sediment Core Log

WUT-SC06

Sheet 1 of 1

Project: **Blair Waterway Deepening Program**	Logged By: **Ry Pearson**	Latitude: **708547.83**
Project #: **240092-03.03**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1177043.65**
Client: **Port of Tacoma**	Drive Length (feet): **4**	Mudline Elevation (feet): **-51.7 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **2.4**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **60**	Core Collection Date/Time: **11/6/2024 11:30**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-52		10	90	0 to 0.2: SILT (ML), very soft, wet, dark brown gray, 90% fines, 10% sand.			
1	-53		95	5	0.2 to 2.4: POORLY GRADED SAND (SP), medium dense to dense, moist, dark gray with multicolored flecks, 95% sand, 5% fines, trace shall hash, trace silt.		-51.7 to -54.1	WUT-SC06-A
2	-54				End of core at 2.4 feet.			
3	-55							
4	-56							
5	-57							
6	-58							
7	-59							
8	-60							
9	-61							
10	-62							
11	-63							
12	-64							
13	-65							
14	-66							
15								

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.

Appendix D-2
2025 Archaeological Monitoring Results Memorandum

DRAFT

949 Market Street, Suite 700
Tacoma, Washington 98402
206.287.9130

ANCHOR QEA

Memorandum

January 14, 2026

To: Sara Potter, Port of Tacoma

From: Austin Jenkins and Jordan Cooper, Anchor QEA

cc: Norman Gilbert, Mark Rettman, and Rob Healy, Port of Tacoma; and Dan Berlin and Christine Simmons, Anchor QEA

Re: Archaeological Monitoring Results Memorandum Addendum
Blair Waterway Tacoma Harbor Deepening Program – Tru-Grit 2025 Sediment Sampling

Introduction

The Port of Tacoma (Port) conducted a sediment sampling program within the Blair Waterway to inform future dredging of the Tru-Grit Abrasives, Inc. (Tru-Grit), site under the Tacoma Harbor Deepening Program (Project; Figure 1). The Site is in Tacoma, Pierce County, Washington, in Section 35 of Township 21 North, Range 3 East. This memorandum addendum summarizes the results of archaeological monitoring of two sediment sampling mobilizations that were conducted in 2025 as described in the *Sampling and Quality Assurance Project Plan Addendum #1* (Anchor QEA 2025a) and Addendum #2 (Anchor QEA 2025b). Of the sediment characterization sampling efforts, two cores (TG-SC05RE and TG-SC31) and three grab samples (TG-SG06, TG-SG31, and TG-SG32) were monitored for cultural resources (Figure 2).

Sampling took place within an area of historical tideflats deposited by the Puyallup River, Wapato Creek, and other creeks and streams draining into Commencement Bay. The broader tideflats area has high potential to contain archaeological sites and culturally significant areas related to subsistence, settlement, ceremonial, and mortuary uses.

This memorandum addendum summarizes the results of archaeological monitoring completed pursuant to the Archaeological Monitoring and Inadvertent Discovery Plan (MIDP; Jenkins and Cooper 2024).

Regulatory Context

The sampling was permitted by the U.S. Army Corps of Engineers (USACE) under Nationwide Permit 6 (NWP 6). As such, it is subject to review by USACE under Section 106 of the National Historic Preservation Act (Section 106). Under Section 106 and its implementing regulations (36 *Code of Federal Regulations* [CFR] Part 800), USACE must consider the effects of their undertakings on historic properties, which include "any prehistoric or historic district, site, building, structure, or object included

in, or eligible for inclusion in, the National Register of Historic Places" (36 CFR 800.16[l][1]). The stipulations of NWP 6 indicate that USACE determined that the Port's activities will comply with Section 106, provided that the Port report any post-review discovery of historical or archaeological resources. Continued coordination between the Port and the Puyallup Tribe of Indians (Puyallup Tribe) Tribal Historic Preservation Office determined that monitoring would be required. The MIDP was developed to comply with NWP 6 stipulations and was submitted to the Tribal Historic Preservation Office.

Methods

The MIDP established a threshold for archaeological monitoring for any sampling and ground disturbance above approximately -10 feet mean lower low water (MLLW). Borings maps below -10 feet MLLW were expected to have all Holocene deposits removed prior to sampling and thus were not monitored. Core samples were collected using a vibracore advanced to 14 feet or refusal depth. Grab samples were collected from the 0- to 10-centimeter (0.3 foot) biologically active zone using an onboard hydraulically driven power grab sampler. The MIDP outlined monitoring that would take place and adopted the Puyallup Tribe's Inadvertent Discovery Plan with procedures to follow in the event of an inadvertent discovery of archaeological resources or human remains.

Austin Jenkins oversaw the implementation of field methods, and Jordan Cooper conducted the archaeological monitoring. Jenkins meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology. If cultural resources had been encountered, work stoppage, collection, communication, and documentation procedures outlined by the MIDP would have been implemented. None were encountered; therefore, those steps are not recapitulated here.

Results

Jordan Cooper observed and photographed all required sampling activities and made stratigraphic notes. During the first 2025 mobilization, one core, TG-SC05RE, was mapped to the -10 feet MLLW threshold and was monitored on April 1, 2025. During the second 2025 mobilization, one core (TG-SC31) and three grab samples (TG-SG06, TG-SG31, and TG-SGC32) and were mapped to the -10 feet MLLW threshold and were monitored on August 26, 2025. No cultural resources were observed during these activities. Representative core photographs are included in Attachment 1, and core logs are included in Attachment 2.

First 2025 Mobilization

Observed sediments in core TG-SC05RE were generally dark grey (Attachment 1, Photographs 1 through 4) medium to coarse sand and varying levels of silt, gravels, and shell content (Attachment 2). All observed sediments were interpreted to be native alluvial material, and no fill was observed to be present. The bottom 9.4 to 9.8 feet consisted of dark grey sand. One modern white

glass fragment was identified at 2.25 feet (Attachment 1, Photograph 5). Trace shell fragments were generally concentrated in the bottom 8 feet (Attachment 1, Photograph 6). TG-SC05RE reached a depth of 9.8 feet (Attachment 2).

No cultural resources were identified during monitoring.

Second 2025 Mobilization

Observed sediments in core TG-SC31 were generally dark grey (Attachment 1, Photographs 7 through 9) medium to coarse sand and varying levels of silt, gravels, and shell content. This core was collected from elevation -9.45 feet MLLW and was the second attempt to collect at this location. The bottom 6 to 10.7 feet consisted of brown, very fine silt with abundant organics/woody debris (Attachment 2). All observed sediments were interpreted to be native alluvial material, and no fill was observed to be present.

The three monitored grab samples consisted of generally of dark grey (Attachment 1, Photographs 10 through 12) medium to coarse sand and varying levels of silt, gravels, and common shell fragments content. TG-SG06 was collected at elevation -8 feet MLLW; TG-SG31 was collected at elevation -11 feet MLLW; and TG-SG32 sample was collected at elevation -11 feet MLLW.

No cultural resources were identified during monitoring.

Conclusions

Anchor QEA completed cultural resources monitoring in accordance with the MIDP developed for the project. Jordan Cooper observed all sampling activities above the -10 feet MLLW elevation and took photographs and stratigraphic notes. All cores and grabs collected below -10 feet MLLW followed the Inadvertent Discovery Plan, and no inadvertent discoveries were reported. No cultural resources were observed during these activities.

References

Anchor QEA, 2025a. *Sampling and Quality Assurance Project Plan Addendum #1*. Tru-Grit Site Data Gaps Field Investigation. Prepared for Port of Tacoma. March 2025.

Anchor QEA, 2025b. *Sampling and Quality Assurance Project Plan Addendum #2*. Tru-Grit Site Data Gaps Field Investigation. Prepared for Port of Tacoma. August 2025.

Jenkins, A., and J. Cooper, 2024. Anchor QEA. *Archaeological Monitoring and Inadvertent Discovery Plan*. Blair Waterway Tacoma Harbor Deepening Program [Berths and Tru-Grit] Sediment Sampling. Prepared for Port of Tacoma. October 2024.

Figures

DRAFT



NOTE:
1. Basemap: 1997 Tacoma North 7.5' Topograpic Quad (2003 Rev.)

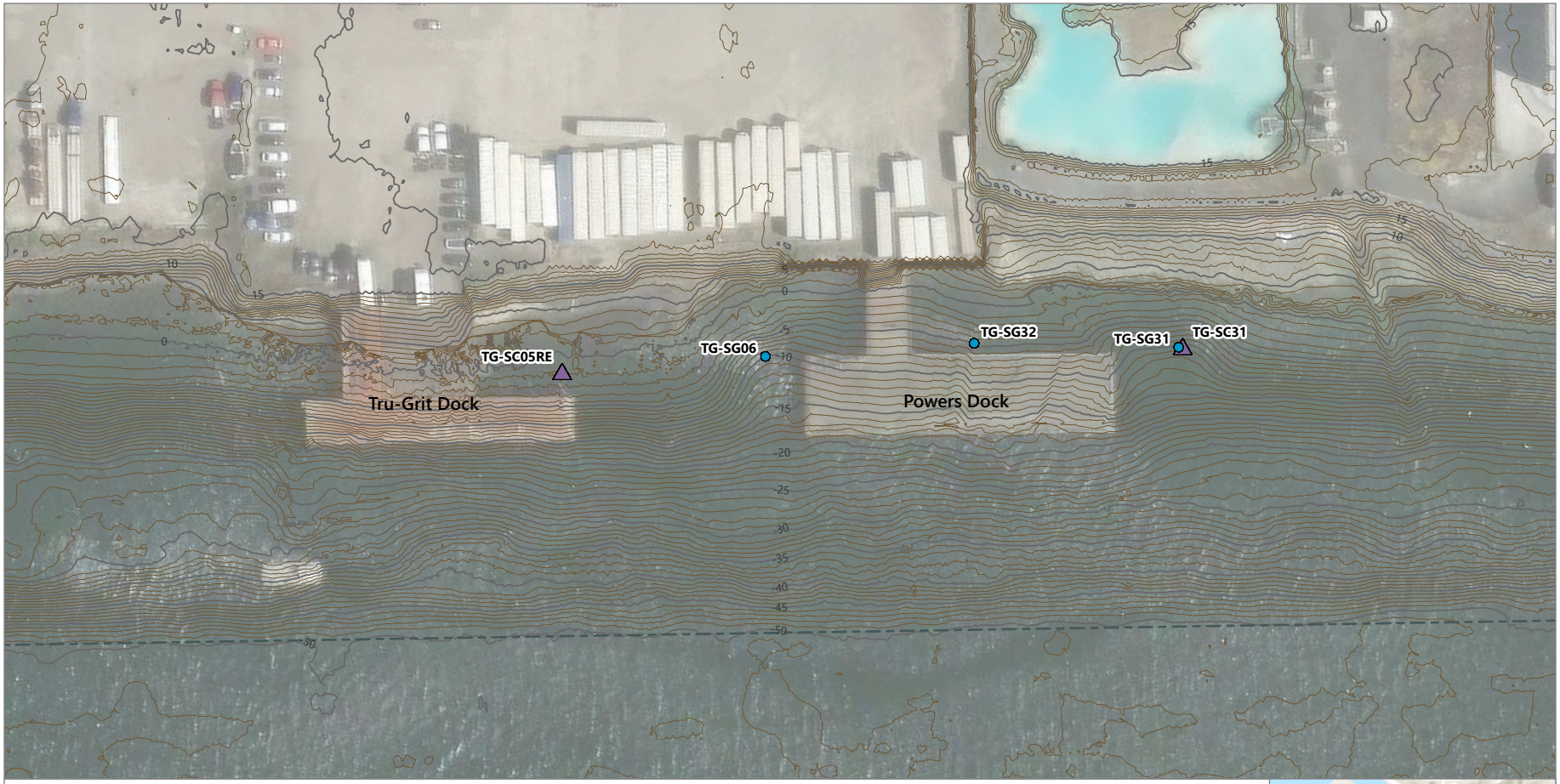
0 2,000
Feet

Publish Date: 2026/01/14, 09:08 AM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx

ANCHOR QEA

Figure 1
Vicinity Map
Archaeological Monitoring Results Memorandum Addendum
Port of Tacoma – Tru-Grit

DRAFT



LEGEND:

- Feasibility Study Navigation Channel Boundary
- Elevation (MLLW, 5-Foot Interval)

Sample Location

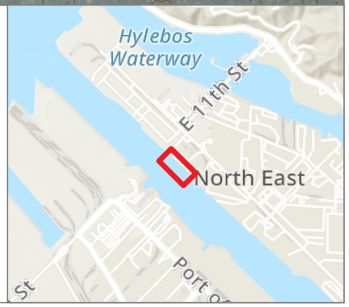
- Core (Subsurface Sediment)
- Grab (Surface Sediment)

NOTES:

1. Aerial imagery: Esri (2025)
2. Contour Source: Survey by USACE, dated October 27, 2021, and David Evans Associates Inc., dated May 27, 2022, with data gaps filled from survey by USACE dated November 14, 2022
3. Horizontal Datum: NAD83 State Plane Washington South, U.S. feet
4. Vertical Datum: MLLW, feet

MLLW: mean lower low water
NAD83: North American Datum of 1983
USACE: U.S. Army Corps of Engineers

0 100
Feet



Publish Date: 2026/01/14, 9:08 AM | User: thartmann
Filepath: \\GSTFile01\GIS\Jobs\PortofTacoma_0092\Tru-Grit_Site_Project_D\Maps\Sediment_Characterization_Data_Report\AQ_PoT_TruGrit_SCR.aprx | TruGrit_SCR_AMM_Fig2_MonitoringLocs

ANCHOR QEA

Figure 2
Monitoring Locations
Archaeological Monitoring Results Memorandum Addendum
Port of Tacoma – Tru-Grit

Attachment 1
Core Photographs

Photograph 1
Representation of TG-SC05RE at 1 to 2 Feet



Photograph 2
Representation of TG-SC05RE at 3 to 4 Feet



Photograph 3
Representation of TG-SC05RE at 6 to 7 Feet



Photograph 4
Representation of TG-SC05RE at 8 to 9.4 Feet



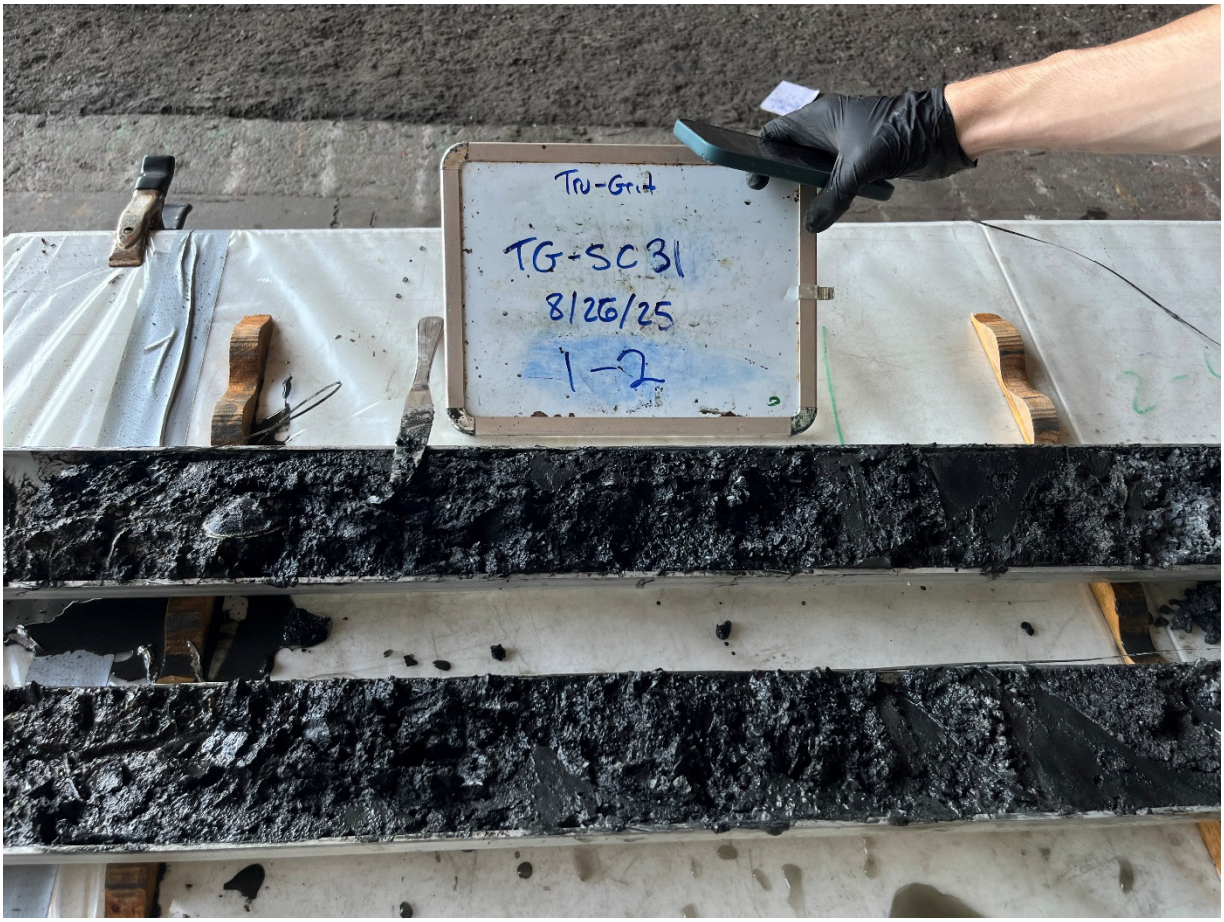
Photograph 5
TG-SC05RE Modern Glass Fragment at 2.25 Feet



Photograph 6
Representation of TG-SC05RE Shell Fragments at 8 Feet



Photograph 7
Representation of TG-SC31 at 1 to 2 Feet



Photograph 8
Representation of TG-SC31 at 5 to 6 Feet



Photograph 9
Representation of TG-SC31 at 7 to 8 Feet



Photograph 10
Representation of Grab Sample TG-SG06



Photograph 11
Representation of Grab Sample TG-SG31



Photograph 12
Representation of Grab Sample TG-SG32



Attachment 2
Core Logs

Sediment Core Log

TG-SC05RE

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712454.66**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1168779.01**
Client: **Port of Tacoma**	Drive Length (feet): **14**	Mudline Elevation (feet): **-0.14 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **9.8**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **Gravity**	Percent Recovery (%): **70**	Core Collection Date/Time: **4/1/2025 08:49**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0 – 8	-0.14 to -8.14		95	5	0.0 to 8.0: POORLY GRADED SAND (SP), loose to medium dense, moist, dark gray with trace multicolored grains (red and white), sand is medium. @1.4 to 1.7: sand layer, very dark gray @2.2: white glass fragment @3.3: silt lense, light gray @3.7: silt lense, light gray @4.1 to 4.3: shell fragments @4.7: silt clast, light gray @6.6: silt lense, gray @7.4: shell @7.6 to 7.8: silt lense, light gray		-0.14 to - 2.14	TG-SC05RE-00-02 -250401
							-2.14 to -4.14	TG-SC05RE-02-04 -250401
							-4.14 to -6.14	TG-SC05RE-04-06 -250401
							-6.14 to -8.14	TG-SC05RE-06-08 -250401
8 – 9.4	-8.14 to -9.94		10	90	8.0 to 9.4: SILT (ML), medium stiff, moist, dark brown, low plasticity, H2S-like odor to end of core. @8.2: shell fragment @8.5: 1.5" fine sand clast @8.8: shell fragment		-8.14 to -9.94	TG-SC05RE-08-9.4 -250401
9.4 – 9.8	-9.94 to -10.14		95	5	9.4 to 9.8: POORLY GRADED SAND (SP), medium dense, dark gray, sand is medium.			
9.8	-10.14				End of core at 9.8 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.

Sediment Core Log

TG-SC31

Project: **Tru-Grit Sediment Characterization**	Logged By: **Audrey White**	Latitude: **712196.73**
Project #: **240092-03.06**	Method/Core Diameter: **Vibracore / 4 inches**	Longitude: **1169058.43**
Client: **Port of Tacoma**	Drive Length (feet): **12.6**	Mudline Elevation (feet): **-9.45 MLLW**
Location: **Tacoma, Washington**	Recovery Length (feet): **10.6**	Horizontal Datum: **NAD83 WA State Plane South (feet)**
Contractor: **MSS**	Percent Recovery (%): **84**	Core Collection Date/Time: **8/26/2025 11:45**

In-situ Depth (feet)	Elevation (feet MLLW)	% Gravel	% Sand	% Fines	Sediment Description (Density, Moisture, Color, Minor Consttuent, MAJOR Constituent, with Additional Constituents, Sheen, Odor)	Lithology	Sample Depth (feet)	Sample ID
0	-9.45		10	90	0.0 to 3.4: SILT (ML), soft, moist, very dark gray, low plasticity, abundant shell debris to 1.9'. @0.6: 1.5" intact bivalve @2.6 to 2.9: sub-angular gravel layer, light gray		-9.45 to -11.45	TG-SC31-00-02 -250826
3.4	-13.05		80	20	3.4 to 5.0: SILTY SAND (SM), loose, moist, dark gray, sand is fine to medium.		-11.45 to -13.45	TG-SC31-02-04 -250826
5.0	-14.85		95	5	5.0 to 5.9: POORLY GRADED SAND (SP), loose, moist, dark gray with multicolored grains (red and white), sand is medium.		-13.45 to -15.45	TG-SC31-04-06 -250826
5.9	-15.65		5	95	5.9 to 10.7: SILT (ML), medium stiff, moist, brown with trace gray mottling to 7.0', abundant fibrous woody debris, trace to moderate H2S-like odor.		-15.45 to -17.45	TG-SC31-06-08 -250826
							-17.45 to -19.45	TG-SC31-08-10 -250826
							-19.45 to -20.15	TG-SC31-10-10.7 -250826
10.7	-20.15				End of core at 10.7 feet.			

ANCHOR QEA
1201 3rd Avenue Suite 2600
Seattle, WA 98101
206-287-9130

Notes: Archaeological monitoring completed by J. Cooper.

Appendix E
Data Report Index

Appendix E
Data Report Index

Sample ID	Lab SDG[1]	Validation Report ID
Fall 2024 Investigation Samples		
TG-SC01-00-01-241113	24K0538	60455
TG-SC01-00-01-241113	24K0556	AQ-2025-0054
TG-SC01-00-01-241113	25A0504	60810
TG-SC02-00-1.7-241108	24K0387	60412
TG-SC02-00-1.7-241108	24K0414	AQ-2025-0054
TG-SC02-00-1.7-241108	25A0504	60810
TG-SC03-0.8-6.3-241108	24K0387	AQ-2025-0055
TG-SC03-0.8-6.3-241108	24K0414	AQ-2025-0054
TG-SC03-00-0.8-241108	24K0414	AQ-2025-0054
TG-SC03-00-02-241108	24K0387	60412
TG-SC03-00-02-241108	25A0504	60810
TG-SC03-02-04-241108	24K0387	60412
TG-SC03-04-06-241108	24K0387	60412
TG-SC03-06-6.3-241108	24K0387	60412
TG-SC04-00-02-241029	24K0102	60391
TG-SC04-02-04-241029	24K0086	AQ-2025-0054
TG-SC04-02-04-241029	24K0102	60391
TG-SC04-04-06-241029	24K0086	AQ-2025-0054
TG-SC04-04-06-241029	24K0102	60391
TG-SC04-04-06-241029	25B0282	60818
TG-SC04-5.8-06-241029	24K0088	AQ-2025-0054
TG-SC05-00-1.6-241113	24K0538	60455
TG-SC05-00-1.6-241113	24K0556	AQ-2025-0054
TG-SC06-00-02-241108	24K0387	60412
TG-SC06-00-02-241108	25A0504	60810
TG-SC06-02-04-241108	24K0387	60412
TG-SC06-02-04-241108	25A0504	60810
TG-SC06-04-06-241108	24K0387	60412
TG-SC06-06-07-241108	24K0387	60412
TG-SC06-1.5-2.7-241108	24K0414	AQ-2025-0054
TG-SC06-3.1-06-241108	24K0387	AQ-2025-0055
TG-SC06-3.1-06-241108	24K0414	AQ-2025-0054
TG-SC07-00-02-241113	24K0538	60455
TG-SC07-00-02-241113	25A0504	60810
TG-SC07-00-3.6-241113	24K0556	AQ-2025-0054
TG-SC07-02-04-241113	24K0538	60455
TG-SC07-04-5.9-241113	24K0538	60455
TG-SC07-3.6-5.9-241113	24K0556	AQ-2025-0054
TG-SC08-00-02-241114	24K0538	60455
TG-SC08-00-02-241114	25A0504	60810
TG-SC08-00-4.9-241114	24K0556	AQ-2025-0054
TG-SC08-02-04-241114	24K0538	60455
TG-SC08-04-06-241114	24K0538	60455
TG-SC08-04-06-241114	25I0445, 2510041	AQ-2025-0157
TG-SC08-4.9-06-241114	24K0556	AQ-2025-0054
TG-SC09-00-02-241113	24K0538	60455
TG-SC09-00-5.8-241113	24K0556	AQ-2025-0054

Appendix E
Data Report Index

Sample ID	Lab SDG[1]	Validation Report ID
TG-SC09-02-04-241113	24K0538	60455
TG-SC09-04-06-241113	24K0538	60455
TG-SC09-5.8-6.7-241113	24K0556	AQ-2025-0054
TG-SC10-00-02-241112	24K0387	60412
TG-SC10-00-5.2-241112	24K0414	AQ-2025-0054
TG-SC10-02-04-241112	24K0387	60412
TG-SC10-04-5.2-241112	24K0387	60412
TG-SC11-00-02-241111	24K0387	60412
TG-SC11-00-02-241111	24K0414	AQ-2025-0054
TG-SC11-02-4.4-241111	24K0387	60412
TG-SC11-02-4.4-241111	24K0414	AQ-2025-0054
TG-SC11-02-4.4-241111	25A0504	60810
TG-SC12-0.9-4.5-241111	24K0414	AQ-2025-0054
TG-SC12-00-0.9-241111	24K0414	AQ-2025-0054
TG-SC12-00-02-241111	24K0387	60412
TG-SC112-00-02-241111	24K0387	60412
TG-SC12-02-4.5-241111	24K0387	60412
TG-SC13-00-02-241113	24K0538	60455
TG-SC13-00-02-241113	25A0504	60810
TG-SC13-00-1.9-241113	24K0556	AQ-2025-0054
TG-SC13-02-3.3-241113	24K0538	60455
TG-SC13-1.9-3.3-241113	24K0556	AQ-2025-0054
TG-SC14-00-02-241114	24K0538	60455
TG-SC14-00-3.6-241114	24K0556	AQ-2025-0054
TG-SC14-02-04-241114	24K0538	60455
TG-SC14-02-04-241114	25A0504	60810
TG-SC14-04-6.1-241114	24K0538	60455
TG-SC14-04-6.1-241114	25A0504	60810
TG-SC14-4.1-6.1-241114	24K0556	AQ-2025-0054
TG-SC15-00-02-241113	24K0538	60455
TG-SC15-00-1.9-241113	24K0556	AQ-2025-0054
TG-SC15-02-3.2-241113	24K0538	60455
TG-SC15-1.9-3.2-241113	24K0556	AQ-2025-0054
TG-SC16-00-02-241114	24K0538	60455
TG-SC16-00-02-241114	24K0556	AQ-2025-0054
TG-SC16-02-04-241114	24K0538	60455
TG-SC116-02-04-241114	24K0538	60455
TG-SC16-03-05-241114	24K0556	AQ-2025-0054
TG-SC16-04-5.4-241114	24K0538	60455
TG-SC16-04-5.4-241114	25A0504	60810
TG-SC17-00-02-241114	24K0538	60455
TG-SC17-00-4.2-241114	24K0556	AQ-2025-0054
TG-SC17-02-04-241114	24K0538	60455
TG-SC17-04-6.2-241114	24K0538	60455
TG-SC17-04-6.2-241114	25A0504	60810
TG-SC17-04-6.2-241114	25A0504	60810
TG-SC17-4.2-6.2-241114	24K0556	AQ-2025-0054
TG-SC18-00-02-241101	24K0127	60131

Appendix E
Data Report Index

Sample ID	Lab SDG[1]	Validation Report ID
TG-SC18-00-02-241101	24K0158	AQ-2025-0054
TG-SC18-00-02-241101	25A0504	60810
TG-SC18-02-04-241101	24K0127	60131
TG-SC18-03-04-241101	24K0088	AQ-2025-0054
TG-SC18-04-06-241101	24K0127	60131
TG-SC18-04-06-241101	25A0504	60810
TG-SC18-06-08-241101	24K0127	60131
TG-SC18-06-08-241101	24K0158	AQ-2025-0054
TG-SC18-08-9.9-241101	24K0127	60131
TG-SC19-00-02-241112	24K0387	60412
TG-SC19-00-02-241112	25A0504	60810
TG-SC19-00-2.6-241112	24K0414	AQ-2025-0054
TG-SC19-02-04-241112	24K0387	60412
TG-SC19-04-5.4-241112	24K0387	60412
TG-SC19-2.6-5.4-241112	24K0387	AQ-2025-0055
TG-SC19-2.6-5.4-241112	24K0414	AQ-2025-0054
TG-SC20-00-02-241114	24K0538	60455
TG-SC20-00-02-241114	25A0504	60810
TG-SC20-00-2.1-241114	24K0556	AQ-2025-0054
TG-SC20-02-04-241114	24K0538	60455
TG-SC20-04-4.8-241114	24K0538	60455
TG-SC20-2.1-4.8-241114	24K0556	AQ-2025-0054
TG-SC21-00-02-241113	24K0538	60455
TG-SC21-00-02-241113	25A0504	60810
TG-SC21-00-3.8-241113	24K0556	AQ-2025-0054
TG-SC21-02-04-241113	24K0538	60455
TG-SC21-02-04-241113	25C0179	60818
TG-SC21-04-06-241113	24K0538	60455
TG-SC21-3.8-06-241113	24K0556	AQ-2025-0054
TG-SC22-00-02-241114	24K0538	60455
TG-SC22-00-02-241114	25A0504	60810
TG-SC22-00-1.9-241114	24K0556	AQ-2025-0054
TG-SC22-02-04-241114	24K0538	60455
TG-SC22-02-04-241114	25C0179	60818
TG-SC22-04-06-241114	24K0538	60455
TG-SC22-06-6.8-241114	24K0538	60455
TG-SC22-1.9-6.8-241114	24K0556	AQ-2025-0054
TG-SC23-00-02-241113	24K0538	60455
TG-SC23-00-02-241113	25A0504	60810
TG-SC23-00-3.9-241113	24K0556	AQ-2025-0054
TG-SC23-02-04-241113	24K0538	60455
TG-SC23-02-04-241113	25C0179	60818
TG-SC123-02-04-241113	24K0538	60455
TG-SC123-02-04-241113	25C0179	60818
TG-SC23-04-5.5-241113	24K0538	60455
TG-SC23-3.9-5.5-241113	24K0556	AQ-2025-0054
TG-SC24-00-02-241028	24K0086	AQ-2025-0054
TG-SC24-00-02-241028	24K0102	60391

Appendix E
Data Report Index

Sample ID	Lab SDG[1]	Validation Report ID
TG-SC24-00-02-241028	25A0504	60810
TG-SC24-02-04-241028	24K0102	60391
TG-SC24-02-04-241028	25C0179	60818
TG-SC24-04-06-241028	24K0102	60391
TG-SC24-06-08-241028	24K0086	AQ-2025-0054
TG-SC24-06-08-241028	24K0102	60391
TG-SC24-08-10-241028	24K0102	60391
TG-SC24-10-11.2-241028	24K0102	60391
TG-SC-RB241031	24K0102	60391
Spring 2025 Investigation Samples		
TG-SC05RE-00-02-250401	25D0035	61067
TG-SC05RE-02-04-250401	25D0035	61067
TG-SC05RE-02-04-250401	25E0393	61404
TG-SC05RE-04-06-250401	25D0035	61067
TG-SC05RE-06-08-250401	25D0035	61067
TG-SC105RE-06-08-250401	25D0035	61067
TG-SC05RE-08-9.4-250401	25D0035	61067
TG-SC09RE-06-08-250327	25C0722	60936
TG-SC09RE-08-10-250327	25C0722	60936
TG-SC09RE-08-10-250327	25E0393	61404
TG-SC09RE-10-12-250327	25C0722	60936
TG-SC10RE-04-06-250328	25C0722	60936
TG-SC10RE-06-6.9-250328	25C0722	60936
TG-SC10RE-06-6.9-250328	25E0393	61404
TG-SC11RE-02-04-250327	25C0722	60936
TG-SC11RE-04-06-250327	25C0722	60936
TG-SC11RE-04-06-250327	25I0445, 2510041	AQ-2025-0157
TG-SC11RE-06-08-250327	25C0722	60936
TG-SC11RE-06-08-250327	25I0445, 2510041	AQ-2025-0157
TG-SC11RE-08-10-250327	25C0722	60936
TG-SC11RE-10-11.3-250327	25C0722	60936
TG-SC12RE-04-06-250328	25C0722	60936
TG-SC12RE-04-06-250328	25E0393	61404
TG-SC12RE-06-08-250328	25C0722	60936
TG-SC12RE-06-08-250328	25I0445, 2510041	AQ-2025-0157
TG-SC12RE-08-10-250328	25C0722	60936
TG-SC12RE-08-10-250328	25I0445, 2510041	AQ-2025-0157
TG-SC12RE-10-11.2-250328	25C0722	60936
TG-SC15RE-02-04-250328	25C0722	60936
TG-SC15RE-04-06-250328	25C0722	60936
TG-SC15RE-04-06-250328	25E0393	61404
TG-SC115RE-04-06-250328	25C0722	60936
TG-SC15RE-06-08-250328	25C0722	60936
TG-SC15RE-08-10-250328	25C0722	60936
TG-SC15RE-10-10.9-250328	25C0722	60936
TG-SC25-00-02-250328	25C0722	60936
TG-SC25-02-04-250328	25C0722	60936
TG-SC25-04-06-250328	25C0722	60936

Appendix E
Data Report Index

Sample ID	Lab SDG[1]	Validation Report ID
TG-SC25-04-06-250328	25F0353	61474
TG-SC25-06-08-250328	25C0722	60936
TG-SC125-06-08-250328	25C0722	60936
TG-SC25-08-10-250328	25C0722	60936
TG-SC25-08-10-250328	25E0393	61404
TG-SC25-10-11.8-250328	25C0722	60936
TG-SC25-10-11.8-250328	25I0445, 2510041	AQ-2025-0157
TG-SC26-00-02-250331	25D0035	61067
TG-SC26-02-04-250331	25D0035	61067
TG-SC26-04-06-250331	25D0035	61067
TG-SC26-06-08-250331	25D0035	61067
TG-SC26-06-08-250331	25E0393	61404
TG-SC26-08-10-250331	25D0035	61067
TG-SC26-08-10-250331	25I0445, 2510041	AQ-2025-0157
TG-SC26-10-11-250331	25D0035	61067
TG-SC27-00-02-250512	25E0227	61186
TG-SC27-02-04-250512	25E0227	61186
TG-SC27-04-06-250512	25E0227	61186
TG-SC27-04-06-250512	25F0353	61474
TG-SC27-06-08-250512	25E0227	61186
TG-SC27-06-08-250512	25I0445, 2510041	AQ-2025-0157
TG-SC27-08-10-250512	25E0227	61186
TG-SC27-08-10-250512	25I0445, 2510041	AQ-2025-0157
TG-SC27-10-12-250512	25E0227	61186
TG-SC28-00-02-250512	25E0227	61186
TG-SC28-00-02-250512	25F0353	61474
TG-SC28-02-04-250512	25E0227	61186
TG-SC28-04-06-250512	25E0227	61186
TG-SC28-06-08-250512	25E0227	61186
TG-SC28-08-10-250512	25E0227	61186
TG-SC28-10-12-250512	25E0227	61186
TG-SC-RB250401	25D0035	61067
Summer 2025 Investigation Samples		
TG-SC29-00-02-250826	25H0498	61620
TG-SC29-02-04-250826	25H0498	61620
TG-SC29-04-06-250826	25H0498	61620
TG-SC29-06-08-250826	25H0498	61620
TG-SC29-08-10-250826	25H0498	61620
TG-SC29-10-12-250826	25H0498	61620
TG-SC30-00-02-250826	25H0498	61620
TG-SC30-02-04-250826	25H0498	61620
TG-SC30-04-06-250826	25H0498	61620
TG-SC30-06-08-250826	25H0498	61620
TG-SC130-06-08-250826	25H0498	61620
TG-SC30-08-10-250826	25H0498	61620
TG-SC30-10-12-250826	25H0498	61620
TG-SC31-00-02-250826	25H0498	61620
TG-SC31-02-04-250826	25H0498	61620

Appendix E
Data Report Index

Sample ID	Lab SDG[1]	Validation Report ID
TG-SC31-04-06-250826	25H0498	61620
TG-SC31-04-06-250826	25I0445, 2510041	AQ-2025-0157
TG-SC31-06-08-250826	25H0498	61620
TG-SC31-06-08-250826	25I0445, 2510041	AQ-2025-0157
TG-SC31-08-10-250826	25H0498	61620
TG-SC31-10-10.7-250826	25H0498	61620
TG-SC-RB-250826	25H0498	61620
TG-SG06-250826	25H0510, 2509120	61623
TG-SG12-250826	25H0510, 2509120	61623
TG-SG25-250826	25H0510, 2509120	61623
TG-SG27-250826	25H0510, 2509120	61623
TG-SG29-250826	25H0510, 2509120	61623
TG-SG30-250826	25H0510, 2509120	61623
TG-SG31-250826	25H0510, 2509120	61623
TG-SG131-250826	25H0510, 2509120	61623
TG-SG32-250826	25H0510, 2509120	61623
TG-SG-RB-250826	25H0510, 2509120	61623
Sediment Disposal Profile Characterization Samples		
TG-COMP-A/B-091025	PG2035.01	--
TG-COMP-C-091025	PG2035.02	--
TG-COMP-D-091025	PG2035.03	--
TG-COMP-A-B-102725	25J0514	--
TG-COMP-C-102725	25J0514	--
TG-COMP-D-102725	25J0514	--

Note:

1: Twenty sediment samples were subbed from ARL to Enthalpy for dioxins/furans in order to meet project turnaround times. Both laboratory SDGs are listed above, and the Enthalpy laboratory report has been included in its entirety within the ARL laboratory report.

--: not applicable

ARL: Analytical Resources, LLC

Enthalpy: Enthalpy Analytical

SDG: sample delivery group

Appendix F
Analytical Laboratory Reports

Provided as a separate file

Appendix G
Data Validation Reports

Provided as a separate file