CENWS-OD-TS-NR-DMMO

MEMORANDUM FOR: RECORD July 9, 2015

SUBJECT: DETERMINATION REGARDING THE SUITABILITY/UNSUITABILITY OF PROPOSED DREDGED MATERIAL FOR EXPANSION OF THE PORT OF EVERETT'S PACIFIC TERMINAL BERTHING AREA, LOCATED AT THE FORMER SITE OF WEYERHAEUSER MILL A, EVALUATED UNDER SECTION 404 OF THE CLEAN WATER ACT FOR UNCONFINED OPEN-WATER DISPOSAL AT THE PORT GARDNER OPEN-WATER SITE.

1. Introduction. This memorandum reflects the consensus determination of the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, Washington Departments of Ecology and Natural Resources, and the Environmental Protection Agency) regarding the suitability/unsuitability of up to 40,000 cubic yards (cy) of dredged material associated with expansion of the Port of Everett's Pacific Terminal berthing area, located at the former site of Weyerhaeuser Mill A, for disposal at the Port Gardner open-water site.

2. Background. The Port of Everett is proposing expansion of the berthing capacity at Pacific Terminal to support the larger ships anticipated to call on the terminal in the future. Pacific Terminal is the Port's primary marine terminal and is used by the Port for handling and loading of maritime cargo. It was constructed in the mid-1990s as part of a near-shore confined disposal (NCD) facility project. Currently, a 650-foot-long shipping berth operates at the terminal. Pacific Terminal is a part of a larger marine terminal complex, which also includes South Terminal and Pier 1 (GeoEngineers, 2014).

   Pacific Terminal is located on property formerly occupied by Weyerhaeuser's Mill A facility at the southern end of the City of Everett waterfront (Figure 1). Previous sediment investigations found elevated concentrations of metals, semivolatile organics, PCBs and dioxins/furans located offshore of the former mill facility. The contamination led the Department of Ecology (Ecology) to designate the area a cleanup site in 1996. A partial cleanup was accomplished at that time, resulting in construction of the NCD and dredging and sequestration of 130,000 cubic yards of contaminated sediment behind the NCD containment berm. Pacific Terminal was constructed over the NCD and serves as a cap which minimizes rainwater infiltration. The cleanup removed contaminated sediment to the west of Pier 1 and created a berthing area for Pacific Terminal. Other areas of contaminated sediment associated with the Mill A facility remain, including an area of wood debris accumulation adjacent to South and Pacific Terminals.

   Ecology is undertaking a cleanup of the remaining contaminated sediment associated with Mill A under an Agreed Order, but the cleanup is likely to take several years to accomplish. In the meantime, the Port of Everett has an immediate need to expand the berth at Pacific Terminal to facilitate maritime cargo shipping. To accommodate this need, Ecology has agreed to a Model Toxics Control Act (MTCA) Interim Cleanup Action in the berth expansion area under an amendment to the existing Agreed Order. The proposed interim action will expedite part of the environmental cleanup at the former Mill A site while meeting the Port's immediate navigation needs. Figure 2 shows the interim action dredge area in relation to the terminal complex and the area of wood debris accumulation. Also shown is the "Berth 1 Construction Dredge Area". The Port

of Everett plans to expand Berth 1 at some future time; however, it is not part of the current proposal. Figure 3 shows the interim action area in more detail and depicts the expansion of the berthing capacity at Pacific Terminal.

3. Sediment Evaluation under DMMP and MTCA. Characterization of the sediment proposed for dredging required the dual application of the DMMP evaluation guidelines and MTCA cleanup standards. To facilitate this characterization, Ecology's Toxics Cleanup Program (TCP) and the DMMP agencies agreed to a joint review of the sampling and analysis plan, in which the combined sediment evaluation framework was developed. The Interim Action Work Plan for the project requires that any sediment identified as cleanup material under MTCA will be disposed of at an appropriate landfill. Only dredged material meeting both the DMMP suitability guidelines and MTCA standards will be taken to the Port Gardner open-water disposal site. The resulting evaluation framework is provided in Figure 4 and summarized in the following bullets:

■ For arsenic, cadmium, lead and mercury the screening levels for protection of human health and higher trophic level ecological receptors would be the maximum allowable concentrations for open-water disposal. For other metals tiered testing would be conducted, with the DMMP screening levels used to determine the need for bioassays.

■ For PAHs, chlorinated hydrocarbons, phthalates, phenols and miscellaneous extractables the analytical results would be independently compared to DMMP screening levels, MTCA screening levels for protection of benthic organisms and MTCA screening levels for protection of human health and higher trophic level ecological receptors. If concentrations exceed any of these screening levels, then bioassay testing would be required for the material to be determined suitable for open-water disposal.

■ For total PCBs, the MTCA screening level for protection of human health and higher trophic level ecological receptors would be the maximum allowable concentration for open-water disposal.

■ For total cPAHs and total dioxin-like PCB congeners there are no MTCA screening levels for protection of benthic organisms or DMMP screening levels. For these groups of chemicals, the screening levels for protection of human health and higher trophic level ecological receptors would be the maximum allowable concentrations for open-water disposal.

■ The MTCA screening level for dioxin (5 ng/kg) is based on the practical quantitation limit and would not be used for determination of open-water suitability. The DMMP dioxin guidelines would be used instead.

■ For chemicals that do not have MTCA screening levels (e.g. pesticides and TBT), the DMMP guidelines would be used.

■ In the event that a DMMP bioaccumulation trigger (BT) were to be exceeded for a DMMU and the DMMU would otherwise qualify for open water disposal, the Port would determine whether or not to conduct bioaccumulation testing for that DMMU. If bioaccumulation testing was not conducted the DMMU would be found unsuitable for open-water disposal.

■ DMMUs with a dry-weight wood-waste content greater than 25% would be subjected to bioassay testing.

This suitability determination memorandum describes the sampling and testing that was performed, presents the results of the sediment evaluation, and documents the determination by the DMMP agencies of the suitability/unsuitability of the dredged material for open-water disposal based on the dual DMMP/MTCA framework.

4. Project Summary. Table 1 includes project summary and tracking information.

Table 1. Project Summary

Project ranking	High
Dredging volume	40,000 cubic yards
Proposed dredging depth	-43 feet MLLW within the main navigation area and -48 feet MLLW within the slope protection keyway; both base elevations include one foot of over-dredge allowance
1st draft sampling and analysis plan (SAP) received	November 7, 2014
DMMP comments provided on 1st draft	November 20, 2014
2nd draft SAP received	December 1, 2014
DMMP comments provided on 2nd draft	December 15, 2014
Final SAP received	December 16, 2014
SAP approved	December 20, 2014
Sampling dates	January 12-16, 2015
Draft data report received	May 8, 2015
DMMP comments provided on draft report	May 20, 2015
Final data report received	June 22, 2015
DAIS Tracking number	PEWMA-1-B-F-366
EIM study ID	AODE8979
USACE permit application number	NWS-2014-890
Recency determination (high rank = 3 years)	January 12, 2018

5. Project Ranking and Sampling Requirements. The Former Mill A site was ranked “high” due to its location in East Waterway (DMMP, 2014).

In a high-ranked area the number of samples and analyses are normally calculated using the following guidelines (DMMP, 2014):

- Maximum volume of sediment represented by each field sample (typically a 4-foot core) = 4,000 cubic yards
- Maximum volume of sediment represented by each analysis in the upper 4-feet of the dredging prism (surface sediment) = 4,000 cubic yards

- Maximum volume of sediment represented by each analysis beyond the upper 4-feet of the dredging prism (subsurface sediment) = 12,000 cubic yards

However, due to the heterogeneity of the site and the site's designation as a MTCA cleanup site, the DMMP agencies limited both surface and subsurface analyses to 4,000 cubic yards.

The total project volume at the time the sampling and analysis plan (SAP) was submitted was 35,140 cubic yards, including a one-foot overdredge allowance and an uncertainty factor of 10%. The project was divided into eleven dredged material management units (DMMUs) in six layers. Figures 4 to 7 show the layers, DMMUs and sampling locations. Figure 8 shows the compositing scheme. A total of 48 individual core sections were to be composited to represent the 11 DMMUs. However, the DMMP agencies agreed to review the core logs prior to compositing in order to take into account the stratigraphy encountered during sampling.

The SAP also included analysis of 9 z-samples. Normally, the z-samples would be collected from the first 2 feet beyond the overdepth. However, to accommodate the needs of TCP, z-samples were restricted to the first foot beyond the dredging overdepth. The purpose of z-sample analysis was to determine the chemical quality of the sediment that would be exposed by dredging. TCP also needed z-sample analysis on the new side slopes to determine sediment composition and slope stability.

6. Sampling. Field sampling took place January 12-16, 2015 using a sonic drill rig mounted on a barge. Tables 2 and 3 present the coring data, including penetration and recovery. Figure 9 shows both the target and actual sampling locations.

   Full penetration was achieved at all sampling locations. The minimum acceptable recovery rate of 75% was also achieved, with the exception of 4 core sections (at sampling stations PT-6, PT-8, PT-9 and PT-12). A second core was collected at these 4 stations in order to replace the core sections with poor recovery. This procedure was successful, except for the -27 to -30.25 MLLW core section at PT-106, which again had poor recovery.

   The core from each sampling station was divided into one-foot core sections and archived. Upon completion of sampling, the core logs and stratigraphy were evaluated to determine if revisions needed to be made to the DMMU configurations and compositing plan. In consultation with the DMMP agencies and TCP, GeoEngineers made two substantive changes upon review of the logs. First, a new DMMU (D-7) was created, consisting of sediment with high wood content that was blanketing the base of the slope in the most offshore portion of the dredging prism. Second, the three DMMUs located between elevations -38 ft and -42 ft MLLW (D-6A, D-6B and D-6C) were consolidated into two DMMUs (D-6A and D-6B).

   Figures 10, 11 and 12 show the stratigraphy encountered during sampling and the revised DMMU configurations. Figure 13 includes the revised compositing plan. In addition to the DMMU modifications, the z-layer sample at PT-3 was substituted for PT-2 because wood debris was observed closer to the dredging limit at this location. This change is evident in Figure 13.

7. Wood-Content Analysis. Due to the fact that wood waste was known to be present in portions of the dredge prism, the DMMP agencies required the fraction of wood waste in each DMMU to be

quantified using a modified total volatile solids (TVS) test on 300-g samples of sediment. According to DMMP guidelines (DMMP, 2014), if the TVS content is greater than 25% (roughly equivalent to 50% wood waste by volume), then bioassays must be run and passed in order for that DMMU to be eligible for open-water disposal.

The results from the wood-content analysis were unexpected. Despite visual evidence of high wood-waste content, none of the DMMUs had greater than 25% TVS. However, out of an abundance of caution and to ensure holding times were met, the Port of Everett chose to conduct bioassays on the 6 DMMUs with the highest wood content, as these were visually estimated to be in excess of 50% wood waste by volume. These DMMUs are indicated in Table 4.

8. Chemical Analysis. The approved SAP was followed and the resulting analytical data were deemed adequate to characterize the proposed dredged material. The sediment conventional and chemistry results can be found in Tables 5 and 6, in which contaminant concentrations are compared to the DMMP guidelines and MTCA preliminary cleanup screening levels respectively. Figures 14-17 show the results of chemical comparisons to DMMP and MTCA.

The total organic carbon content (TOC) of the DMMUs ranged widely, from a low of 0.12% in D-5B to a high of 14.4% in D-1, reflecting the highly variable quantities of wood waste within the dredge prism. The TOC concentrations were either too high (>3.5%) or too low (<0.5%) for carbon-normalization, with the exception of D-7. Total volatile solids covaried with TOC. Sulfide and ammonia were low in most samples.

Grain-size analysis was conducted twice for the DMMUs. The first analysis was the standard DMMP analysis. The second analysis was conducted on the residue of the wood-waste analysis. It was anticipated that the standard analysis would be biased toward the coarser-grained fractions, with larger wood chunks being included with the gravel fraction. This hypothesis proved to be correct, although the effect was relatively subtle. For the DMMUs with the highest wood content, the grain-size results from the standard analysis were skewed toward the coarser fractions.

For bioassay testing, it is assumed that the grain-size results from the ashed residue of the wood-waste analysis better reflect the nature of the sediment that the test organisms would be exposed to. The results from the grain-size analysis conducted on the ashed residue indicate that the sediment in the DMMUs was predominantly silty sand, with relatively low clay content (ranging from 2.6% to 12.5%).

Chemical testing indicated that contamination was greater in the upper layers of sediment, which included a higher wood-waste content, and nearly non-existent in deeper native material, which did not contain appreciable woody material.

Metals were not an issue with respect to the DMMP guidelines in any of the DMMUs, with no exceedances of DMMP screening levels (SLs). The concentrations of chromium and lead were slightly higher than the MTCA site-specific cleanup screening levels in some DMMUs, with chromium exceeding the screening level of 1 mg/kg for the protection of human health and higher trophic ecological receptors in DMMUs D-1 and D-3B, and lead exceeding the screening level of 21 mg/kg for the protection of human health and higher trophic ecological receptors in DMMUs D-1, D-2 and D-3B.

Semivolatile organics were elevated in several DMMUs, with DMMP maximum levels (MLs) exceeded for at least one chemical in DMMUs D-1, D-2, D-3B and D-4B. Semivolatiles exceeding the DMMP SL in at least one DMMU included naphthalene, diethyl phthalate, 2-methylphenol, 4-methylphenol, phenol, 2,4-dimethylphenol, benzoic acid and benzyl alcohol. These same chemicals exceeded the MTCA cleanup screening level for protection of benthic organisms in at least one DMMU.

PCB congener analysis was conducted to comply with MTCA testing requirements, replacing the Aroclor analysis done for typical DMMP projects. Like the metals, PCBs were not an issue in any of the DMMUs when compared to the DMMP guidelines. The highest concentration of total PCBs was 27.1 ug/kg in DMMU D-1, which is well below the DMMP SL of 130 ug/kg. Carbon-normalized, the highest concentration of PCBs was 0.7 mg/kg oc, which is far below the DMMP bioaccumulation trigger (BT) of 38 mg/kg oc. However, when compared to the site-specific MTCA levels, five of the DMMUs (D-1, D-2, D-3A, D-3B and D-4B) exceeded the sediment screening level for protection of human health and higher trophic level ecological receptors of 3.5 ug/kg.

Bulk concentrations of tributyltin (TBT) were mostly undetected. The highest detected concentration was 3.7 ug/kg, which is far below the DMMP BT of 73 ug/kg. There is no MTCA cleanup screening level for TBT.

Dioxin concentrations were elevated in several DMMUs, with D-1, D-2, D-3B, D-4B and D-7 all above the DMMP BT of 10 ng/kg toxic equivalents (TEQ). DMMU D-3A exceeded the DMMP site management objective of 4 ng/kg TEQ. The remaining DMMUs (D-4A, D-5A, D-5B, D-6A and D6B) had TEQs ranging from 0.43 to 1.38 ng/kg. The TEQ calculations are shown in Table 7.

TEQs for carcinogenic polycyclic aromatic hydrocarbons (cPAHs) were calculated for comparison to the site-specific MTCA cleanup screening level of 16 ug/kg for the protection of human health and higher trophic ecological receptors. DMMUs D-1, D-2, D-3A, D-3B and D-4B exceeded this concentration. There are no DMMP guidelines for cPAHs.

Data validation was conducted by GeoEngineers. All of the sample delivery group data packages received EPA Stage 2B validation, with 10 percent of the packages receiving EPA Stage 4 validation. The data and qualifiers presented in Tables 5, 6 and 7 include all modifications made by the validator.

9. Bioassays. As indicated in Section 6, bioassays were run on the six DMMUs with the highest wood content. These same DMMUs were subsequently found to contain at least one contaminant concentration exceeding a DMMP SL. The DMMUs that were not subjected to bioassays (D-4A, D-5A, D-5B, D-6A and D-6B) had no DMMP SL exceedances.

   The standard suite of three bioassay tests (amphipod mortality, larval development, and polychaete growth) was performed. The DMMP interpretation guidelines for non-dispersive disposal sites (DMMP, 2014) and Table IV from the Sediment Management Standards (SMS) (Ecology, 2013) were used to assess the bioassay results. The DMMP and SMS interpretation guidelines are found in Tables 8 and 9 respectively. The reference sediment sample was collected from Carr Inlet on February 24, 2015. The Carr Inlet sediment, with a fines content of only 1.1% (Table 10), was

coarser than the test sediments. The fines content of the test samples (from the grain-size analysis of ashed sediment) ranged from 20.6% to 33.7%. Because the bioassays tend to perform better when run with coarse sediment, use of a reference sediment that is coarser than the test sediments makes for an environmentally conservative evaluation. The reference sediment and negative controls met the DMMP performance criteria for all three bioassays.

Amphipod Mortality. The amphipod bioassay was run using *Eohaustorius estuarius* as the test species. Test results are shown in Table 11 and summarized in Tables 14 and 15. The test sediments performed well and there were no hits for any DMMU.

All water quality parameters were within the acceptable limits throughout the duration of the test, with the exception of minor deviations in salinity. Although salinity was recorded slightly above the recommended range of 28 ± 1 ppt, this salinity was still well within the tolerance range for this species.

A reference-toxicant test was performed on the batch of test organisms utilized for this study. The LC50 value was well within control chart limits (±2 standard deviations from the laboratory historical mean). This result indicates that the test organisms used in this study were of similar sensitivity to those previously tested at the bioassay lab (Environ, 2015).

Polychaete Growth. The juvenile polychaete growth test - using *Neanthes arenaceodentata* as the test species - was run with the ash-free dry-weight endpoint. Test results are shown in Table 12 and summarized in Tables 14 and 15. The test sediments performed well and there were no hits for any DMMU.

All water quality parameters were within the acceptable limits throughout the duration of the test. A reference-toxicant test was performed on the batch of test organisms utilized for this study. The LC50 value was well within control chart limits (±2 standard deviations from the laboratory historical mean). This result indicates that the test organisms used in this study were of similar sensitivity to those previously tested at the bioassay lab (Environ, 2015).

Larval Development. The larval development bioassay - using *Mytilus galloprovincialis* - was run with the standard endpoint, which involves carefully decanting the overlying water at the end of the test so as not to disturb the sediment. The results are shown in Table 13 and summarized in Tables 14 and 15.

DMMUs D-1, D-2 and D-4B scored a hit under the two-hit rule for DMMP non-dispersive disposal and exceeded the SMS sediment cleanup objective (SCO). DMMU D-3B scored a hit under the one-hit rule for DMMP unconfined open-water disposal and exceeded the SMS cleanup screening level (CSL).

All water quality parameters were within the acceptable limits throughout the duration of the test, with the exception of minor deviations in salinity. Although salinity was recorded at 30 ppt in the water quality surrogate for several samples on Day 1, this salinity was well within the tolerance range for this species.

A reference-toxicant test was performed on the batch of test organisms utilized for this study.

The LC50 value was well within control chart limits (±2 standard deviations from the laboratory historical mean). This result indicates that the test organisms used in this study were of similar sensitivity to those previously tested at the bioassay lab (Environ, 2015).

A single hit under the DMMP one-hit rule disqualifies a DMMU for open-water disposal. Therefore, DMMU D-3B failed biological testing and is unsuitable for open-water disposal. Under the DMMP two-hit rule, hits must occur in at least two bioassays to disqualify a DMMU for open-water disposal. DMMUs D-1, D-2 and D-4B scored hits under the two-hit rule for the larval test, but there were no corroborating hits in the other bioassays. Therefore, with regard to bioassay testing, these DMMUs are suitable for open-water disposal.

The SMS interpretation of the data yielded the same results. DMMU D-3B exceeded the CSL and is unsuitable for open-water disposal. DMMUs D-1, D-2 and D-4B exceeded the SCO for a single bioassay only and are, therefore, not considered cleanup material with regard to benthic effects.

Figure 18 graphically depicts the outcome of biological testing.

10. Sediment Exposed by Dredging. Ecology's TCP staff evaluated the z-samples taken from the dredge prism base and side slopes. The four z-samples taken from the dredge prism base had no exceedances of DMMP guidelines or MTCA cleanup screening levels. Two of the five z-samples taken from side slopes exceeded DMMP or MTCA screening levels. Exceedances occurred for dioxins/furans, cadmium, lead and cPAHs.

    As part of the MTCA Interim Action, Ecology will require the side slopes to be armored to contain the contaminated material and stabilize the slope. The placement of armor rock necessitated a design change to key the rock into the slope. This resulted in minor modifications of the DMMU layout and associated volumes. The DMMP-approved volume revisions are summarized in Table 16. Figures 10, 11 and 12 show the keyway necessary to construct the armored slope.

11. DMMP Suitability Determination. The chemical and biological testing results were evaluated using the DMMP guidelines and site-specific MTCA preliminary sediment screening levels – in accordance with the SAP – to characterize sediment quality and evaluate suitability of the dredged material for open-water disposal. The results of this dual evaluation are provided in Table 16.

Table 16. Evaluation of Chemical and Biological Testing Results for Open-Water Disposal

DMMU	Volume (cy)	Suitability	Reason
D-1	3,940	unsuitable	D/F>10 ng/kg TEQ with no bioaccumulation testing; cPAH and total PCBs>HH/HTL
D-2	3,750	unsuitable	D/F>10 ng/kg TEQ with no bioaccumulation testing; cPAH and total PCBs>HH/HTL
D-3A	2,450	unsuitable	cPAH and total PCBs>HH/HTL
D-3B	2,420	unsuitable	D/F>10 ng/kg TEQ with no bioaccumulation testing; cPAH and total PCBs>HH/HTL; failed bioassays
D-4A	2,790	suitable	No DMMP or MTCA chemical exceedances
D-4B	3,160	unsuitable	D/F>10 ng/kg TEQ with no bioaccumulation testing; cPAH and total PCBs>HH/HTL

D-5A	2,870	suitable	No DMMP or MTCA chemical exceedances
D-5B	2,710	suitable	No DMMP or MTCA chemical exceedances
D-6A	4,520	suitable	No DMMP or MTCA chemical exceedances
D-6B	4,320	suitable	No DMMP or MTCA chemical exceedances
D-7	4,390	unsuitable	D/F>10 ng/kg TEQ with no bioaccumulation testing; cPAH and total PCBs>HH/HTL; failed bioassays

cPAH = carcinogenic polycyclic aromatic hydrocarbons
D/F = dioxins/furans
HH/HTL = human health and higher trophic level ecological receptors
PCBs = polychlorinated biphenyls
TEQ = toxic equivalents

In summary, six DMMUs (D-1, D-2, D-3A, D-3B, D-4B and D-7), with a combined volume of 20,110 cy, are unsuitable for open-water disposal at the Port Gardner site. Five DMMUs (D-4A, D-5A, D-5B, D-6A and D-6B), with a combined volume of 17,210 cy, are suitable for open-water disposal. The suitable DMMUs all had low dioxin concentrations, with TEQs ranging from 0.43 to 1.38 ng/kg. The volume-weighted average for the suitable DMMUs is well below the DMMP disposal site management objective of 4 pptr TEQ.

In order to provide flexibility to the dredging contractor during project construction and to maintain consistency with the Port's permit applications, the Port of Everett requested that the upper limit on the total dredged material volume be increased to 40,000 cubic yards in the suitability determination. The DMMP agencies agreed to this modification, provided that the dredged material taken to the Port Gardner disposal site is restricted to the 17,210 cubic yards documented in this memorandum as being suitable for open-water disposal.

A pre-dredge meeting with DNR, Ecology, EPA and the Corps of Engineers is required at least 7 days prior to dredging. A dredging quality control plan must be developed and submitted to the Regulatory Branch of the Seattle District Corps of Engineers at least 7 days prior to the pre-dredge meeting. The dredging quality control plan must clearly show how the unsuitable material will be dredged separately from the suitable material. Dredging, positioning, de-watering, transloading and disposal will all need to be addressed with enough detail to provide assurance to the agencies that the dredge plan will be properly implemented. The unsuitable material must be completely dredged and removed before the suitable material may be dredged and taken to the Port Gardner site. A bathymetric survey will be required after the unsuitable material has been dredged to verify that it has been completely removed.

A DNR site-use authorization must be acquired for open-water disposal. Disposal at the Port Gardner site must be by bottom-dump barge.

This suitability determination does ***not*** constitute final agency approval of the project. During the public comment period that follows a public notice, the resource agencies will provide input on the overall project. A final decision will be made after full consideration of agency input, and after an alternatives analysis is done under section 404(b)(1) of the Clean Water Act.

12. References.

DMMP, 2014. *Dredged Material Evaluation and Disposal Procedures (User Manual)*. Prepared by the Seattle District Dredged Material Management Office for the Dredged Material Management Program, December 2014.

Ecology, 2013. *Sediment Management Standards – Chapter 173-204 WAC*. Washington State Department of Ecology, February 2013.

Environ, 2015. *Biological Testing Results for Weyerhaeuser Mill A Former Cleanup Site Dredged Material Evaluation.* Prepared by Environ International Corporation, Port Gamble, Washington for GeoEngineers, Inc. on behalf of the Port of Everett, April 13, 2015; Revised June 19, 2015.

GeoEngineers, 2014. *Dredged Material Characterization Sampling and Analysis Plan, Weyerhaeuser Mill A Former Cleanup Site, Interim Action Dredging Project, Everett, Washington.* Prepared by GeoEngineers for the Dredged Material Management Office and Washington State Department of Ecology on behalf of the Port of Everett, December 16, 2014.

GeoEngineers, 2015. *Final Dredged Material Characterization Report, Weyerhaeuser Mill A Former Cleanup Site, Interim Action Dredging Project, Everett, Washington.* Prepared by GeoEngineers for the Dredged Material Management Office and Washington State Department of Ecology on behalf of the Port of Everett, June 19, 2015.

13. Agency Signatures.

signed copy on file in DMMO - Seattle District office

Concur:

_____ _____
Date David Fox, P.E. - Seattle District Corps of Engineers

_____ _____
Date Erika Hoffman - Environmental Protection Agency

_____ _____
Date Laura Inouye, Ph.D. - Washington Department of Ecology

_____ _____
Date Celia Barton - Washington Department of Natural Resources

Copies furnished:

DMMP signatories
Frank Nichols – Seattle District Regulatory
Graham Anderson – Port of Everett
John Herzog – GeoEngineers

Table 2

Field Sediment Core Locations

Former Mill A Cleanup Interim Action Dredging Project

Everett, Washington

Core Location		Planned Coordinates (Lat/Long)	Actual Coordinates[1] (Northing/Easting)	Date	Time	Tide Elevation[2] (ft MLLW)	Depth to Mudline[2] (ft)	Anticipated Mudline Elevation (ft MLLW)	Actual Mudline Elevation (ft MLLW)	Target Penetration Elevation[3] (ft MLLW)	Actual Penetration Elevation (ft MLLW)
Base of Dredge Prism	PT-1	N 47° 58' 37.82" W 122° 13' 34.04"	N 47° 58' 37.768" W 122° 13' 33.965"	1/14/2015	1510	5.75	39.75	-35	-34.00	-45	-49.00
	PT-2	N 47° 58' 38.30" W 122° 13' 33.23"	N 47° 58' 38.268" W 122° 13' 33.139"	1/14/2015	800	8.50	38.00	-30	-29.50	-45	-49.50
	PT-3	N 47° 58' 38.50" W 122° 13' 32.39"	N 47° 58' 38.498" W 122° 13' 32.540"	1/13/2015	1340	5.00	42.50	-38	-37.50	-45	-47.50
	PT-4	N 47° 58' 37.49" W 122° 13' 33.39"	N 47° 58' 37.447" W 122° 13' 33.405"	1/14/2015	1300	9.25	36.50	-27	-27.25	-45	-47.25
	PT-5	N 47° 58' 37.71" W 122° 13' 32.29"	N 47° 58' 37.709" W 122° 13' 32.275"	1/13/2015	1230	9.00	33.25	-24	-24.25	-45	-49.25
	PT-6	N 47° 58' 36.97" W 122° 13' 31.43"	N 47° 58' 36.952" W 122° 13' 31.504"	1/13/2015	815	9.75	25.00	-16	-15.25	-45	-45.25
	PT-7	N 47° 58' 37.45" W 122° 13' 30.78"	N 47° 58' 37.456" W 122° 13' 30.776"	1/14/2015	955	10.50	40.50	-31	-30.00	-45	-45.00
	PT-8	N 47° 58' 36.79" W 122° 13' 30.45"	N 47° 58' 36.806" W 122° 13' 30.297"	1/12/2015	930	11.00	34.25	-23	-23.25	-45	-45.25
	PT-9	N 47° 58' 36.80" W 122° 13' 29.61"	N 47° 58' 36.772" W 122° 13' 29.631"	1/12/2015	1405	5.50	34.00	-30	-28.50	-45	-48.50
Dredge Transition Slope	PT-10	N 47° 58' 37.12" W 122° 13' 33.98"	N 47° 58' 37.039" W 122° 13' 33.906"	1/14/2015	1135	10.50	39.50	-30	-29.00	-38	-44.00
	PT-11	N 47° 58' 36.92" W 122° 13' 32.74"	N 47° 58' 36.822" W 122° 13' 32.695"	1/15/2015	1330	9.75	29.75	-20	-20.00	-38	-40.00
	PT-12	N 47° 58' 36.55" W 122° 13' 31.37"	N 47° 58' 36.577" W 122° 13' 31.431"	1/15/2015	745	8.00	22.00	-14	-14.00	-32	-39.00
	PT-13	N 47° 58' 36.31" W 122° 13' 30.22"	N 47° 58' 36.314" W 122° 13' 30.222"	1/15/2015	1140	10.75	26.75	-18	-16.00	-31	-36.00
	PT-14	N 47° 58' 36.32" W 122° 13' 29.49"	W 122° 13' 29.604" N 47° 58' 36.278"	1/15/2015	935	10.00	28.00	-19	-18.00	-31	-38.00
Duplicate Cores[4]	PT-106	N 47° 58' 36.97" W 122° 13' 31.43"	N 47° 58' 37.038" W 122° 13' 31.408"	1/16/2015	755	8.00	25.00	-16	-17.00	a	-32.00
	PT-108	N 47° 58' 36.79" W 122° 13' 30.45"	N 47° 58' 36.783" W 122° 13' 30.543"	1/16/2015	925	9.00	31.00	-23	-22.00	a	-30.00
	PT-109	N 47° 58' 36.80" W 122° 13' 29.61"	N 47° 58' 36.737" W 122° 13' 29.649"	1/12/2015	1600	5.50	34.00	-30	-28.50	a	-33.50
	PT-112	N 47° 58' 36.55" W 122° 13' 31.37"	N 47° 58' 36.605" W 122° 13' 31.454"	1/16/2015	1000	9.50	24.00	-14	-14.50	a	-24.00

Notes:

[1] Actual coordinates have been corrected using post-processing software.

[2] Depth of to mudline and tide elevation (from tideboard) measurements were rounded to the nearest 0.25 feet.

[3] Target penetration depths are from Sampling and Analysis Plan (GeoEngineers, 2014)

[4] Duplicate cores were completed to obtain core intervals and samples from elevation where required recovery (75%) was not obtained in the original core.

[a] Target depth in duplicate core dependent on missing interval in primary core

ft = Feet

MLLW = Mean low low water

Table 3

Sediment Core Interval Data and Recovery Measurements

Former Mill A Cleanup Interim Action Dredging Project

Everett, Washington

Sample Location		Date	Total Depth Penetrated (ft below mudline)	Core Starting Elevation (ft MLLW)	Depth Penetrated (ft)	Core Ending Elevation (ft MLLW)	Recovery Measurement (ft)	% Recovery	Core Accepted (Y/N)
Base of Dredge Prism	PT-1	1/14/2015	5.0	-34.00	5.0	-39.00	5.0	100.0%	Yes
			10.0	-39.00	5.0	-44.00	5.0	100.0%	Yes
			15.0	-44.00	5.0	-49.00	5.0	100.0%	Yes
	PT-2	1/14/2015	5.0	-29.50	5.0	-34.50	4.6	92.0%	Yes
			10.0	-34.50	5.0	-39.50	4.0	80.0%	Yes
			15.0	-39.50	5.0	-44.50	4.0	80.0%	Yes
			20.0	-44.50	5.0	-49.50	5.0	100.0%	Yes
	PT-3	1/13/2015	5.0	-37.50	5.0	-42.50	4.0	80.0%	Yes
			10.0	-42.50	5.0	-47.50	5.0	100.0%	Yes
	PT-4	1/14/2015	5.0	-27.25	5.0	-32.25	5.0	100.0%	Yes
			10.0	-32.25	5.0	-37.25	5.0	100.0%	Yes
			15.0	-37.25	5.0	-42.25	5.0	100.0%	Yes
			20.0	-42.25	5.0	-47.25	5.0	100.0%	Yes
	PT-5	1/13/2015	5.0	-24.25	5.0	-29.25	5.0	100.0%	Yes
			10.0	-29.25	5.0	-34.25	4.0	80.0%	Yes
			15.0	-34.25	5.0	-39.25	5.0	100.0%	Yes
			20.0	-39.25	5.0	-44.25	5.0	100.0%	Yes
			25.0	-44.25	5.0	-49.25	5.0	100.0%	Yes
	PT-6	1/13/2015	5.0	-15.25	5.0	-20.25	5.0	100.0%	Yes
			10.0	-20.25	5.0	-25.25	4.2	84.0%	Yes
			15.0	-25.25	5.0	-30.25	1.0	20.0%	No
			20.0	-30.25	5.0	-35.25	5.0	100.0%	Yes
			25.0	-35.25	5.0	-40.25	5.0	100.0%	Yes
			30.0	-40.25	5.0	-45.25	5.0	100.0%	Yes
	PT-106	1/16/2015	10.0	-24.50	2.5	-27.00	2.2	88.0%	Yes
			15.0	-27.00	5.0	-32.00	0.3	5.0%	No
	PT-7	1/14/2015	5.0	-30.00	5.0	-35.00	5.0	100.0%	Yes
			10.0	-35.00	5.0	-40.00	5.0	100.0%	Yes
			15.0	-40.00	5.0	-45.00	5.0	100.0%	Yes
	PT-8	1/12/2015	2.0	-23.25	2.0	-25.25	2.0	100.0%	Yes
			7.0	-25.25	5.0	-30.25	1.0	20.0%	No
			12.0	-30.25	5.0	-35.25	5.0	100.0%	Yes
			17.0	-35.25	5.0	-40.25	5.0	100.0%	Yes
			22.0	-40.25	5.0	-45.25	5.0	100.0%	Yes
	PT-108[a]	1/16/2015	5.0	-25.00	5.0	-30.00	4.0	80.0%	Yes
	PT-9	1/12/2015	5.0	-28.50	5.0	-33.50	2.5	50.0%	No
			10.0	-33.50	5.0	-38.50	5.0	100.0%	Yes
			15.0	-38.50	5.0	-43.50	5.0	100.0%	Yes
			20.0	-43.50	5.0	-48.50	5.0	100.0%	Yes
	PT-109	1/12/2015	5.0	-28.50	5.0	-33.50	4.8	96.0%	Yes

Sample Location		Date	Total Depth Penetrated (ft below mudline)	Core Starting Elevation (ft MLLW)	Depth Penetrated (ft)	Core Ending Elevation (ft MLLW)	Recovery Measurement (ft)	% Recovery	Core Accepted (Y/N)
Dredge Transition Slope	PT-10	1/14/2015	5.0	-29.00	5.0	-34.00	5.0	100.0%	Yes
			10.0	-34.00	5.0	-39.00	4.5	90.0%	Yes
			15.0	-39.00	5.0	-44.00	5.0	100.0%	Yes
	PT-11	1/15/2015	5.0	-20.00	5.0	-25.00	5.0	100.0%	Yes
			10.0	-25.00	5.0	-30.00	5.0	100.0%	Yes
			15.0	-30.00	5.0	-35.00	5.0	100.0%	Yes
			20.0	-35.00	5.0	-40.00	5.0	100.0%	Yes
	PT-12	1/15/2014	5.0	-14.00	5.0	-19.00	5.0	100.0%	Yes
			10.0	-19.00	5.0	-24.00	1.0	20.0%	No
			15.0	-24.00	5.0	-29.00	4.0	80.0%	Yes
			20.0	-29.00	5.0	-34.00	5.0	100.0%	Yes
			25.0	-34.00	5.0	-39.00	5.0	100.0%	Yes
	PT-112[a]	1/16/2015	5.0	-19.00	5.0	-24.00	5.0	100.0%	Yes
	PT-13	1/15/2015	5.0	-16.00	5.0	-21.00	4.0	80.0%	Yes
			10.0	-21.00	5.0	-26.00	4.8	95.0%	Yes
			15.0	-26.00	5.0	-31.00	5.0	100.0%	Yes
			20.0	-31.00	5.0	-36.00	5.0	100.0%	Yes
	PT-14	1/15/2015	5.0	-18.00	5.0	-23.00	5.0	100.0%	Yes
			10.0	-23.00	5.0	-28.00	4.8	96.0%	Yes
			15.0	-28.00	5.0	-33.00	5.0	100.0%	Yes
			20.0	-33.00	5.0	-38.00	5.0	100.0%	Yes

Notes:

[a] Top interval of core was water-jetted to reach core starting elevation.

ft = Feet

MLLW = Mean low low water

Table 4

Wood Content Analytical Results for DMMU

Mill A Former Site Interim Action Dredging Project
Everett, Washington

DMMU	Approx. Average Wood Debris Content Observed in DMMU[1] (% by volume)	Organic Matter by Method ASTM D2974 (% by weight)	Bioassay[2]
D-1	70%	17.03%	X
D-2	50%	11.93%	X
D-3A	40%	5.91%	X
D-3B	70%	13.20%	X
D-4A	10%	0.65%	
D-4B	50%	7.87%	X
D-5A	0%	0.52%	
D-5B	10%	1.14%	
D-6A	0%	0.54%	
D-6B	0%	0.58%	
D-7	50%	7.20%	X

Notes:

[1] Approximate volume of wood debris observed during sediment core collection was determined by evaluating core logs.

[2] Samples were selected for bioassay based on observed wood debris volume to ensure that bioassay holding times were met.

DMMU = Dredged Material Management Unit

Table 5

Interim Action Sediment Chemical Analytical Results Compared to DMMP Guideline Chemistry Values

Mill A Former Site Interim Action Dredging Project

Everett, Washington

Analyte	DMMP Guideline Chemistry Values			Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-Z	PT-13
				Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
				Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
	SL	BT	ML	Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
Conventionals																				
Total Organic Carbon	NE	NE	NE	%	14.4	9.93	5.6	13.3	0.313	8.49	0.152	0.124	0.157	0.176	2.94	2.7	--	0.228	7.76	--
Total Solids	NE	NE	NE	%	45.98	50.15	62.61	44.45	79.68	51.63	81.11	81.14	82.81	81.72	57.21	71.55	--	81.58	61.16	--
Total Volatile Solids	NE	NE	NE	%	21.02	18.9	12.12	31.21	1.31	14.52	1.14	1.05	1.19	0.95	12.15	5.09	--	1.01	10.3	--
Organic Matter	25	NE	NE	%	16.73	11.93	5.91	13.2	0.65	7.87	0.52	1.14	0.54	0.58	7.2	4.39	--	0.43	8.29	--
Preserved Total Solids	NE	NE	NE	%	--	--	--	--	--	--	--	--	--	--	--	--	58.07	--	--	81.39
Sulfide	NE	NE	NE	mg/kg	--	--	--	--	--	--	--	--	1.92 J	4.38 J	112 J	16	205	1.32	4.8	22.3 J
Ammonia	NE	NE	NE	mg/kg	21	30	8.47	45.1	3.93	28.7	9.95	7.88	2.78	6.01	20.2	13.2	--	26.6	42.2	--
Grain Size																				
Gravel (≤ -1)	NE	NE	NE	%	10.2	8.2	1.8	7.2	0.3	5.7	0.1	1.6	0.7	0.1 U	4.6	1.1	--	0.1	0.8	--
Very coarse sand (-1 < Phi ≤ 0)	NE	NE	NE	%	4.8	2.4	1.5	3.9	0.3	2.2	0.1	0.6	0.1	0.2	1.9	0.8	--	0.4	1.6	--
Coarse sand (0 < Phi ≤ 1)	NE	NE	NE	%	6.6	3.7	2.7	5.8	1.1	3.5	0.5	1.6	0.5	1.2	3.8	2.2	--	2.8	2.3	--
Medium sand (1 < Phi ≤ 2)	NE	NE	NE	%	15	16.1	23	12.1	18.3	12.2	10.4	22.9	27.5	22.5	20.5	20.4	--	10.9	5.2	--
Fine sand (2 < Phi ≤ 3)	NE	NE	NE	%	19.3	30.2	42	27	49.2	42.5	52.6	55.5	41.8	60.2	34.9	51.2	--	46.3	14.7	--
Very fine sand (3 < Phi ≤ 4)	NE	NE	NE	%	10.4	11.4	12.6	11.7	20.4	13.3	25.7	7.3	18.5	8.4	8.3	6	--	29.2	23.4	--
Coarse silt (4 < Phi ≤ 5)	NE	NE	NE	%	4.8	5.2	2.6	5.1	3.7	1.6	3.6	2.7	4.1	2.1	7.9	4	--	4.1	13.6	--
Medium silt (5 < Phi ≤ 6)	NE	NE	NE	%	6.6	4.6	3	6.3	1.6	4.6	1.7	2	1.5	1.2	4.3	3.3	--	1.6	11.3	--
Fine silt (6 < Phi ≤ 7)	NE	NE	NE	%	5.4	4.5	2.8	5.1	1.2	3.4	1.2	1.5	1.2	0.8	3.1	2.7	--	1.1	7.9	--
Very fine silt (7 < Phi ≤ 8)	NE	NE	NE	%	4.4	3.5	2.1	4.4	1	2.9	1	1.1	1.2	0.7	2.6	2	--	0.8	5.3	--
Coarse clay (8 < Phi ≤ 9)	NE	NE	NE	%	2.8	2.3	1.5	3.2	0.7	2.1	0.7	1	0.8	0.6	2.2	1.8	--	0.7	4	--
Medium clay (9 < Phi ≤ 10)	NE	NE	NE	%	3	2.8	1.6	2.6	0.7	2	0.8	0.8	0.8	0.7	1.8	1.6	--	0.6	3.5	--
Particle/Grain Size, Phi >10	NE	NE	NE	%	6.7	5.2	2.9	5.7	1.6	4	1.8	1.4	1.3	1.3	4	2.8	--	1.4	6.1	--
Total Fines	NE	NE	NE	%	33.7	28	16.5	32.4	10.4	20.6	10.7	10.4	10.9	7.5	25.9	18.3	--	10.3	51.8	--
Grain Size (Ash Wt.)																				
Gravel (≤ -1)	NE	NE	NE	%	2.1	1.1	1.2	2.8	0.1 U	3.5	0.1 U	0.1 U	0.2	0.1 U	1.5	--	--	--	--	--
Very coarse sand (-1 < Phi ≤ 0)	NE	NE	NE	%	2.0	1.4	0.6	1.9	0.3	1.0	0.1	0.3	0.1	0.2	1.6	--	--	--	--	--
Coarse sand (0 < Phi ≤ 1)	NE	NE	NE	%	3.8	2.5	1.3	2.7	1.3	2.0	0.4	1.2	0.5	1.2	4.1	--	--	--	--	--
Medium sand (1 < Phi ≤ 2)	NE	NE	NE	%	14.6	14.8	21.5	8.6	19.1	9.5	12.9	16.2	26.6	28.2	24.0	--	--	--	--	--
Fine sand (2 < Phi ≤ 3)	NE	NE	NE	%	23.3	35.6	43.6	31.7	46.5	41.6	52.3	61.4	43.9	56.5	41.6	--	--	--	--	--
Very fine sand (3 < Phi ≤ 4)	NE	NE	NE	%	14.8	16.1	13.0	16.8	20.8	14.9	23.8	12.4	18.4	7.2	9.7	--	--	--	--	--
Coarse silt (4 < Phi ≤ 5)	NE	NE	NE	%	8.5	6.6	4.6	6.0	5.6	6.5	4.3	3.2	4.1	2.7	3.1	--	--	--	--	--
Medium silt (5 < Phi ≤ 6)	NE	NE	NE	%	15.6	9.1	4.5	17.7	1.9	11.0	1.6	1.2	2.1	1.0	6.0	--	--	--	--	--
Fine silt (6 < Phi ≤ 7)	NE	NE	NE	%	6.9	4.9	4.0	5.5	1.7	5.5	1.6	1.1	2.4	0.9	3.6	--	--	--	--	--
Very fine silt (7 < Phi ≤ 8)	NE	NE	NE	%	1.9	2.4	1.8	1.2	1.1	1.2	1.2	0.9	0.2	0.5	1.4	--	--	--	--	--
Coarse clay (8 < Phi ≤ 9)	NE	NE	NE	%	0.9	1.4	0.9	0.5	0.4	0.5	0.5	0.5	0.1 U	0.4	0.7	--	--	--	--	--
Medium clay (9 < Phi ≤ 10)	NE	NE	NE	%	0.3	0.6	0.4	0.2	0.1	0.1	0.2	0.4	0.1	0.2	0.1	--	--	--	--	--
Particle/Grain Size, Phi >10	NE	NE	NE	%	5.1	3.4	2.5	4.3	1.3	2.9	1.3	1.1	1.4	0.9	2.5	--	--	--	--	--
Total Fines	NE	NE	NE	%	39.4	28.5	18.8	35.5	12.0	27.6	10.6	8.5	10.3	6.6	17.5	--	--	--	--	--
Metals																				
Antimony	150	NE	200	mg/kg	1.1 J	1.40 J	0.75 J	1.1 J	0.82 J	2.38 J	0.68 J	0.75 J	1.03 J	0.68 J	1.07 J	0.84 J	--	0.77 J	1.46 J	--
Arsenic	57	507	700	mg/kg	10.7 J	6.80 J	5.83 J	9.5 J	4.57 J	6.67 J	5.14 J	4.81 J	5.18 J	4.42 J	7.69 J	6.08 J	--	3.92 J	9	--
Cadmium	5.1	11.3	14	mg/kg	1.3	1	0.6	1.3	0.2	0.7	0.3	0.3	0.220 J	0.210 J	1	0.4	--	0.211 J	1.1	--
Chromium	260	260	NE	mg/kg	35	31.3	24.3	35	28.4	30.3	27.7	25.7	29.9	22.2	31.5	28.2	--	24.2	47.9	--
Copper	390	1,027	1,300	mg/kg	43.9	32.9	18.3	43.2	11	24.8	9.9	9.8	10.2	7.1	33.6	12.8	--	7.6	44.2	--
Lead	450	975	1,200	mg/kg	28	22	9	31	1.86 J	14	1.80 J	5	1.94 J	2.30 J	19	10	--	1.48 J	26	--
Mercury	0.41	1.5	2.3	mg/kg	0.13	0.14	0.0380 J	0.12	0.0120 J	0.14	0.0106 J	0.0159 J	0.02	0.0080 J	0.1	0.08	--	0.0071 J	0.11	--
Selenium	NE	3	NE	mg/kg	0.52 J	0.337 J	0.214 J	0.45 J	0.6 U	0.311 J	0.6 U	0.127 J	0.6 U	0.125 J	0.315 J	0.185 J	--	0.6 U	0.487 J	--
Silver	6.1	6.1	8.4	mg/kg	0.7 U	0.6 U	0.5 U	0.7 U	0.4 U	0.6 U	0.3 U	0.4 U	0.3 U	0.4 U	0.6 U	0.4 U	--	0.3 U	0.5 U	--
Zinc	410	2,783	3,800	mg/kg	76	54	37	69	31	49	31	30	31	27	58	34	--	28	70	--
LPAHs																				
2-Methylnaphthalene	670	NE	1,900	µg/kg	280	190	130	410	5.7	280	3.2 J	5.9	2.5 J	4.8 U	240	75	--	4.7 U	180	--
Acenaphthene	500	NE	2,000	µg/kg	340	210	160	420	4.4 J	410	4.8 U	4.5 J	4.7 U	4.8 U	260	73	--	4.7 U	210	--
Acenaphthylene	560	NE	1,300	µg/kg	57	82	89	210	4.8 U	110	4.8 U	2.4 J	4.7 U	4.8 U	110	53	--	4.7 U	80	--
Anthracene	960	NE	13,000	µg/kg	280	150	99	210	3.4 J	180	4.8 U	6.1	4.7 U	4.8 U	150	100	--	4.7 U	160	--
Fluorene	540	NE	3,600	µg/kg	330	210	160	400	4.8 J	370	4.8 U	5.8	4.7 U	4.8 U	250	89	--	4.7 U	240	--
Naphthalene	2,100	NE	2,400	µg/kg	1,100	1,100	1,200	3,600	33	1,600	8.5	26	4.7 U	6.8	1,300	460	--	3.3 J	1,100	--
Phenanthrene	1,500	NE	21,000	µg/kg	680	600	550	1100	15	900	7.9	18	4.7 U	4.8 U	630	260	--	4.7 U	650	--
Total LPAHs	5,200	NE	29,000	µg/kg	2,787 T	2,352 T	2,258 T	5,940 T	60.6 T	3,570 T	16.4 T	62.8 T	4.7 UT	6.8 T	2,700 T	1,035 T	--	3.3 T	2,440 T	--

Analyte	DMMP Guideline Chemistry Values			Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-Z	PT-13
				Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
				Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
	SL	BT	ML	Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
HPAHs																				
Benzo(a)anthracene	1,300	NE	5,100	µg/kg	140	58	34	52	4.8 U	130	4.8 U	5.4	4.7 U	4.8 U	55	59	--	4.7 U	71	--
Benzo(a)pyrene	1,600	NE	3,600	µg/kg	79	34	18 J	29	4.8 U	84	4.8 U	3.9 J	4.7 U	4.8 U	28	51	--	4.7 U	49	--
Benzo(ghi)perylene	670	NE	3,200	µg/kg	55	22 J	14 J	25	4.8 U	58	4.8 U	4.2 J	4.7 U	4.8 U	20	38	--	4.7 U	44	--
Benzofluoranthenes (Sum)	3,200	NE	9,900	µg/kg	200	83	45	89	4.8 U	200	4.8 U	7.5	4.7 U	4.8 U	76	84	--	4.7 U	98	--
Chrysene	1,400	NE	21,000	µg/kg	230	90	54	83	2.8 J	140	4.8 U	6.1	4.7 U	4.8 U	85	62	--	4.7 U	98	--
Dibenzo(a,h)anthracene	230	NE	1,900	µg/kg	16 J	25 U	24 U	24 U	4.8 U	12 J	4.8 U	4.8 U	4.7 U	4.8 U	4.0 J	24 U	--	4.7 U	24 U	--
Fluoranthene	1,700	4,600	30,000	µg/kg	570	480	360	670	11	640	7	19	4.7 U	4.8 U	420	260	--	4.7 U	460	--
Indeno(1,2,3-cd)pyrene	600	NE	4,400	µg/kg	45	18 J	24 U	16 J	4.8 U	44	4.8 U	4.8 U	4.7 U	4.8 U	13	27	--	4.7 U	25	--
Pyrene	2,600	11,980	16,000	µg/kg	440	360	270	460	9.5	460	4.4 J	21	4.7 U	4.8 U	300	240	--	4.7 U	430	--
Total HPAHs	12,000	NE	69,000	µg/kg	1,775 T	1,145 T	795 T	1,424 T	23.3 T	1,768 T	11.4 T	67.1 T	4.7 UT	4.8 UT	1,001 T	821 T	--	4.7 UT	1,275 T	--
cPAHs																				
Total cPAH TEQ (ND=0.5DL)	NE	NE	NE	µg/kg	121.4 JT	52.1 JT	28.8 JT	46.7 JT	3.4 JT	124 JT	3.4 UT	5.7 JT	3.3 UT	3.4 UT	43.7 JT	69.8 T	--	3.3 UT	70.6 T	--
Chlorinated Hydrocarbons																				
Hexachlorobenzene	22	168	230	µg/kg	0.99 U	1.3 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	14 U	0.97 U	--	0.95 U	0.96 U	--
1,2,4-Trichlorobenzene	31	NE	64	µg/kg	4.9 U	4.9 U	4.7 U	3.5 J	4.8 U	8.4	4.8 U	4.8 U	4.8 U	4.8 U	2.5 J	4.9 U	--	4.7 U	4.8 U	--
1,2-Dichlorobenzene (o-Dichlorobenzene)	35	NE	110	µg/kg	13	7.7	3.7 J	11	3.0 J	5.8	2.5 J	4.8 U	4.8 U	4.8 U	11	4.9 U	--	4.7 U	4.8 U	--
1,4-Dichlorobenzene (p-Dichlorobenzene)	110	NE	120	µg/kg	6.3	4.6 J	3.2 J	6.7	4.8 U	5.2	4.8 U	4.8 U	4.8 U	4.8 U	5.2	4.9 U	--	4.7 U	4.8 U	--
Phthalates																				
Bis(2-Ethylhexyl) Phthalate	1,300	NE	8,300	µg/kg	30 J	49 UJ	47 UJ	48 UJ	48 UJ	48 UJ	48 UJ	48 UJ	48 UJ	48 UJ	28 J	49 U	--	47 U	48 U	--
Di-N-Octyl Phthalate	6,200	NE	6,200	µg/kg	11 J	20 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U	--	19 U	19 U	--
Dibutyl Phthalate	1,400	NE	5,100	µg/kg	65	20 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U	--	19 U	19 U	--
Diethyl Phthalate	200	NE	1,200	µg/kg	20 U	380	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U	--	19 U	34	--
Dimethyl Phthalate	71	NE	1,400	µg/kg	20 U	20 U	19 U	19 U	19 U	22	19 U	19 U	19 U	19 U	19 U	20 U	--	19 U	19 U	--
Butyl benzyl Phthalate	63	NE	970	µg/kg	4.9 U	4.9 U	4.7 U	4.8 U	4.8	31	3.2 J	4.8 U	2.5 J	2.6 J	22	4.9 U	--	7.4	8.8	--
Phenols																				
o-Cresol (2-methylphenol)	63	NE	77	µg/kg	37	68	45	140	19 U	81	19 U	19 U	19 U	19 U	49	20 U	--	19 U	36	--
p-Cresol (4-methylphenol)	670	NE	3,600	µg/kg	1,700	2,400	930	1,900	34	1,000	19 U	16 J	19 U	19 U	1,200	20 U	--	92	180	--
Pentachlorophenol	400	504	690	µg/kg	46 J	99 U	94 U	33 J	96 U	33 J	97 U	97 U	95 U	96 U	96 U	98 U	--	94 U	96 U	--
Phenol	420	NE	1,200	µg/kg	390	430	240	460	29	320	34	19 U	19 U	19 U	250	20 U	--	38	59	--
2,4-Dimethylphenol	29	NE	210	µg/kg	46	54	26	78	24 U	56	24 U	24 U	24 U	24 U	44	24 U	--	23 U	24 J	--
Miscellaneous Extractables																				
Benzoic Acid	650	NE	760	µg/kg	790	940	540	1,100	190 U	860	190 U	190 U	190 U	190 U	720	200 U	--	82 J	150 J	--
Benzyl Alcohol	57	NE	870	µg/kg	30	33	25	59	19 U	32	19 U	19 U	19 U	19 U	24	20 U	--	19 U	19 U	--
Dibenzofuran	540	NE	1,700	µg/kg	300	220	180	410	4.8 J	340	4.8 U	5.8	4.7 U	4.8 U	240	86	--	4.7 U	200	--
Hexachlorobutadiene	11	NE	270	µg/kg	0.99 U	0.99 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
N-Nitrosodiphenylamine (as diphenylamine)	28	NE	130	µg/kg	4.9 U	4.9 U	4.7 U	4.8 U	2.9 J	4.8 U	3.0 J	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	--	4.7 U	4.8 U	--
Pesticides																				
4,4'-DDD	16	NE	NE	µg/kg	0.99 U	0.99 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
4,4'-DDE	9	NE	NE	µg/kg	0.99 U	0.99 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
4,4'-DDT	12	NE	NE	µg/kg	6.9 U	4.3 U	0.99 U	4.0 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
Total DDT (4,4 isomers)	NE	50	69	µg/kg	6.9 UT	4.3 UT	0.99 UT	4 UT	0.98 UT	0.98 UT	0.98 UT	0.98 UT	0.97 UT	0.97 UT	0.98 UT	0.97 UT	--	0.95 UT	0.96 UT	--
Aldrin	9.5	NE	NE	µg/kg	1.7 U	0.49 U	1.8 U	3.6 U	0.49 U	3.9 U	0.49 U	0.49 U	0.48 U	0.49 U	1.7 U	0.48 U	--	0.48 U	0.48 U	--
alpha-Chlordane (cis)	NE	NE	NE	µg/kg	0.50 U	0.49 U	0.50 U	0.50 U	0.49 U	0.49 U	0.49 U	0.49 U	0.48 U	0.49 U	0.49 U	0.48 U	--	0.48 U	0.48 U	--
beta or gamma-Chlordane (trans)	NE	NE	NE	µg/kg	0.50 U	0.49 U	0.50 U	0.50 U	0.49 U	0.49 U	0.49 U	0.49 U	0.48 U	0.49 U	1.0 U	0.48 U	--	0.48 U	0.48 U	--
Chlordane (Total)	2.8	37	NE	µg/kg	4.5 UT	1.7 UT	0.99 UT	2.3 J	0.98 UT	2.3 UT	0.98 UT	0.98 UT	0.97 UT	0.97 UT	2.7 UT	0.97 UT	--	0.95 UT	1.6 UT	--
cis-Nonachlor	NE	NE	NE	µg/kg	1.6 U	1.7 U	0.99 U	2.3 J	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
Dieldrin	1.9	NE	1700	µg/kg	1.2 U	0.99 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
Heptachlor	1.5	NE	270	µg/kg	0.50 U	0.49 U	0.50 U	0.50 U	0.49 U	0.80 U	0.49 U	0.49 U	0.48 U	0.49 U	1.5 U	0.48 U	--	0.48 U	0.48 U	--
Oxychlordane	NE	NE	NE	µg/kg	4.5 U	0.99 U	0.99 U	0.99 U	0.98 U	2.3 U	0.98 U	0.98 U	0.97 U	0.97 U	2.7 U	0.97 U	--	0.95 U	1.6 U	--
trans-Nonachlor	NE	NE	NE	µg/kg	2.2 U	0.99 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
Polychlorinated Biphenyls (PCBs)																				
PCB-001	NE	NE	NE	ng/kg	18.2	18.0	20.5	5.77	0.867 U	5.34	0.450 U	0.752 U	0.600 U	0.397 U	9.50	1.20 J	--	0.315 U	3.28 J	--
PCB-002	NE	NE	NE	ng/kg	4.98	5.12	12.6	4.61	0.973 U	4.08	0.544 U	0.856 U	0.696 U	0.461 U	4.92	2.47 J	--	0.381 U	6.95	--
PCB-003	NE	NE	NE	ng/kg	13.3	11.4	16.9	6.67	0.937 U	4.56	0.558 U	0.833 U	0.689 U	0.458 U	7.96	1.82 J	--	0.381 U	5.20	--
PCB-004	NE	NE	NE	ng/kg	16.5	13.7	29.7	7.09	1.62 U	4.11	1.63 U	1.21 U	1.39 U	1.39 U	8.94	2.22 J	--	0.810 U	0.626 U	--
PCB-005	NE	NE	NE	ng/kg	0.572 U	1.82 U	1.99 U	1.77 U	1.43 U	0.928 U	1.49 U	1.07 U	1.26 U	1.35 U	0.617 U	0.735 U	--	0.744 U	0.491 U	--
PCB-006	NE	NE	NE	ng/kg	9.37	9.26	16.5	6.98	2.86 J	3.23 J	1.39 U	0.994 U	1.17 U	1.25 U	12.5	5.07	--	0.710 U	2.50 J	--
PCB-007	NE	NE	NE	ng/kg	2.94 J	3.61 J	4.40	1.68 U	1.39 U	0.900 U	1.45 U	1.04 U	1.22 U	1.31 U	3.48 J	0.716 U	--	0.725 U	0.478 U	--
PCB-008	NE	NE	NE	ng/kg	39.6	37.5	66.4	20.7	1.45 U	10.1	1.52 U	1.09 U	1.28 U	1.37 U	26.7	3.72 J	--	0.741 U	2.29 J	--
PCB-009	NE	NE	NE	ng/kg	3.61 J	2.72 J	6.64	1.78 U	1.45 U	0.943 U	1.52 U	1.09 U	1.28 U	1.37 U	0.627 U	0.746 U	--	0.756 U	0.499 U	--
PCB-010	NE	NE	NE	ng/kg	0.590 U	1.97 U	2.15 U	1.92 U	1.62 U	1.05 U	1.69 U	1.21 U	1.42 U	1.53 U	0.699 U	0.765 U	--	0.776 U	0.512 U	--
PCB-011	NE	NE	NE	ng/kg	13.0	14.4	11.8	9.70	3.91 J	5.32	1.59 U	3.10 J	1.33 U	1.43 U	13.9	6.53	--	2.91 J	4.55	--
PCB-012	NE	NE	NE	ng/kg	2.87 J	3.61 J	7.67	1.79 U	1.43 U	1.37 U	1.50 U	1.07 U	1.26 U	1.35 U	3.21 J	4.24	--	0.798 U	2.56 J	--
PCB-013	NE	NE	NE	ng/kg	4.80	4.87	5.44	4.99	1.59 U	1.52 U	1.66 U	1.19 U	1.40 U	1.50 U	8.75	2.36 J	--	0.859 U	1.94 J	--
PCB-014	NE	NE	NE	ng/kg	0.599 U	1.88 U	2.06 U	1.83 U	1.47 U	0.954 U	1.54 U	1.10 U	1.29 U	1.38 U	0.634 U	0.758 U	--	0.768 U	0.506 U	--
PCB-015	NE	NE	NE	ng/kg	36.6	28.6	22.4	11.8	1.47 U	7.61	1.58 U	1.10 U	1.32 U	1.47 U	19.4	1.97 J	--	0.815 U	1.16 J	--
PCB-016	NE	NE	NE	ng/kg	32.6	37.1	35.3	19.4	1.32 U	7.75	0.566 U	1.44 U	0.546 U	0.646 U	17.9	0.553 U	--	0.404 U	0.583 U	--
PCB-017	NE	NE	NE	ng/kg	45.3	41.1	51.5	21.3	1.38 U	10.4	0.590 U	1.50 U	0.569 U	0.673 U	23.3	0.614 U	--	0.449 U	1.79 U	--
PCB-018	NE	NE	NE	ng/kg	120.0	107	131	56.4	1.53 U	26.8	0.654 U	1.66 U	0.631 U	0.747 U	64.0	0.681 U	--	0.497 U	1.98 U	--
PCB-019	NE	NE	NE	ng/kg	10.9	11.4	12.4	5.95	1.53 U	1.75 U	0.653 U	1.66 U	0.630 U	0.745 U	5.88	0.660 U	--	0.482 U	0.696 U	--
PCB-020	NE	NE	NE	ng/kg	67.5	59.9	73.7	29.4	1.08 U	15.6	0.837 U	1.46 U	0.974 U	0.740 U	40.0	0.930 U	--	0.843 U	3.99	--

Analyte	DMMP Guideline Chemistry Values			Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-Z	PT-13
				Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
				Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
	SL	BT	ML	Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
PCB-021	NE	NE	NE	ng/kg	67.5	59.9	73.7	29.4	1.08 U	15.6	0.837 U	1.46 U	0.974 U	0.740 U	40.0	0.930 U	--	0.843 U	3.99	--
PCB-022	NE	NE	NE	ng/kg	52.9	39.8	45.4	22.0	1.13 U	11.1	0.873 U	1.52 U	1.02 U	0.772 U	28.1	0.911 U	--	0.826 U	1.34 U	--
PCB-023	NE	NE	NE	ng/kg	1.85 U	1.88 U	1.71 U	1.85 U	1.21 U	1.98 U	0.935 U	1.63 U	1.09 U	0.827 U	1.84 U	0.961 U	--	0.871 U	1.41 U	--
PCB-024	NE	NE	NE	ng/kg	1.77 J	4.60	2.16 J	1.50 U	1.02 U	1.17 U	0.437 U	1.11 U	0.422 U	0.499 U	1.40 J	0.475 U	--	0.347 U	0.501 U	--
PCB-025	NE	NE	NE	ng/kg	9.50	7.96	9.97	3.58 J	0.974 U	1.59 U	0.752 U	1.31 U	0.876 U	0.666 U	6.23	0.812 U	--	0.736 U	1.20 U	--
PCB-026	NE	NE	NE	ng/kg	20.6	18.8	21.4	8.27	1.12 U	3.97 J	0.869 U	1.52 U	1.01 U	0.769 U	14.0	0.949 U	--	0.860 U	1.40 U	--
PCB-027	NE	NE	NE	ng/kg	6.95	4.76	8.46	4.00	1.04 U	1.20 U	0.446 U	1.13 U	0.431 U	0.510 U	2.79 J	0.459 U	--	0.335 U	0.484 U	--
PCB-028	NE	NE	NE	ng/kg	137	115	113	56.3	2.20 J	27.8	0.770 U	2.60 J	0.896 U	0.682 U	76.1	0.787 U	--	0.713 U	5.45	--
PCB-029	NE	NE	NE	ng/kg	1.82 U	1.90 U	1.73 U	1.86 U	1.10 U	1.80 U	0.850 U	1.48 U	0.989 U	0.752 U	1.67 U	0.954 U	--	0.864 U	1.40 U	--
PCB-030	NE	NE	NE	ng/kg	0.637 U	1.70 U	1.20 U	1.42 U	0.991 U	1.13 U	0.424 U	1.08 U	0.409 U	0.484 U	1.44 U	0.440 U	--	0.321 U	0.464 U	--
PCB-031	NE	NE	NE	ng/kg	138	99.8	113	58.3	1.94 J	29.6	0.819 U	2.37 J	0.954 U	0.725 U	44.8	0.979 U	--	0.887 U	6.29	--
PCB-032	NE	NE	NE	ng/kg	39.0	28.7	37.3	15.0	1.11 U	7.47	0.476 U	1.21 U	0.459 U	0.543 U	17.1	0.516 U	--	0.376 U	0.544 U	--
PCB-033	NE	NE	NE	ng/kg	67.5	59.9	73.7	29.4	1.08 U	15.6	0.837 U	1.46 U	0.974 U	0.740 U	40.0	0.930 U	--	0.843 U	3.99	--
PCB-034	NE	NE	NE	ng/kg	1.81 U	2.15 U	1.96 U	2.11 U	1.09 U	1.78 U	0.844 U	1.47 U	0.981 U	0.746 U	1.66 U	0.949 U	--	0.860 U	1.40 U	--
PCB-035	NE	NE	NE	ng/kg	1.69 U	1.97 U	1.79 U	1.93 U	1.17 U	1.91 U	0.905 U	1.58 U	1.05 U	0.801 U	1.78 U	0.993 U	--	0.900 U	1.46 U	--
PCB-036	NE	NE	NE	ng/kg	1.63 U	1.88 U	1.71 U	1.84 U	1.10 U	1.79 U	0.847 U	1.48 U	0.986 U	0.750 U	1.67 U	0.931 U	--	0.844 U	1.37 U	--
PCB-037	NE	NE	NE	ng/kg	39.7	24.7	28.9	14.7	1.05 U	8.04	0.812 U	1.42 U	0.944 U	0.718 U	20.3	0.873 U	--	0.791 U	1.28 U	--
PCB-038	NE	NE	NE	ng/kg	1.59 U	1.83 U	1.67 U	1.80 U	1.10 U	1.79 U	0.846 U	1.48 U	0.985 U	0.749 U	1.66 U	0.891 U	--	0.807 U	1.31 U	--
PCB-039	NE	NE	NE	ng/kg	1.68 U	1.94 U	1.76 U	1.90 U	1.13 U	1.84 U	0.870 U	1.52 U	1.01 U	0.770 U	8.88	0.954 U	--	0.865 U	1.41 U	--
PCB-040	NE	NE	NE	ng/kg	40.8	32.0	27.0	20.9	1.57 U	9.19	0.997 U	0.721 U	0.651 U	0.843 U	18.4	0.790 U	--	0.613 U	0.809 U	--
PCB-041	NE	NE	NE	ng/kg	234	173	138	93.7	2.46 J	46.8	0.586 U	5.14	0.383 U	0.496 U	89.5	0.469 U	--	0.363 U	4.05	--
PCB-042	NE	NE	NE	ng/kg	81.0	53.8	53.7	28.5	1.02 U	16.1	0.651 U	1.93 J	0.425 U	0.550 U	31.1	0.517 U	--	0.401 U	1.85 J	--
PCB-043	NE	NE	NE	ng/kg	255	193	162	96.6	2.09 J	51.9	0.755 U	4.90	0.493 U	0.638 U	92.9	0.595 U	--	0.461 U	4.57	--
PCB-044	NE	NE	NE	ng/kg	345	259	185	142	3.07 J	71.0	0.865 U	5.67	0.565 U	0.731 U	135	0.686 U	--	0.532 U	4.96	--
PCB-045	NE	NE	NE	ng/kg	42.3	25.3	25.8	15.6	1.34 U	7.77	0.856 U	0.619 U	0.559 U	0.723 U	15.9	0.680 U	--	0.527 U	0.880 U	--
PCB-046	NE	NE	NE	ng/kg	17.6	11.8	12.5	7.45	1.45 U	3.42 J	0.926 U	0.670 U	0.605 U	0.783 U	7.54	0.726 U	--	0.563 U	0.940 U	--
PCB-047	NE	NE	NE	ng/kg	71.3	49.8	45.1	22.7	0.983 U	15.0	0.625 U	2.04 J	0.408 U	0.529 U	16.7	0.527 U	--	0.408 U	2.61 J	--
PCB-048	NE	NE	NE	ng/kg	47.8	29.9	28.7	13.6	0.987 U	9.91	0.628 U	1.46 J	0.410 U	0.531 U	14.2	0.488 U	--	0.378 U	1.57 J	--
PCB-049	NE	NE	NE	ng/kg	255	193	162	96.6	2.09 J	51.9	0.755 U	4.90	0.493 U	0.638 U	92.9	0.595 U	--	0.461 U	4.57	--
PCB-050	NE	NE	NE	ng/kg	0.849 U	2.22 U	2.35 U	1.77 U	1.19 U	0.546 U	0.756 U	0.547 U	0.494 U	0.639 U	0.731 U	0.602 U	--	0.467 U	0.780 U	--
PCB-051	NE	NE	NE	ng/kg	12.2	8.76	8.73	5.64	1.20 U	2.70 J	0.766 U	0.554 U	0.501 U	0.648 U	5.00	0.640 U	--	0.496 U	0.828 U	--
PCB-052	NE	NE	NE	ng/kg	512	437	266	222	3.06 J	112	0.652 U	7.66	0.426 U	0.552 U	213	1.20 J	--	0.376 U	6.17	--
PCB-053	NE	NE	NE	ng/kg	44.9	30.0	27.8	17.7	1.25 U	8.88	0.798 U	0.577 U	0.522 U	0.675 U	18.6	0.659 U	--	0.511 U	0.854 U	--
PCB-054	NE	NE	NE	ng/kg	0.649 U	1.73 U	1.83 U	1.38 U	0.936 U	0.430 U	0.596 U	0.431 U	0.389 U	0.504 U	0.576 U	0.484 U	--	0.375 U	0.627 U	--
PCB-055	NE	NE	NE	ng/kg	9.62	5.25	7.78	3.94 J	0.879 U	2.10 J	0.559 U	0.404 U	0.365 U	0.473 U	4.23	0.448 U	--	0.347 U	0.459 U	--
PCB-056	NE	NE	NE	ng/kg	212	155	110.0	75.9	1.34 U	36.3	0.523 U	3.80 J	0.466 U	0.560 U	88.6	0.684 U	--	0.603 U	5.07	--
PCB-057	NE	NE	NE	ng/kg	1.50 J	1.62 U	1.71 U	1.29 U	0.879 U	0.404 U	0.559 U	0.404 U	0.365 U	0.473 U	0.540 U	0.444 U	--	0.344 U	0.454 U	--
PCB-058	NE	NE	NE	ng/kg	0.630 U	1.60 U	1.70 U	1.28 U	0.929 U	0.427 U	0.591 U	0.427 U	0.386 U	0.500 U	0.571 U	0.457 U	--	0.354 U	0.468 U	--
PCB-059	NE	NE	NE	ng/kg	81.0	53.8	53.7	28.5	1.02 U	16.1	0.651 U	1.93 J	0.425 U	0.550 U	31.1	0.517 U	--	0.401 U	1.85 J	--
PCB-060	NE	NE	NE	ng/kg	212	155	110.0	75.9	1.34 U	36.3	0.523 U	3.80 J	0.466 U	0.560 U	88.6	0.684 U	--	0.603 U	5.07	--
PCB-061	NE	NE	NE	ng/kg	469	376	221	177	2.62 J	94.9	0.559 U	7.65	0.365 U	0.473 U	222	0.437 U	--	0.339 U	7.51	--
PCB-062	NE	NE	NE	ng/kg	0.742 U	1.84 U	1.95 U	1.47 U	0.949 U	0.436 U	0.604 U	0.437 U	0.395 U	0.511 U	0.584 U	0.517 U	--	0.401 U	0.529 U	--
PCB-063	NE	NE	NE	ng/kg	13.8	9.31	9.41	4.69	0.855 U	2.51 J	0.544 U	0.394 U	0.355 U	0.460 U	6.14	0.439 U	--	0.340 U	0.450 U	--
PCB-064	NE	NE	NE	ng/kg	234	173	138	93.7	2.46 J	46.8	0.586 U	5.14	0.383 U	0.496 U	89.5	0.469 U	--	0.363 U	4.05	--
PCB-065	NE	NE	NE	ng/kg	0.651 U	1.79 U	1.89 U	1.43 U	1.00 U	0.461 U	0.638 U	0.462 U	0.417 U	0.540 U	0.617 U	0.469 U	--	0.363 U	0.480 U	--
PCB-066	NE	NE	NE	ng/kg	313	225	156	104	2.08 J	58.4	0.534 U	5.89	0.349 U	0.452 U	140.0	0.431 U	--	0.334 U	6.16	--
PCB-067	NE	NE	NE	ng/kg	9.97	7.14	6.44	3.85 J	0.862 U	1.51 J	0.548 U	0.397 U	0.358 U	0.464 U	4.20	0.453 U	--	0.351 U	0.463 U	--
PCB-068	NE	NE	NE	ng/kg	0.600 U	1.58 U	1.67 U	1.26 U	0.843 U	0.387 U	0.536 U	0.388 U	0.350 U	0.453 U	0.518 U	0.435 U	--	0.337 U	0.445 U	--
PCB-069	NE	NE	NE	ng/kg	512	437	266	222	3.06 J	112	0.652 U	7.66	0.426 U	0.552 U	213	1.20 J	--	0.376 U	6.17	--
PCB-070	NE	NE	NE	ng/kg	469	376	221	177	2.62 J	94.9	0.559 U	7.65	0.365 U	0.473 U	222	0.437 U	--	0.339 U	7.51	--
PCB-071	NE	NE	NE	ng/kg	234	173	138	93.7	2.46 J	46.8	0.586 U	5.14	0.383 U	0.496 U	89.5	0.469 U	--	0.363 U	4.05	--
PCB-072	NE	NE	NE	ng/kg	234	173	138	93.7	2.46 J	46.8	0.586 U	5.14	0.383 U	0.496 U	89.5	0.469 U	--	0.363 U	4.05	--
PCB-073	NE	NE	NE	ng/kg	0.662 U	1.79 U	1.90 U	1.43 U	0.886 U	0.407 U	0.563 U	0.407 U	0.368 U	0.476 U	0.545 U	0.502 U	--	0.389 U	0.650 U	--
PCB-074	NE	NE	NE	ng/kg	179	125	89.6	64.5	0.818 U	32.9	0.520 U	3.17 J	0.340 U	0.440 U	78.7	0.436 U	--	0.338 U	4.41	--
PCB-075	NE	NE	NE	ng/kg	47.8	29.9	28.7	13.6	0.987 U	9.91	0.628 U	1.46 J	0.410 U	0.531 U	14.2	0.488 U	--	0.378 U	1.57 J	--
PCB-076	NE	NE	NE	ng/kg	313	225	156	104	2.08 J	58.4	0.534 U	5.89	0.349 U	0.452 U	140.0	0.431 U	--	0.334 U	6.16	--
PCB-077	NE	NE	NE	ng/kg	22.9	18.2	18.4	9.78	1.33 U	3.66 J	0.523 U	0.522 U	0.464 U	0.561 U	9.47	0.727 U	--	0.662 U	1.18 J	--
PCB-078	NE	NE	NE	ng/kg	1.28 U	2.35 U	1.91 U	1.97 U	1.31 U	0.651 U	0.514 U	0.521 U	0.458 U	0.550 U	0.926 U	0.688 U	--	0.607 U	0.632 U	--
PCB-079	NE	NE	NE	ng/kg	7.14	8.56	7.22	4.95	1.26 U	1.62 J	0.494 U	0.501 U	0.439 U	0.529 U	4.16	0.652 U	--	0.575 U	0.599 U	--
PCB-080	NE	NE	NE	ng/kg	0.535 U	1.44 U	1.52 U	1.15 U	0.767 U	0.353 U	0.488 U	0.353 U	0.319 U	0.413 U	0.472 U	0.384 U	--	0.298 U	0.393 U	--
PCB-081	NE	NE	NE	ng/kg	10.8	13.8	11.4	8.83	1.21 U	3.62 J	0.469 U	0.483 U	0.418 U	0.500 U	8.53	0.604 U	--	0.515 U	0.580 U	--
PCB-082	NE	NE	NE	ng/kg	100.0	100.0	47.4	57.9	1.29 U	24.1	1.02 U	1.05 U	0.779 U	1.14 U	51.1	0.555 U	--	0.996 U	1.43 J	--
PCB-083	NE	NE	NE	ng/kg	33.5	32.6	18.7	18.4	0.999 U	8.43	0.792 U	0.816 U	0.607 U	0.891 U	17.2	0.418 U	--	0.751 U	0.553 U	--
PCB-084	NE	NE	NE	ng/kg	328	290.0	159	171	1.13 U	80.3	0.894 U	3.54 J	0.685 U	1.01 U	147	0.453 U	--	0.815 U	2.84 J	--
PCB-085	NE	NE	NE	ng/kg	129	134	59.0	69.2	0.915 U	30.6	0.726 U	1.68 J	0.556 U	0.816 U	60.7	0.398 U	--	0.714 U	1.94 J	--
PCB-086	NE	NE	NE	ng/kg	0.667 U	1.55 U	1.66 U	1.50 U	1.02 U	0.432 U	0.805 U	0.829 U	0.616 U	0.905 U	1.81 U	0.395 U	--	0.711 U	0.523 U	--
PCB-087	NE	NE	NE	ng/kg	326	334	154	189	0.927 U	84.0	0.735 U	3.96 J	0.563 U	0.827 U	185	0.379 U	--	0.682 U	3.28 J	--
PCB-088	NE	NE	NE	ng/kg	120.0	94.5	55.3	55.2	0.534 U	29.4	0.545 U	1.52 J	0.516 U	0.801 U	71.0	0.372 U	--	0.578 U	2.01 J	--
PCB-089	NE	NE	NE	ng/kg	9.27	9.67	6.42	5.15	1.20 U	2.14 J	0.953 U	0.982 U	0.730 U	1.07 U	3.87 J	0.475 U	--	0.854 U	0.628 U	--
PCB-090	NE	NE	NE	ng/kg	925	851	523	476	3.13 J	221	0.814 U	9.63	0.623 U	0.915 U	557	1.64 J	--	0.767 U	8.01	--
PCB-091	NE	NE	NE	ng/kg	120.0	94.5	55.3	55.2	0.534 U	29.4	0.545 U	1.52 J	0.516 U	0.801 U	71.0	0.372 U	--	0.578 U	2.01 J	--
PCB-092	NE	NE	NE	ng/kg	328	290.0	159	171	1.13 U	80.3	0.894 U	3.54 J	0.685 U	1.01 U	147	0.453 U	--	0.815 U	2.84 J	--

Analyte	DMMP Guideline Chemistry Values			Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-Z	PT-13
				Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
				Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
	SL	BT	ML	Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
PCB-093	NE	NE	NE	ng/kg	0.607 U	99.2	136	23.6	0.605 U	1.75 U	0.618 U	0.387 U	0.584 U	0.907 U	1.03 U	0.386 U	--	0.601 U	0.879 U	--
PCB-094	NE	NE	NE	ng/kg	4.63	2.71 U	1.75 U	1.64 U	0.613 U	1.77 U	0.625 U	0.392 U	0.591 U	0.918 U	1.05 U	0.429 U	--	0.667 U	0.977 U	--
PCB-095	NE	NE	NE	ng/kg	718	473	232	76.8	2.52 J	183	0.521 U	6.65	0.493 U	0.765 U	114	1.08 J	--	0.560 U	7.06	--
PCB-096	NE	NE	NE	ng/kg	5.17	4.58	4.25	3.29 J	0.419 U	1.21 U	0.427 U	0.268 U	0.404 U	0.628 U	2.25 J	0.286 U	--	0.445 U	0.651 U	--
PCB-097	NE	NE	NE	ng/kg	221	222	104	123	1.03 U	58.9	0.817 U	2.95 J	0.626 U	0.918 U	121	0.412 U	--	0.740 U	2.48 J	--
PCB-098	NE	NE	NE	ng/kg	0.532 U	2.29 U	1.48 U	197	0.510 U	1.47 U	0.520 U	0.326 U	0.492 U	0.764 U	338	0.373 U	--	0.580 U	0.848 U	--
PCB-099	NE	NE	NE	ng/kg	319	327	156	173	0.991 U	84.4	0.786 U	4.25	0.602 U	0.884 U	167	0.406 U	--	0.730 U	4.16	--
PCB-100	NE	NE	NE	ng/kg	2.55 J	2.21 U	1.43 U	1.34 U	0.519 U	1.50 U	0.530 U	0.332 U	0.501 U	0.778 U	0.887 U	0.359 U	--	0.558 U	0.817 U	--
PCB-101	NE	NE	NE	ng/kg	925	851	523	476	3.13 J	221	0.814 U	9.63	0.623 U	0.915 U	557	1.64 J	--	0.767 U	8.01	--
PCB-102	NE	NE	NE	ng/kg	0.532 U	2.29 U	1.48 U	197	0.510 U	1.47 U	0.520 U	0.326 U	0.492 U	0.764 U	338	0.373 U	--	0.580 U	0.848 U	--
PCB-103	NE	NE	NE	ng/kg	5.40	2.12 U	4.27	1.28 U	0.496 U	1.43 U	0.506 U	0.317 U	0.478 U	0.743 U	2.71 J	0.341 U	--	0.531 U	0.777 U	--
PCB-104	NE	NE	NE	ng/kg	0.410 U	1.72 U	1.11 U	1.04 U	0.394 U	1.14 U	0.402 U	0.252 U	0.381 U	0.591 U	0.673 U	0.273 U	--	0.424 U	0.621 U	--
PCB-105	NE	NE	NE	ng/kg	301	285	125	146	1.40 U	72.2	0.795 U	3.45 J	0.516 U	0.648 U	161	0.772 U	--	0.672 U	3.45 J	--
PCB-106	NE	NE	NE	ng/kg	765	676	310.0	339	1.61 U	176	0.986 U	7.97	0.520 U	0.759 U	423	0.781 U	--	0.719 U	7.60	--
PCB-107	NE	NE	NE	ng/kg	50.9	48.6	26.6	24.7	1.45 U	12.2	0.894 U	0.626 U	0.568 U	0.745 U	26.2	0.798 U	--	0.662 U	0.681 U	--
PCB-108	NE	NE	NE	ng/kg	50.9	48.6	26.6	24.7	1.45 U	12.2	0.894 U	0.626 U	0.568 U	0.745 U	26.2	0.798 U	--	0.662 U	0.681 U	--
PCB-109	NE	NE	NE	ng/kg	0.522 U	1.27 U	1.37 U	1.24 U	0.867 U	0.369 U	0.688 U	0.708 U	0.527 U	0.773 U	1.54 U	0.354 U	--	0.635 U	0.468 U	--
PCB-110	NE	NE	NE	ng/kg	754	759	381	426	3.07 J	187	0.586 U	8.21	0.449 U	0.659 U	430.0	1.41 J	--	0.572 U	7.60	--
PCB-111	NE	NE	NE	ng/kg	16.3	17.3	8.88	9.35	0.744 U	3.83 J	0.590 U	0.607 U	0.451 U	0.663 U	10.0	0.305 U	--	0.549 U	0.404 U	--
PCB-112	NE	NE	NE	ng/kg	33.5	32.6	18.7	18.4	0.999 U	8.43	0.792 U	0.816 U	0.607 U	0.891 U	17.2	0.418 U	--	0.751 U	0.553 U	--
PCB-113	NE	NE	NE	ng/kg	0.527 U	18.3	1.41 U	4.04	0.837 U	0.356 U	0.663 U	0.683 U	0.508 U	0.746 U	1.49 U	0.346 U	--	0.622 U	0.458 U	--
PCB-114	NE	NE	NE	ng/kg	20.2	18.2	12.0	10.7	1.34 U	5.49	0.831 U	0.568 U	0.585 U	0.708 U	11.6	0.838 U	--	0.644 U	0.647 U	--
PCB-115	NE	NE	NE	ng/kg	16.3	17.3	8.88	9.35	0.744 U	3.83 J	0.590 U	0.607 U	0.451 U	0.663 U	10.0	0.305 U	--	0.549 U	0.404 U	--
PCB-116	NE	NE	NE	ng/kg	129	134	59.0	69.2	0.915 U	30.6	0.726 U	1.68 J	0.556 U	0.816 U	60.7	0.398 U	--	0.714 U	1.94 J	--
PCB-117	NE	NE	NE	ng/kg	326	334	154	189	0.927 U	84.0	0.735 U	3.96 J	0.563 U	0.827 U	185	0.379 U	--	0.682 U	3.28 J	--
PCB-118	NE	NE	NE	ng/kg	765	676	310.0	339	1.61 U	176	0.986 U	7.97	0.520 U	0.759 U	423	0.781 U	--	0.719 U	7.60	--
PCB-119	NE	NE	NE	ng/kg	11.0	11.7	8.31	5.39	0.767 U	2.66 J	0.608 U	0.627 U	0.466 U	0.684 U	5.52	0.313 U	--	0.563 U	0.415 U	--
PCB-120	NE	NE	NE	ng/kg	0.462 U	2.29 J	1.20 U	2.27 J	0.719 U	0.306 U	0.570 U	0.587 U	0.437 U	0.641 U	1.28 U	0.300 U	--	0.540 U	0.397 U	--
PCB-121	NE	NE	NE	ng/kg	0.455 U	1.97 U	1.27 U	1.20 U	0.434 U	1.25 U	0.443 U	0.278 U	0.419 U	0.651 U	0.741 U	0.306 U	--	0.475 U	0.696 U	--
PCB-122	NE	NE	NE	ng/kg	9.52	10.8	6.81	5.60	1.31 U	2.32 J	0.803 U	0.563 U	0.511 U	0.669 U	5.13	0.774 U	--	0.643 U	0.661 U	--
PCB-123	NE	NE	NE	ng/kg	12.0	13.1	4.87	7.36	1.15 U	3.21 J	0.769 U	0.605 U	0.522 U	0.700 U	6.26	0.710 U	--	0.544 U	0.604 U	--
PCB-124	NE	NE	NE	ng/kg	29.5	25.6	14.1	13.4	1.50 U	8.69	0.923 U	0.647 U	0.587 U	0.769 U	20.3	0.806 U	--	0.669 U	0.688 U	--
PCB-125	NE	NE	NE	ng/kg	326	334	154	189	0.927 U	84.0	0.735 U	3.96 J	0.563 U	0.827 U	185	0.379 U	--	0.682 U	3.28 J	--
PCB-126	NE	NE	NE	ng/kg	4.61	3.78 J	8.85	1.59 U	1.60 U	0.541 U	1.10 U	0.646 U	0.577 U	0.878 U	2.79 J	0.987 U	--	1.05 U	0.765 U	--
PCB-127	NE	NE	NE	ng/kg	0.944 U	1.92 U	2.09 U	1.52 U	1.34 U	0.518 U	0.826 U	0.579 U	0.525 U	0.688 U	0.804 U	0.845 U	--	0.702 U	0.722 U	--
PCB-128	NE	NE	NE	ng/kg	162	140.0	85.1	84.0	0.989 U	47.5	0.545 U	1.14 U	0.507 U	0.995 U	112	0.647 U	--	0.611 U	1.52 J	--
PCB-129	NE	NE	NE	ng/kg	50.2	41.0	27.3	27.0	1.36 U	14.1	0.750 U	1.57 U	0.698 U	1.37 U	35.7	0.859 U	--	0.811 U	0.872 U	--
PCB-130	NE	NE	NE	ng/kg	61.8	44.6	34.3	29.0	1.18 U	15.6	0.651 U	1.36 U	0.606 U	1.19 U	46.4	0.812 U	--	0.766 U	0.824 U	--
PCB-131	NE	NE	NE	ng/kg	28.8	19.9	18.6	14.4	1.20 U	7.11	0.659 U	1.38 U	0.613 U	1.20 U	22.4	0.726 U	--	0.685 U	0.737 U	--
PCB-132	NE	NE	NE	ng/kg	298	242	195	169	1.02 U	85.4	0.563 U	2.57 J	0.524 U	1.03 U	234	0.643 U	--	0.607 U	2.82 J	--
PCB-133	NE	NE	NE	ng/kg	28.8	19.9	18.6	14.4	1.20 U	7.11	0.659 U	1.38 U	0.613 U	1.20 U	22.4	0.726 U	--	0.685 U	0.737 U	--
PCB-134	NE	NE	NE	ng/kg	55.2	40.6	36.7	27.2	1.29 U	17.2	0.712 U	1.49 U	0.662 U	1.30 U	44.3	0.748 U	--	0.705 U	0.759 U	--
PCB-135	NE	NE	NE	ng/kg	144	87.2	97.3	57.5	1.35 U	42.6	0.743 U	1.56 U	0.691 U	1.36 U	122	0.711 U	--	0.670 U	0.721 U	--
PCB-136	NE	NE	NE	ng/kg	146	131	138	117	0.405 U	50.3	0.398 U	0.971 U	0.363 U	0.479 U	180.0	0.387 U	--	0.334 U	0.669 U	--
PCB-137	NE	NE	NE	ng/kg	52.9	46.5	20.9	27.4	1.24 U	15.9	0.682 U	1.43 U	0.635 U	1.24 U	31.4	0.756 U	--	0.713 U	0.767 U	--
PCB-138	NE	NE	NE	ng/kg	1,010	786	663	517	2.61 J	312	0.474 U	8.69	0.441 U	0.865 U	834	1.63 J	--	0.509 U	6.81	--
PCB-139	NE	NE	NE	ng/kg	892	633	691	476	1.15 U	270.0	0.635 U	7.42	0.591 U	1.16 U	709	1.36 J	--	0.635 U	5.89	--
PCB-140	NE	NE	NE	ng/kg	5.03	4.71	3.28 J	2.17 U	1.15 U	0.880 U	0.635 U	1.33 U	0.591 U	1.16 U	3.10 J	0.677 U	--	0.639 U	0.687 U	--
PCB-141	NE	NE	NE	ng/kg	225	166	176	120.0	1.14 U	73.7	0.628 U	2.11 J	0.584 U	1.15 U	204	0.704 U	--	0.665 U	1.81 J	--
PCB-142	NE	NE	NE	ng/kg	0.680 U	2.00 U	1.42 U	2.58 U	1.32 U	1.01 U	0.729 U	1.53 U	0.678 U	1.33 U	0.639 U	0.808 U	--	0.763 U	0.821 U	--
PCB-143	NE	NE	NE	ng/kg	55.2	40.6	36.7	27.2	1.29 U	17.2	0.712 U	1.49 U	0.662 U	1.30 U	44.3	0.748 U	--	0.705 U	0.759 U	--
PCB-144	NE	NE	NE	ng/kg	57.2	37.8	43.9	29.5	1.18 U	19.0	0.651 U	1.36 U	0.606 U	1.19 U	51.5	0.687 U	--	0.648 U	0.697 U	--
PCB-145	NE	NE	NE	ng/kg	0.859 U	0.930 U	1.62 U	1.95 U	0.414 U	0.356 U	0.407 U	0.994 U	0.372 U	0.491 U	0.751 U	0.397 U	--	0.343 U	0.686 U	--
PCB-146	NE	NE	NE	ng/kg	126	93.9	91.1	64.4	0.984 U	40.7	0.542 U	1.14 U	0.505 U	0.990 U	112	0.617 U	--	0.582 U	0.627 U	--
PCB-147	NE	NE	NE	ng/kg	16.0	12.5	6.26	8.24	1.15 U	5.29	0.632 U	1.32 U	0.588 U	1.15 U	10.1	0.663 U	--	0.625 U	0.673 U	--
PCB-148	NE	NE	NE	ng/kg	1.14 U	1.20 U	2.09 U	2.52 U	0.468 U	0.402 U	0.460 U	1.12 U	0.420 U	0.555 U	0.849 U	0.494 U	--	0.426 U	0.853 U	--
PCB-149	NE	NE	NE	ng/kg	892	633	691	476	1.15 U	270.0	0.635 U	7.42	0.591 U	1.16 U	709	1.36 J	--	0.635 U	5.89	--
PCB-150	NE	NE	NE	ng/kg	0.840 U	0.886 U	1.54 U	1.86 U	0.400 U	0.344 U	0.394 U	0.960 U	0.359 U	0.474 U	0.726 U	0.392 U	--	0.338 U	0.677 U	--
PCB-151	NE	NE	NE	ng/kg	125	85.3	162	69.2	1.19 U	70.4	0.658 U	2.32 J	0.613 U	1.20 U	156	0.709 U	--	0.669 U	1.79 J	--
PCB-152	NE	NE	NE	ng/kg	0.817 U	0.887 U	1.54 U	1.86 U	0.399 U	0.342 U	0.392 U	0.956 U	0.357 U	0.472 U	0.723 U	0.380 U	--	0.328 U	0.656 U	--
PCB-153	NE	NE	NE	ng/kg	962	707	712	509	1.89 J	313	0.492 U	8.18	0.458 U	0.898 U	770.0	1.32 J	--	0.564 U	6.70	--
PCB-154	NE	NE	NE	ng/kg	6.71	7.47	5.92	2.01 U	0.426 U	2.06 J	0.418 U	1.02 U	0.382 U	0.504 U	5.51	0.439 U	--	0.379 U	0.758 U	--
PCB-155	NE	NE	NE	ng/kg	0.759 U	0.792 U	1.38 U	1.66 U	0.364 U	0.313 U	0.358 U	0.873 U	0.326 U	0.431 U	0.660 U	0.349 U	--	0.302 U	0.604 U	--
PCB-156	NE	NE	NE	ng/kg	99.3	84.8	57.3	49.9	0.837 U	30.5	0.447 U	0.972 U	0.415 U	0.833 U	79.7	0.524 U	--	0.488 U	0.554 U	--
PCB-157	NE	NE	NE	ng/kg	20.8	19.5	11.9	10.6	0.819 U	5.54	0.462 U	0.983 U	0.474 U	0.850 U	13.5	0.638 U	--	0.571 U	0.594 U	--
PCB-158	NE	NE	NE	ng/kg	128	103	83.6	70.8	0.844 U	39.2	0.465 U	0.974 U	0.433 U	0.849 U	105	0.530 U	--	0.500 U	1.15 J	--
PCB-159	NE	NE	NE	ng/kg	11.1	7.81	11.9	7.33	0.800 U	4.51	0.441 U	0.924 U	0.410 U	0.805 U	8.98	0.507 U	--	0.478 U	0.514 U	--
PCB-160	NE	NE	NE	ng/kg	128	103	83.6	70.8	0.844 U	39.2	0.465 U	0.974 U	0.433 U	0.849 U	105	0.530 U	--	0.500 U	1.15 J	--
PCB-161	NE	NE	NE	ng/kg	298	242	195	169	1.02 U	85.4	0.563 U	2.57 J	0.524 U	1.03 U	234	0.643 U	--	0.607 U	2.82 J	--
PCB-162	NE	NE	NE	ng/kg	162	140.0	85.1	84.0	0.989 U	47.5	0.545 U	1.14 U	0.507 U	0.995 U	112	0.647 U	--	0.611 U	1.52 J	--
PCB-163	NE	NE	NE	ng/kg	1,010	786	663	517	2.61 J	312	0.474 U	8.69	0.441 U	0.865 U	834	1.63 J	--	0.509 U	6.81	--
PCB-164	NE	NE	NE	ng/kg	1,010	786	663	517	2.61 J	312	0.474 U	8.69	0.441 U	0.865 U	834	1.63 J	--	0.509 U	6.81	--

Analyte	DMMP Guideline Chemistry Values			Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-Z	PT-13
				Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
				Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
	SL	BT	ML	Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
PCB-165	NE	NE	NE	ng/kg	126	93.9	91.1	64.4	0.984 U	40.7	0.542 U	1.14 U	0.505 U	0.990 U	112	0.617 U	--	0.582 U	0.627 U	--
PCB-166	NE	NE	NE	ng/kg	3.70 J	1.33 U	2.86 J	1.72 U	0.893 U	0.682 U	0.492 U	1.03 U	0.458 U	0.898 U	2.30 J	0.569 U	--	0.537 U	0.578 U	--
PCB-167	NE	NE	NE	ng/kg	38.1	30.3	22.0	18.1	0.826 U	12.0	0.453 U	0.915 U	0.426 U	0.825 U	32.3	0.584 U	--	0.503 U	0.547 U	--
PCB-168	NE	NE	NE	ng/kg	0.464 U	1.38 U	3.38 J	1.78 U	0.884 U	0.675 U	0.487 U	1.02 U	0.453 U	0.889 U	0.427 U	0.568 U	--	0.535 U	0.576 U	--
PCB-169	NE	NE	NE	ng/kg	0.458 U	1.30 U	10.0	1.67 U	0.863 U	0.646 U	0.483 U	0.991 U	0.400 U	0.857 U	0.384 U	0.523 U	--	0.586 U	0.613 U	--
PCB-170	NE	NE	NE	ng/kg	282	186	274	164	1.36 U	142	0.987 U	2.42 J	1.01 U	1.02 U	337	0.750 U	--	0.556 U	2.36 J	--
PCB-171	NE	NE	NE	ng/kg	90.9	64.3	87.2	53.4	1.24 U	42.7	0.900 U	0.879 U	0.925 U	0.928 U	95.6	0.683 U	--	0.506 U	0.552 U	--
PCB-172	NE	NE	NE	ng/kg	50.1	34.9	50.2	27.7	1.30 U	25.1	0.943 U	0.921 U	0.969 U	0.973 U	60.0	0.704 U	--	0.522 U	0.569 U	--
PCB-173	NE	NE	NE	ng/kg	7.80	6.25	8.90	5.35	1.44 U	3.92 J	1.05 U	1.02 U	1.08 U	1.08 U	8.24	0.770 U	--	0.571 U	0.622 U	--
PCB-174	NE	NE	NE	ng/kg	305	214	290.0	181	1.22 U	137	0.888 U	2.66 J	0.913 U	0.916 U	297	0.622 U	--	0.461 U	2.32 J	--
PCB-175	NE	NE	NE	ng/kg	13.8	9.95	15.1	9.06	1.24 U	5.95	0.901 U	0.880 U	0.926 U	0.930 U	16.3	0.652 U	--	0.483 U	0.526 U	--
PCB-176	NE	NE	NE	ng/kg	45.3	34.0	47.9	27.0	0.934 U	21.1	0.679 U	0.663 U	0.697 U	0.700 U	45.9	0.480 U	--	0.356 U	0.388 U	--
PCB-177	NE	NE	NE	ng/kg	182	128	180.0	106	1.34 U	84.8	0.972 U	0.949 U	0.999 U	1.00 U	177	0.708 U	--	0.525 U	0.572 U	--
PCB-178	NE	NE	NE	ng/kg	60.0	41.7	60.6	36.4	1.28 U	27.5	0.928 U	0.907 U	0.954 U	0.958 U	60.8	0.699 U	--	0.518 U	0.565 U	--
PCB-179	NE	NE	NE	ng/kg	126	97.9	128	80.8	0.892 U	55.4	0.648 U	0.633 U	0.666 U	0.669 U	115	0.474 U	--	0.352 U	1.32 J	--
PCB-180	NE	NE	NE	ng/kg	630.0	416	566	352	1.05 U	315	0.765 U	5.10	0.787 U	0.790 U	694	0.589 U	--	0.437 U	4.59	--
PCB-181	NE	NE	NE	ng/kg	0.793 U	1.41 U	1.61 U	1.73 U	1.27 U	0.543 U	0.920 U	0.898 U	0.945 U	0.949 U	0.656 U	0.734 U	--	0.544 U	0.593 U	--
PCB-182	NE	NE	NE	ng/kg	361	275	350.0	220.0	1.14 U	172	0.831 U	3.10 J	0.854 U	0.858 U	354	0.607 U	--	0.450 U	3.55 J	--
PCB-183	NE	NE	NE	ng/kg	192	142	192	122	1.11 U	95.0	0.807 U	2.61 J	0.830 U	0.833 U	204	1.46 J	--	1.20 J	3.21 J	--
PCB-184	NE	NE	NE	ng/kg	0.545 U	0.990 U	1.13 U	1.21 U	0.889 U	0.381 U	0.646 U	0.631 U	0.664 U	0.666 U	0.461 U	0.466 U	--	0.346 U	0.377 U	--
PCB-185	NE	NE	NE	ng/kg	38.3	30.8	41.7	24.5	1.27 U	18.8	0.926 U	0.904 U	0.952 U	0.955 U	39.8	0.691 U	--	0.512 U	0.558 U	--
PCB-186	NE	NE	NE	ng/kg	0.600 U	1.06 U	1.20 U	1.30 U	0.960 U	0.412 U	0.698 U	0.681 U	0.717 U	0.720 U	0.498 U	0.494 U	--	0.366 U	0.399 U	--
PCB-187	NE	NE	NE	ng/kg	361	275	350.0	220.0	1.14 U	172	0.831 U	3.10 J	0.854 U	0.858 U	354	0.607 U	--	0.450 U	3.55 J	--
PCB-188	NE	NE	NE	ng/kg	0.611 U	1.16 U	1.24 U	1.36 U	0.963 U	0.384 U	0.652 U	0.667 U	0.774 U	0.690 U	0.476 U	0.506 U	--	0.371 U	0.439 U	--
PCB-189	NE	NE	NE	ng/kg	10.8	9.23	14.0	6.49	0.879 U	5.72	0.688 U	0.639 U	0.595 U	0.689 U	17.5	0.506 U	--	0.379 U	0.374 U	--
PCB-190	NE	NE	NE	ng/kg	56.1	41.1	61.6	35.7	1.01 U	32.4	0.732 U	0.715 U	0.752 U	0.755 U	74.4	0.536 U	--	0.398 U	0.433 U	--
PCB-191	NE	NE	NE	ng/kg	13.9	9.72	14.1	7.74	0.921 U	6.19	0.669 U	0.654 U	0.688 U	0.691 U	16.3	0.508 U	--	0.377 U	0.411 U	--
PCB-192	NE	NE	NE	ng/kg	0.644 U	1.10 U	1.26 U	1.35 U	1.05 U	0.452 U	0.765 U	0.747 U	0.787 U	0.790 U	0.546 U	0.566 U	--	0.420 U	0.458 U	--
PCB-193	NE	NE	NE	ng/kg	34.8	24.1	34.8	19.5	0.944 U	17.7	0.686 U	0.670 U	0.705 U	0.708 U	39.7	0.510 U	--	0.378 U	0.412 U	--
PCB-194	NE	NE	NE	ng/kg	157	101	158	96.8	0.501 U	79.8	0.430 U	1.27 U	0.347 U	0.477 U	291	0.420 U	--	0.502 U	2.15 J	--
PCB-195	NE	NE	NE	ng/kg	62.9	39.3	69.5	38.3	0.566 U	36.4	0.486 U	1.43 U	0.392 U	0.540 U	121	0.465 U	--	0.555 U	0.548 U	--
PCB-196	NE	NE	NE	ng/kg	187	121	186	129	0.783 U	107	0.576 U	1.43 U	0.409 U	0.671 U	317	0.599 U	--	0.597 U	4.26	--
PCB-197	NE	NE	NE	ng/kg	7.94	5.52	10.9	6.30	0.627 U	4.70	0.461 U	1.15 U	0.328 U	0.537 U	13.7	0.446 U	--	0.445 U	0.518 U	--
PCB-198	NE	NE	NE	ng/kg	9.16	7.36	12.5	6.34	0.866 U	5.52	0.636 U	1.58 U	0.452 U	0.741 U	16.7	0.677 U	--	0.674 U	0.785 U	--
PCB-199	NE	NE	NE	ng/kg	165	115	159	110.0	0.912 U	92.7	0.670 U	1.67 U	0.476 U	0.781 U	250.0	0.645 U	--	0.643 U	4.79	--
PCB-200	NE	NE	NE	ng/kg	19.4	13.7	20.7	13.9	0.607 U	11.4	0.446 U	1.11 U	0.317 U	0.520 U	30.3	0.452 U	--	0.450 U	0.524 U	--
PCB-201	NE	NE	NE	ng/kg	24.2	20.2	27.4	17.5	0.623 U	13.7	0.458 U	1.14 U	0.325 U	0.533 U	35.1	0.451 U	--	0.449 U	0.523 U	--
PCB-202	NE	NE	NE	ng/kg	32.8	28.2	31.1	24.6	0.613 U	17.2	0.451 U	1.12 U	0.320 U	0.525 U	41.7	0.463 U	--	0.461 U	1.57 J	--
PCB-203	NE	NE	NE	ng/kg	187	121	186	129	0.783 U	107	0.576 U	1.43 U	0.409 U	0.671 U	317	0.599 U	--	0.597 U	4.26	--
PCB-204	NE	NE	NE	ng/kg	0.335 U	1.70 U	0.803 U	1.41 U	0.619 U	0.416 U	0.455 U	1.13 U	0.323 U	0.530 U	0.399 U	0.449 U	--	0.447 U	0.521 U	--
PCB-205	NE	NE	NE	ng/kg	7.98	5.30	13.4	4.71	0.402 U	4.36	0.345 U	1.02 U	0.278 U	0.383 U	16.6	0.326 U	--	0.389 U	0.384 U	--
PCB-206	NE	NE	NE	ng/kg	68.5	68.0	81.0	61.1	0.974 U	38.7	0.351 U	0.632 U	0.318 U	0.336 U	106	0.412 U	--	0.506 U	12.4	--
PCB-207	NE	NE	NE	ng/kg	9.69	10.5	14.1	7.46	0.754 U	5.69	0.259 U	0.478 U	0.239 U	0.251 U	16.2	0.296 U	--	0.376 U	1.25 J	--
PCB-208	NE	NE	NE	ng/kg	18.7	21.6	25.3	16.4	0.725 U	10.8	0.238 U	0.450 U	0.224 U	0.233 U	21.8	0.278 U	--	0.364 U	4.57	--
PCB-209	NE	NE	NE	ng/kg	42.4	164	121	120.0	1.04 U	27.3	0.213 U	0.546 U	0.271 U	0.247 U	30.3	0.308 U	--	0.272 U	14.9	--
Total PCBs	130,000	NE	3,100,000	ng/kg	27,102 T	22,080 T	17,935 T	13,887 T	65.1 T	7,913 T	1.7 UT	270 T	1.4 UT	1.5 UT	19,387 T	50.2 T	--	4.1 T	355 T	--
Total PCBs	NE	38	NE	mg/kg OC	0.2	0.2	0.3	0.1	0.0	0.1	0.001 U	0.2	0.001 U	0.001 U	0.7	0.002	--	0.002	0.005	--
Organometallic Compounds																				
Tributyltin Ion	NE	73	NE	µg/kg	3.7	1.8 J	3.6 U	3.6 U	3.5 U	2.2 J	3.5 U	3.5 U	3.4 U	3.4 U	3.7 U	3.6 U	--	3.4 U	3.7 U	--
Dioxins/Furans																				
Total Dioxin/Furan TEQ (ND=0.5DL)	4-10	10	NE	ng/kg	32.3 JT	25.1 JT	7.6 JT	26.1 JT	0.5 T	9.8 JT	0.3 T	0.7 JT	0.15 JT	0.5 JT	14.7 JT	0.7 JT		0.4 T	6.9 JT	

Notes:

-- = not tested
BT = bioaccumulation trigger
cPAH = carcinogenic polycyclic aromatic hydrocarbon
DL = detection limit
HPAH = high molecular weight polycyclic aromatic hydrocarbon
J = Estimated concentration
JT = Estimated concentration total
LPAH = low molecular weight polycyclic aromatic hydrocarbon
mg/kg = milligram per kilogram
mg/kg OC = milligram per kilogram organic carbon normalized
ML = maximum level
NE = not established
ng/kg = nanogram per kilogram
PCB = polychlorinated biphenyl
SL = screening level
TEQ = toxicity equivalent
U = The analyte is not detected at or above the reported concentration.
µg/kg = microgram per kilogram
Bold indicates the analyte was detected.
Yellow shading indicates exceedance of SL.
Orange shading indicates exceedance of BT.
Red border indicates exceedance of ML.

Table 6

Interim Action Sediment Chemical Analytical Results Compared to MTCA Cleanup Preliminary Screening Levels

Mill A Former Site Interim Action Dredging Project

Everett, Washington

Analyte	Sediment Screening Level for Protection of Benthic Organisms	Sediment Screening Level for Protection of Human Health and Higher Trophic Level Ecological Receptors	Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-A	PT-13
			Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
			Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
			Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
Conventionals																			
Total Organic Carbon	NE	NE	%	14.4	9.93	5.6	13.3	0.313	8.49	0.152	0.124	0.157	0.176	2.94	2.7	--	0.228	7.76	--
Organic Matter	NE	NE	%	16.73	11.93	5.91	13.2	0.65	7.87	0.52	1.14	0.54	0.58	7.2	4.39	--	0.43	8.29	--
Preserved Total Solids	NE	NE	%	--	--	--	--	--	--	--	--	--	--	--	--	58.07	--	--	81.39
Total Solids	NE	NE	%	45.98	50.15	62.61	44.45	79.68	51.63	81.11	81.14	82.81	81.72	57.21	71.55	--	81.58	61.16	--
Total Volatile Solids	NE	NE	%	21.02	18.9	12.12	31.21	1.31	14.52	1.14	1.05	1.19	0.95	12.15	5.09	--	1.01	10.3	--
Ammonia	NE	NE	mg/kg	21	30	8.47	45.1	3.93	28.7	9.95	7.88	2.78	6.01	20.2	13.2	--	26.6	42.2	--
Sulfide	NE	NE	mg/kg	--	--	--	--	--	--	--	--	1.92 J	4.38 J	112 J	16	205	1.32	4.8	22.3 J
Grain Size																			
Gravel (≤ -1)	NE	NE	%	10.2	8.2	1.8	7.2	0.3	5.7	0.1	1.6	0.7	0.1 U	4.6	1.1	--	0.1	0.8	--
Very coarse sand (-1 < Phi ≤ 0)	NE	NE	%	4.8	2.4	1.5	3.9	0.3	2.2	0.1	0.6	0.1	0.2	1.9	0.8	--	0.4	1.6	--
Coarse sand (0 < Phi ≤ 1)	NE	NE	%	6.6	3.7	2.7	5.8	1.1	3.5	0.5	1.6	0.5	1.2	3.8	2.2	--	2.8	2.3	--
Medium sand (1 < Phi ≤ 2)	NE	NE	%	15	16.1	23	12.1	18.3	12.2	10.4	22.9	27.5	22.5	20.5	20.4	--	10.9	5.2	--
Fine sand (2 < Phi ≤ 3)	NE	NE	%	19.3	30.2	42	27	49.2	42.5	52.6	55.5	41.8	60.2	34.9	51.2	--	46.3	14.7	--
Very fine sand (3 < Phi ≤ 4)	NE	NE	%	10.4	11.4	12.6	11.7	20.4	13.3	25.7	7.3	18.5	8.4	8.3	6	--	29.2	23.4	--
Coarse silt (4 < Phi ≤ 5)	NE	NE	%	4.8	5.2	2.6	5.1	3.7	1.6	3.6	2.7	4.1	2.1	7.9	4	--	4.1	13.6	--
Medium silt (5 < Phi ≤ 6)	NE	NE	%	6.6	4.6	3	6.3	1.6	4.6	1.7	2	1.5	1.2	4.3	3.3	--	1.6	11.3	--
Fine silt (6 < Phi ≤ 7)	NE	NE	%	5.4	4.5	2.8	5.1	1.2	3.4	1.2	1.5	1.2	0.8	3.1	2.7	--	1.1	7.9	--
Very fine silt (7 < Phi ≤ 8)	NE	NE	%	4.4	3.5	2.1	4.4	1	2.9	1	1.1	1.2	0.7	2.6	2	--	0.8	5.3	--
Coarse clay (8 < Phi ≤ 9)	NE	NE	%	2.8	2.3	1.5	3.2	0.7	2.1	0.7	1	0.8	0.6	2.2	1.8	--	0.7	4	--
Medium clay (9 < Phi ≤ 10)	NE	NE	%	3	2.8	1.6	2.6	0.7	2	0.8	0.8	0.8	0.7	1.8	1.6	--	0.6	3.5	--
Particle/Grain Size, Phi >10	NE	NE	%	6.7	5.2	2.9	5.7	1.6	4	1.8	1.4	1.3	1.3	4	2.8	--	1.4	6.1	--
Total Fines	NE	NE	%	33.7	28	16.5	32.4	10.4	20.6	10.7	10.4	10.9	7.5	25.9	18.3	--	10.3	51.8	--
Grain Size (Ash Wt.)																			
Gravel (≤ -1)	NE	NE	%	2.1	1.1	1.2	2.8	0.1 U	3.5	0.1 U	0.1 U	0.2	0.1 U	1.5	--	--	--	--	--
Very coarse sand (-1 < Phi ≤ 0)	NE	NE	%	2.0	1.4	0.6	1.9	0.3	1.0	0.1	0.3	0.1	0.2	1.6	--	--	--	--	--
Coarse sand (0 < Phi ≤ 1)	NE	NE	%	3.8	2.5	1.3	2.7	1.3	2.0	0.4	1.2	0.5	1.2	4.1	--	--	--	--	--
Medium sand (1 < Phi ≤ 2)	NE	NE	%	14.6	14.8	21.5	8.6	19.1	9.5	12.9	16.2	26.6	28.2	24.0	--	--	--	--	--
Fine sand (2 < Phi ≤ 3)	NE	NE	%	23.3	35.6	43.6	31.7	46.5	41.6	52.3	61.4	43.9	56.5	41.6	--	--	--	--	--
Very fine sand (3 < Phi ≤ 4)	NE	NE	%	14.8	16.1	13.0	16.8	20.8	14.9	23.8	12.4	18.4	7.2	9.7	--	--	--	--	--
Coarse silt (4 < Phi ≤ 5)	NE	NE	%	8.5	6.6	4.6	6.0	5.6	6.5	4.3	3.2	4.1	2.7	3.1	--	--	--	--	--
Medium silt (5 < Phi ≤ 6)	NE	NE	%	15.6	9.1	4.5	17.7	1.9	11.0	1.6	1.2	2.1	1.0	6.0	--	--	--	--	--
Fine silt (6 < Phi ≤ 7)	NE	NE	%	6.9	4.9	4.0	5.5	1.7	5.5	1.6	1.1	2.4	0.9	3.6	--	--	--	--	--
Very fine silt (7 < Phi ≤ 8)	NE	NE	%	1.9	2.4	1.8	1.2	1.1	1.2	1.2	0.9	0.2	0.5	1.4	--	--	--	--	--
Coarse clay (8 < Phi ≤ 9)	NE	NE	%	0.9	1.4	0.9	0.5	0.4	0.5	0.5	0.5	0.1 U	0.4	0.7	--	--	--	--	--
Medium clay (9 < Phi ≤ 10)	NE	NE	%	0.3	0.6	0.4	0.2	0.1	0.1	0.2	0.4	0.1	0.2	0.1	--	--	--	--	--
Particle/Grain Size, Phi >10	NE	NE	%	5.1	3.4	2.5	4.3	1.3	2.9	1.3	1.1	1.4	0.9	2.5	--	--	--	--	--
Total Fines	NE	NE	%	39.4	28.5	18.8	35.5	12.0	27.6	10.6	8.5	10.3	6.6	17.5	--	--	--	--	--
Metals																			
Antimony			mg/kg	1.1 J	1.40 J	0.75 J	1.1 J	0.82 J	2.38 J	0.68 J	0.75 J	1.03 J	0.68 J	1.07 J	0.84 J	--	0.77 J	1.46 J	--
Arsenic	57	11	mg/kg	10.7 J	6.80 J	5.83 J	9.5 J	4.57 J	6.67 J	5.14 J	4.81 J	5.18 J	4.42 J	7.69 J	6.08 J	--	3.92 J	9	--
Cadmium	5.1	1	mg/kg	1.3	1	0.6	1.3	0.2	0.7	0.3	0.3	0.220 J	0.210 J	1	0.4	--	0.211 J	1.1	--
Chromium	260	NE	mg/kg	35	31.3	24.3	35	28.4	30.3	27.7	25.7	29.9	22.2	31.5	28.2	--	24.2	47.9	--
Copper	390	69,000	mg/kg	43.9	32.9	18.3	43.2	11	24.8	9.9	9.8	10.2	7.1	33.6	12.8	--	7.6	44.2	--
Lead	450	21	mg/kg	28	22	9	31	1.86 J	14	1.80 J	5	1.94 J	2.30 J	19	10	--	1.48 J	26	--
Mercury	0.41	0.2	mg/kg	0.13	0.14	0.0380 J	0.12	0.0120 J	0.14	0.0106 J	0.0159 J	0.02	0.0080 J	0.1	0.08	--	0.0071 J	0.11	--
Selenium	NE	NE	mg/kg	0.52 J	0.337 J	0.214 J	0.45 J	0.6 U	0.311 J	0.6 U	0.127 J	0.6 U	0.125 J	0.315 J	0.185 J	--	0.6 U	0.487 J	--
Silver	6.1	8,700	mg/kg	0.7 U	0.6 U	0.5 U	0.7 U	0.4 U	0.6 U	0.3 U	0.4 U	0.3 U	0.4 U	0.6 U	0.4 U	--	0.3 U	0.5 U	--
Zinc	410	520,000	mg/kg	76	54	37	69	31	49	31	30	31	27	58	34	--	28	70	--

Analyte	Sediment Screening Level for Protection of Benthic Organisms	Sediment Screening Level for Protection of Human Health and Higher Trophic Level Ecological Receptors	Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-A	PT-13
			Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
			Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
			Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
LPAHs (OC Normalized)																			
2-Methylnaphthalene	38	NA	mg/kg OC	1.9	1.9	2.3	3.1	1.8	3.3	2.1	4.8	1.6	2.7 U	8.2	2.8	--	2.1 U	2.3	--
Acenaphthene	16	NA	mg/kg OC	2.4	2.1	2.9	3.2	1.4	4.8	3.2 U	3.6	3 U	2.7 U	8.8	2.7	--	2.1 U	2.7	--
Acenaphthylene	66	NA	mg/kg OC	0.4	0.83	1.6	1.6	1.5 U	1.3	3.2 U	1.9	3 U	2.7 U	3.7	2	--	2.1 U	1	--
Anthracene	220	NA	mg/kg OC	1.9	1.5	1.8	1.6	1.1	2.1	3.2 U	4.9	3 U	2.7 U	5.1	4	--	2.1 U	2.1	--
Fluorene	23	NA	mg/kg OC	2.3	2.1	2.9	3	1.5	4.4	3.2 U	4.7	3 U	2.7 U	8.5	3.3	--	2.1 U	3.1	--
Naphthalene	99	NA	mg/kg OC	7.6	11	21	27	11	19	5.6	21	3 U	3.9	44	17	--	1.4	14	--
Phenanthrene	100	NA	mg/kg OC	4.7	6	9.8	8.3	4.8	10	5.2	15	3 U	2.7 U	21	9.6	--	2.1 U	8.4	--
Total LPAHs	370	NA	mg/kg OC	19.4	23.7	40.3	44.7	19.4	42	10.8	50.6	3 U	3.9	91.8	38.3	--	1.4	31.4	--
LPAHs																			
2-Methylnaphthalene	670	5,900,000	µg/kg	280	190	130	410	5.7	280	3.2 J	5.9	2.5 J	4.8 U	240	75	--	4.7 U	180	--
Acenaphthene	500	88,000,000	µg/kg	340	210	160	420	4.4 J	410	4.8 U	4.5 J	4.7 U	4.8 U	260	73	--	4.7 U	210	--
Acenaphthylene	1,300	NE	µg/kg	57	82	89	210	4.8 U	110	4.8 U	2.4 J	4.7 U	4.8 U	110	53	--	4.7 U	80	--
Anthracene	960	440,000,000	µg/kg	280	150	99	210	3.4 J	180	4.8 U	6.1	4.7 U	4.8 U	150	100	--	4.7 U	160	--
Fluorene	540	59,000,000	µg/kg	330	210	160	400	4.8 J	370	4.8 U	5.8	4.7 U	4.8 U	250	89	--	4.7 U	240	--
Naphthalene	2,100	29,000,000	µg/kg	1,100	1,100	1,200	3,600	33	1,600	8.5	26	4.7 U	6.8	1,300	460	--	3.3 J	1,100	--
Phenanthrene	1,500	NE	µg/kg	680	600	550	1,100	15	900	7.9	18	4.7 U	4.8 U	630	260	--	4.7 U	650	--
Total LPAHs	5,200	NE	µg/kg	2,787 T	2,352 T	2,258 T	5,940 T	60.6 T	3,570 T	16.4 T	62.8 T	4.7 UT	6.8 T	2,700 T	1,035 T	--	3.3 T	2,440 T	--
HPAHs (OC Normalized)																			
Benzo(a)anthracene	110	NE	mg/kg OC	0.97	0.58	0.61	0.39	1.5 U	1.5	3.2 U	4.4	3 U	2.7 U	1.9	2.2	--	2.1 U	0.91	--
Benzo(a)pyrene	99	NE	mg/kg OC	0.55	0.34	0.32	0.22	1.5 U	0.99	3.2 U	3.1	3 U	2.7 U	0.95	1.9	--	2.1 U	0.63	--
Benzo(ghi)perylene	31	NE	mg/kg OC	0.38	0.22	0.25	0.19	1.5 U	0.68	3.2 U	3.4	3 U	2.7 U	0.7	1.4	--	2.1 U	0.57	--
Chrysene	110	NE	mg/kg OC	1.6	0.9	0.96	0.62	0.89	1.6	3.2 U	4.9	3 U	2.7 U	2.9	2.3	--	2.1 U	1.3	--
Dibenzo(a,h)anthracene	12	NE	mg/kg OC	0.11	0.25 U	0.43 U	0.18 U	1.5 U	0.14	3.2 U	3.9 U	3 U	2.7 U	0.14	0.89 U	--	2.1 U	0.31 U	--
Fluoranthene	160	NE	mg/kg OC	4	4.8	6.4	5	3.5	7.5	4.6	15	3 U	2.7 U	14	9.6	--	2.1 U	5.9	--
Indeno(1,2,3-cd)pyrene	34	NE	mg/kg OC	0.31	0.18	0.43 U	0.12	1.5 U	0.52	3.2 U	3.9 U	3 U	2.7 U	0.44	1	--	2.1 U	0.32	--
Pyrene	1,000	NE	mg/kg OC	3.1	3.6	4.8	3.5	3	5.4	2.9	17	3 U	2.7 U	10	8.9	--	2.1 U	5.5	--
Total HPAHs	960.0	NE	mg/kg OC	12.3	11.5	14.2	10.7	7.4	20.8	7.5	54.1	3 U	2.7 U	34.1	30.4	--	2.1 U	16.4	--
HPAHs																			
Benzo(a)anthracene	1,300	5,000	µg/kg	140	58	34	52	4.8 U	130	4.8 U	5.4	4.7 U	4.8 U	55	59	--	4.7 U	71	--
Benzo(a)pyrene	1,600	500	µg/kg	79	34	18 J	29	4.8 U	84	4.8 U	3.9 J	4.7 U	4.8 U	28	51	--	4.7 U	49	--
Benzo(ghi)perylene	670	NE	µg/kg	55	22 J	14 J	25	4.8 U	58	4.8 U	4.2 J	4.7 U	4.8 U	20	38	--	4.7 U	44	--
Benzofluoranthenes (Sum)	3,200	5,000	µg/kg	200	83	45	89	4.8 U	200	4.8 U	7.5	4.7 U	4.8 U	76	84	--	4.7 U	98	--
Chrysene	1,400	50,000	µg/kg	230	90	54	83	2.8 J	140	4.8 U	6.1	4.7 U	4.8 U	85	62	--	4.7 U	98	--
Dibenzo(a,h)anthracene	230	5,000	µg/kg	16 J	25 U	24 U	24 U	4.8 U	12 J	4.8 U	4.8 U	4.7 U	4.8 U	4.0 J	24 U	--	4.7 U	24 U	--
Fluoranthene	1,700	59,000,000	µg/kg	570	480	360	670	11	640	7	19	4.7 U	4.8 U	420	260	--	4.7 U	460	--
Indeno(1,2,3-cd)pyrene	600	5,000	µg/kg	45	18 J	24 U	16 J	4.8 U	44	4.8 U	4.8 U	4.7 U	4.8 U	13	27	--	4.7 U	25	--
Pyrene	2,600	44,000,000	µg/kg	440	360	270	460	9.5	460	4.4 J	21	4.7 U	4.8 U	300	240	--	4.7 U	430	--
Total HPAHs	12,000	NE	µg/kg	1,775 T	1,145 T	795 T	1,424 T	23.3 T	1,768 T	11.4 T	67.1 T	4.7 UT	4.8 UT	1,001 T	821 T	--	4.7 UT	1,275 T	--
cPAHs																			
Total cPAH TEQ (ND=0.5DL)	NE	16	µg/kg	121.4 JT	52.1 JT	28.8 JT	46.7 JT	3.4 JT	124 JT	3.4 UT	5.7 JT	3.3 UT	3.4 UT	43.7 JT	69.8 T	--	3.3 UT	70.6 T	--
Chlorinated Hydrocarbons (OC Normalized)																			
1,2,4-Trichlorobenzene	0.81	NE	mg/kg OC	0.034 U	0.049 U	0.084 U	0.026	1.5 U	0.099	3.2 U	3.9 U	3.1 U	2.7 U	0.085	0.18 U	--	2.1 U	0.062 U	--
1,2-Dichlorobenzene (o-Dichlorobenzene)	2.3	NE	mg/kg OC	0.09	0.078	0.066	0.083	0.96	0.068	1.6	3.9 U	3.1 U	2.7 U	0.37	0.18 U	--	2.1 U	0.062 U	--
1,4-Dichlorobenzene (p-Dichlorobenzene)	3.1	NE	mg/kg OC	0.044	0.046	0.057	0.05	1.5 U	0.061	3.2 U	3.9 U	3.1 U	2.7 U	0.18	0.18 U	--	2.1 U	0.062 U	--
Hexachlorobenzene	0.38	NE	mg/kg OC	0.0069 U	0.013 U	0.018 U	0.0074 U	0.31 U	0.012 U	0.64 U	0.79 U	0.62 U	0.55 U	0.48 U	0.036 U	--	0.42 U	0.012 U	--
Chlorinated Hydrocarbons																			
1,2,4-Trichlorobenzene	31	130	µg/kg	4.9 U	4.9 U	4.7 U	3.5 J	4.8 U	8.4	4.8 U	4.8 U	4.8 U	4.8 U	2.5 J	4.9 U	--	4.7 U	4.8 U	--
1,2-Dichlorobenzene (o-Dichlorobenzene)	35	130,000	µg/kg	13	7.7	3.7 J	11	3.0 J	5.8	2.5 J	4.8 U	4.8 U	4.8 U	11	4.9 U	--	4.7 U	4.8 U	--
1,4-Dichlorobenzene (p-Dichlorobenzene)	110	680	µg/kg	6.3	4.6 J	3.2 J	6.7	4.8 U	5.2	4.8 U	4.8 U	4.8 U	4.8 U	5.2	4.9 U	--	4.7 U	4.8 U	--
Hexachlorobenzene	22	2.3	µg/kg	0.99 U	1.3 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	14 U	0.97 U	--	0.95 U	0.96 U	--
Phthalates (OC Normalized)																			
Bis(2-Ethylhexyl) Phthalate	47	NE	mg/kg OC	0.2	0.49 U	0.84 U	0.36 U	15 U	0.57 U	32 U	39 U	31 U	27 U	0.95	1.8 U	--	21 U	0.62 U	--
Butyl benzyl Phthalate	4.9	NE	mg/kg OC	0.034 U	0.049 U	0.084 U	0.036 U	1.5	0.37	2.1	3.9 U	1.6	1.5	0.75	0.18 U	--	3.2	0.11	--
Dibutyl Phthalate	220	NE	mg/kg OC	0.45	0.2 U	0.34 U	0.14 U	6.1 U	0.22 U		15 U	12 U	11 U	0.65 U	0.7 U	--	8.3 U	0.24 U	--
Diethyl Phthalate	61	NE	mg/kg OC	0.1 U	3.8	0.34 U	0.14 U	6.1 U	0.22 U	13 U	15 U	12 U	11 U	0.65 U	0.7 U	--	8.3 U	0.44	--
Dimethyl Phthalate	53	NE	mg/kg OC	0.1 U	0.2 U	0.34 U	0.14 U	6.1 U	0.26	13 U	15 U	12 U	11 U	0.65 U	0.7 U	--	8.3 U	0.24 U	--
Di-N-Octyl Phthalate	58	NE	mg/kg OC	0.076	0.2 U	0.34 U	0.14 U	6.1 U	0.22 U	13 U	15 U	12 U	11 U	0.65 U	0.7 U	--	8.3 U	0.24 U	--
Phthalates																			
Bis(2-Ethylhexyl) Phthalate	1,300	260,000	µg/kg	30 J	49 UJ	47 UJ	48 UJ	48 UJ	48 UJ	48 UJ	48 UJ	48 UJ	48 UJ	28 J	49 U	--	47 U	48 U	--
Butyl benzyl Phthalate	63	1,900,000	µg/kg	4.9 U	4.9 U	4.7 U	4.8 U	4.8	31	3.2 J	4.8 U	2.5 J	2.6 J	22	4.9 U	--	7.4	8.8	--
Dibutyl Phthalate	1,400	150,000,000	µg/kg	65	20 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U	--	19 U	19 U	--
Diethyl Phthalate	200	NE	µg/kg	20 U	380	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U	--	19 U	34	--
Dimethyl Phthalate	71	NE	µg/kg	20 U	20 U	19 U	19 U	19 U	22	19 U	19 U	19 U	19 U	19 U	20 U	--	19 U	19 U	--
Di-N-Octyl Phthalate	6,200	15,000,000	µg/kg	11 J	20 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	20 U	--	19 U	19 U	--

Analyte	Sediment Screening Level for Protection of Benthic Organisms	Sediment Screening Level for Protection of Human Health and Higher Trophic Level Ecological Receptors	Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-A	PT-13
			Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
			Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
			Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
Phenols																			
2,4-Dimethylphenol	29	29,000,000	µg/kg	46	54	26	78	24 U	56	24 U	24 U	24 U	24 U	44	24 U	--	23 U	24 J	--
o-Cresol (2-methylphenol)	63	73,000,000	µg/kg	37	68	45	140	19 U	81	19 U	19 U	19 U	19 U	49	20 U	--	19 U	36	--
p-Cresol (4-methylphenol)	670	150,000,000	µg/kg	1,700	2,400	930	1,900	34	1,000	19 U	16 J	19 U	19 U	1,200	20 U	--	92	180	--
Pentachlorophenol	360	9,200	µg/kg	46 J	99 U	94 U	33 J	96 U	33 J	97 U	97 U	95 U	96 U	96 U	98 U	--	94 U	96 U	--
Phenol	420	440,000,000	µg/kg	390	430	240	460	29	320	34	19 U	19 U	19 U	250	20 U	--	38	59	--
Miscellaneous Extractables (OC Normalized)																			
Dibenzofuran	15	NE	mg/kg OC	2	2.2	3.2	3.1	1.5	4	3.2 U	4.7	3 U	2.7 U	8.2	3.2	--	2.1 U	3	--
Hexachlorobutadiene	3.9	NE	mg/kg OC	0.0069 U	0.01 U	0.018 U	0.0074 U	0.31 U	0.012 U	0.64 U	0.79 U	0.62 U	0.55 U	0.033 U	0.036 U	--	0.42 U	0.012 U	--
N-Nitrosodiphenylamine (as diphenylamine)	11	NE	mg/kg OC	0.034 U	0.049 U	0.084 U	0.036 U	0.93	0.057 U	2	3.9 U	3.1 U	2.7 U	0.16 U	0.18 U	--	2.1 U	0.062 U	--
Miscellaneous Extractables																			
Benzoic Acid	650	NE	µg/kg	790	940	540	1,100	190 U	860	190 U	190 U	190 U	190 U	720	200 U	--	82 J	150 J	--
Benzyl Alcohol	57	150,000,000	µg/kg	30	33	25	59	19 U	32	19 U	19 U	19 U	19 U	24	20 U	--	19 U	19 U	--
Dibenzofuran	540	1,500,000	µg/kg	300	220	180	410	4.8 J	340	4.8 U	5.8	4.7 U	4.8 U	240	86	--	4.7 U	200	--
Hexachlorobutadiene	11	47,000	µg/kg	0.99 U	0.99 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
N-Nitrosodiphenylamine (as diphenylamine)	28	750,000	µg/kg	4.9 U	4.9 U	4.7 U	4.8 U	2.9 J	4.8 U	3.0 J	4.8 U	4.8 U	4.8 U	4.8 U	4.9 U	--	4.7 U	4.8 U	--
Pesticides																			
4,4'-DDD	NE	NE	µg/kg	0.99 U	0.99 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
4,4'-DDE	NE	NE	µg/kg	0.99 U	0.99 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
4,4'-DDT	NE	NE	µg/kg	6.9 U	4.3 U	0.99 U	4.0 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
Total DDT (4,4 isomers)	NE	NE	µg/kg	6.9 UT	4.3 UT	0.99 UT	4 UT	0.98 UT	0.98 UT	0.98 UT	0.98 UT	0.97 UT	0.97 UT	0.98 UT	0.97 UT	--	0.95 UT	0.96 UT	--
Aldrin	NE	NE	µg/kg	1.7 U	0.49 U	1.8 U	3.6 U	0.49 U	3.9 U	0.49 U	0.49 U	0.48 U	0.49 U	1.7 U	0.48 U	--	0.48 U	0.48 U	--
alpha-Chlordane (cis)	NE	NE	µg/kg	0.50 U	0.49 U	0.50 U	0.50 U	0.49 U	0.49 U	0.49 U	0.49 U	0.48 U	0.49 U	0.49 U	0.48 U	--	0.48 U	0.48 U	--
beta or gamma-Chlordane (trans)	NE	NE	µg/kg	0.50 U	0.49 U	0.50 U	0.50 U	0.49 U	0.49 U	0.49 U	0.49 U	0.48 U	0.49 U	1.0 U	0.48 U	--	0.48 U	0.48 U	--
Chlordane (Total)	NE	NE	µg/kg	4.5 UT	1.7 UT	0.99 UT	2.3 J	0.98 UT	2.3 UT	0.98 UT	0.98 UT	0.97 UT	0.97 UT	2.7 UT	0.97 UT	--	0.95 UT	1.6 UT	--
cis-Nonachlor	NE	NE	µg/kg	1.6 U	1.7 U	0.99 U	2.3 J	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
Dieldrin	NE	NE	µg/kg	1.2 U	0.99 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
Heptachlor	NE	NE	µg/kg	0.50 U	0.49 U	0.50 U	0.50 U	0.49 U	0.80 U	0.49 U	0.49 U	0.48 U	0.49 U	1.5 U	0.48 U	--	0.48 U	0.48 U	--
Oxychlordane	NE	NE	µg/kg	4.5 U	0.99 U	0.99 U	0.99 U	0.98 U	2.3 U	0.98 U	0.98 U	0.97 U	0.97 U	2.7 U	0.97 U	--	0.95 U	1.6 U	--
trans-Nonachlor	NE	NE	µg/kg	2.2 U	0.99 U	0.99 U	0.99 U	0.98 U	0.98 U	0.98 U	0.98 U	0.97 U	0.97 U	0.98 U	0.97 U	--	0.95 U	0.96 U	--
Polychlorinated Biphenyls (PCBs)																			
PCB-001	NE	NE	ng/kg	18.2	18	20.5	5.77	0.867 U	5.34	0.450 U	0.752 U	0.600 U	0.397 U	9.5	1.20 J	--	0.315 U	3.28 J	--
PCB-002	NE	NE	ng/kg	4.98	5.12	12.6	4.61	0.973 U	4.08	0.544 U	0.856 U	0.696 U	0.461 U	4.92	2.47 J	--	0.381 U	6.95	--
PCB-003	NE	NE	ng/kg	13.3	11.4	16.9	6.67	0.937 U	4.56	0.558 U	0.833 U	0.689 U	0.458 U	7.96	1.82 J	--	0.381 U	5.2	--
PCB-004	NE	NE	ng/kg	16.5	13.7	29.7	7.09	1.62 U	4.11	1.63 U	1.21 U	1.39 U	1.39 U	8.94	2.22 J	--	0.810 U	0.626 U	--
PCB-005	NE	NE	ng/kg	0.572 U	1.82 U	1.99 U	1.77 U	1.43 U	0.928 U	1.49 U	1.07 U	1.26 U	1.35 U	0.617 U	0.735 U	--	0.744 U	0.491 U	--
PCB-006	NE	NE	ng/kg	9.37	9.26	16.5	6.98	2.86 J	3.23 J	1.39 U	0.994 U	1.17 U	1.25 U	12.5	5.07	--	0.710 U	2.50 J	--
PCB-007	NE	NE	ng/kg	2.94 J	3.61 J	4.4	1.68 U	1.39 U	0.900 U	1.45 U	1.04 U	1.22 U	1.31 U	3.48 J	0.716 U	--	0.725 U	0.478 U	--
PCB-008	NE	NE	ng/kg	39.6	37.5	66.4	20.7	1.45 U	10.1	1.52 U	1.09 U	1.28 U	1.37 U	26.7	3.72 J	--	0.741 U	2.29 J	--
PCB-009	NE	NE	ng/kg	3.61 J	2.72 J	6.64	1.78 U	1.45 U	0.943 U	1.52 U	1.09 U	1.28 U	1.37 U	0.627 U	0.746 U	--	0.756 U	0.499 U	--
PCB-010	NE	NE	ng/kg	0.590 U	1.97 U	2.15 U	1.92 U	1.62 U	1.05 U	1.69 U	1.21 U	1.42 U	1.53 U	0.699 U	0.765 U	--	0.776 U	0.512 U	--
PCB-011	NE	NE	ng/kg	13	14.4	11.8	9.7	3.91 J	5.32	1.59 U	3.10 J	1.33 U	1.43 U	13.9	6.53	--	2.91 J	4.55	--
PCB-012	NE	NE	ng/kg	2.87 J	3.61 J	7.67	1.79 U	1.43 U	1.37 U	1.50 U	1.07 U	1.26 U	1.35 U	3.21 J	4.24	--	0.798 U	2.56 J	--
PCB-013	NE	NE	ng/kg	4.8	4.87	5.44	4.99	1.59 U	1.52 U	1.66 U	1.19 U	1.40 U	1.50 U	8.75	2.36 J	--	0.859 U	1.94 J	--
PCB-014	NE	NE	ng/kg	0.599 U	1.88 U	2.06 U	1.83 U	1.47 U	0.954 U	1.54 U	1.10 U	1.29 U	1.38 U	0.634 U	0.758 U	--	0.768 U	0.506 U	--
PCB-015	NE	NE	ng/kg	36.6	28.6	22.4	11.8	1.47 U	7.61	1.58 U	1.10 U	1.32 U	1.47 U	19.4	1.97 J	--	0.815 U	1.16 J	--
PCB-016	NE	NE	ng/kg	32.6	37.1	35.3	19.4	1.32 U	7.75	0.566 U	1.44 U	0.546 U	0.646 U	17.9	0.553 U	--	0.404 U	0.583 U	--
PCB-017	NE	NE	ng/kg	45.3	41.1	51.5	21.3	1.38 U	10.4	0.590 U	1.50 U	0.569 U	0.673 U	23.3	0.614 U	--	0.449 U	1.79 U	--
PCB-018	NE	NE	ng/kg	120	107	131	56.4	1.53 U	26.8	0.654 U	1.66 U	0.631 U	0.747 U	64	0.681 U	--	0.497 U	1.98 U	--
PCB-019	NE	NE	ng/kg	10.9	11.4	12.4	5.95	1.53 U	1.75 U	0.653 U	1.66 U	0.630 U	0.745 U	5.88	0.660 U	--	0.482 U	0.696 U	--
PCB-020	NE	NE	ng/kg	67.5	59.9	73.7	29.4	1.08 U	15.6	0.837 U	1.46 U	0.974 U	0.740 U	40	0.930 U	--	0.843 U	3.99	--
PCB-021	NE	NE	ng/kg	67.5	59.9	73.7	29.4	1.08 U	15.6	0.837 U	1.46 U	0.974 U	0.740 U	40	0.930 U	--	0.843 U	3.99	--
PCB-022	NE	NE	ng/kg	52.9	39.8	45.4	22	1.13 U	11.1	0.873 U	1.52 U	1.02 U	0.772 U	28.1	0.911 U	--	0.826 U	1.34 U	--
PCB-023	NE	NE	ng/kg	1.85 U	1.88 U	1.71 U	1.85 U	1.21 U	1.98 U	0.935 U	1.63 U	1.09 U	0.827 U	1.84 U	0.961 U	--	0.871 U	1.41 U	--
PCB-024	NE	NE	ng/kg	1.77 J	4.6	2.16 J	1.50 U	1.02 U	1.17 U	0.437 U	1.11 U	0.422 U	0.499 U	1.40 J	0.475 U	--	0.347 U	0.501 U	--
PCB-025	NE	NE	ng/kg	9.5	7.96	9.97	3.58 J	0.974 U	1.59 U	0.752 U	1.31 U	0.876 U	0.666 U	6.23	0.812 U	--	0.736 U	1.20 U	--
PCB-026	NE	NE	ng/kg	20.6	18.8	21.4	8.27	1.12 U	3.97 J	0.869 U	1.52 U	1.01 U	0.769 U	14	0.949 U	--	0.860 U	1.40 U	--
PCB-027	NE	NE	ng/kg	6.95	4.76	8.46	4	1.04 U	1.20 U	0.446 U	1.13 U	0.431 U	0.510 U	2.79 J	0.459 U	--	0.335 U	0.484 U	--
PCB-028	NE	NE	ng/kg	137	115	113	56.3	2.20 J	27.8	0.770 U	2.60 J	0.896 U	0.682 U	76.1	0.787 U	--	0.713 U	5.45	--
PCB-029	NE	NE	ng/kg	1.82 U	1.90 U	1.73 U	1.86 U	1.10 U	1.80 U	0.850 U	1.48 U	0.989 U	0.752 U	1.67 U	0.954 U	--	0.864 U	1.40 U	--
PCB-030	NE	NE	ng/kg	0.637 U	1.70 U	1.20 U	1.42 U	0.991 U	1.13 U	0.424 U	1.08 U	0.409 U	0.484 U	1.44 U	0.440 U	--	0.321 U	0.464 U	--
PCB-031	NE	NE	ng/kg	138	99.8	113	58.3	1.94 J	29.6	0.819 U	2.37 J	0.954 U	0.725 U	44.8	0.979 U	--	0.887 U	6.29	--

Analyte	Sediment Screening Level for Protection of Benthic Organisms	Sediment Screening Level for Protection of Human Health and Higher Trophic Level Ecological Receptors	Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-A	PT-13
			Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
			Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
			Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
PCB-032	NE	NE	ng/kg	39	28.7	37.3	15	1.11 U	7.47	0.476 U	1.21 U	0.459 U	0.543 U	17.1	0.516 U	--	0.376 U	0.544 U	--
PCB-033	NE	NE	ng/kg	67.5	59.9	73.7	29.4	1.08 U	15.6	0.837 U	1.46 U	0.974 U	0.740 U	40	0.930 U	--	0.843 U	3.99	--
PCB-034	NE	NE	ng/kg	1.81 U	2.15 U	1.96 U	2.11 U	1.09 U	1.78 U	0.844 U	1.47 U	0.981 U	0.746 U	1.66 U	0.949 U	--	0.860 U	1.40 U	--
PCB-035	NE	NE	ng/kg	1.69 U	1.97 U	1.79 U	1.93 U	1.17 U	1.91 U	0.905 U	1.58 U	1.05 U	0.801 U	1.78 U	0.993 U	--	0.900 U	1.46 U	--
PCB-036	NE	NE	ng/kg	1.63 U	1.88 U	1.71 U	1.84 U	1.10 U	1.79 U	0.847 U	1.48 U	0.986 U	0.750 U	1.67 U	0.931 U	--	0.844 U	1.37 U	--
PCB-037	NE	NE	ng/kg	39.7	24.7	28.9	14.7	1.05 U	8.04	0.812 U	1.42 U	0.944 U	0.718 U	20.3	0.873 U	--	0.791 U	1.28 U	--
PCB-038	NE	NE	ng/kg	1.59 U	1.83 U	1.67 U	1.80 U	1.10 U	1.79 U	0.846 U	1.48 U	0.985 U	0.749 U	1.66 U	0.891 U	--	0.807 U	1.31 U	--
PCB-039	NE	NE	ng/kg	1.68 U	1.94 U	1.76 U	1.90 U	1.13 U	1.84 U	0.870 U	1.52 U	1.01 U	0.770 U	8.88	0.954 U	--	0.865 U	1.41 U	--
PCB-040	NE	NE	ng/kg	40.8	32	27	20.9	1.57 U	9.19	0.997 U	0.721 U	0.651 U	0.843 U	18.4	0.790 U	--	0.613 U	0.809 U	--
PCB-041	NE	NE	ng/kg	234	173	138	93.7	2.46 J	46.8	0.586 U	5.14	0.383 U	0.496 U	89.5	0.469 U	--	0.363 U	4.05	--
PCB-042	NE	NE	ng/kg	81	53.8	53.7	28.5	1.02 U	16.1	0.651 U	1.93 J	0.425 U	0.550 U	31.1	0.517 U	--	0.401 U	1.85 J	--
PCB-043	NE	NE	ng/kg	255	193	162	96.6	2.09 J	51.9	0.755 U	4.9	0.493 U	0.638 U	92.9	0.595 U	--	0.461 U	4.57	--
PCB-044	NE	NE	ng/kg	345	259	185	142	3.07 J	71	0.865 U	5.67	0.565 U	0.731 U	135	0.686 U	--	0.532 U	4.96	--
PCB-045	NE	NE	ng/kg	42.3	25.3	25.8	15.6	1.34 U	7.77	0.856 U	0.619 U	0.559 U	0.723 U	15.9	0.680 U	--	0.527 U	0.880 U	--
PCB-046	NE	NE	ng/kg	17.6	11.8	12.5	7.45	1.45 U	3.42 J	0.926 U	0.670 U	0.605 U	0.783 U	7.54	0.726 U	--	0.563 U	0.940 U	--
PCB-047	NE	NE	ng/kg	71.3	49.8	45.1	22.7	0.983 U	15	0.625 U	2.04 J	0.408 U	0.529 U	16.7	0.527 U	--	0.408 U	2.61 J	--
PCB-048	NE	NE	ng/kg	47.8	29.9	28.7	13.6	0.987 U	9.91	0.628 U	1.46 J	0.410 U	0.531 U	14.2	0.488 U	--	0.378 U	1.57 J	--
PCB-049	NE	NE	ng/kg	255	193	162	96.6	2.09 J	51.9	0.755 U	4.9	0.493 U	0.638 U	92.9	0.595 U	--	0.461 U	4.57	--
PCB-050	NE	NE	ng/kg	0.849 U	2.22 U	2.35 U	1.77 U	1.19 U	0.546 U	0.756 U	0.547 U	0.494 U	0.639 U	0.731 U	0.602 U	--	0.467 U	0.780 U	--
PCB-051	NE	NE	ng/kg	12.2	8.76	8.73	5.64	1.20 U	2.70 J	0.766 U	0.554 U	0.501 U	0.648 U	5	0.640 U	--	0.496 U	0.828 U	--
PCB-052	NE	NE	ng/kg	512	437	266	222	3.06 J	112	0.652 U	7.66	0.426 U	0.552 U	213	1.20 J	--	0.376 U	6.17	--
PCB-053	NE	NE	ng/kg	44.9	30	27.8	17.7	1.25 U	8.88	0.798 U	0.577 U	0.522 U	0.675 U	18.6	0.659 U	--	0.511 U	0.854 U	--
PCB-054	NE	NE	ng/kg	0.649 U	1.73 U	1.83 U	1.38 U	0.936 U	0.430 U	0.596 U	0.431 U	0.389 U	0.504 U	0.576 U	0.484 U	--	0.375 U	0.627 U	--
PCB-055	NE	NE	ng/kg	9.62	5.25	7.78	3.94 J	0.879 U	2.10 J	0.559 U	0.404 U	0.365 U	0.473 U	4.23	0.448 U	--	0.347 U	0.459 U	--
PCB-056	NE	NE	ng/kg	212	155	110	75.9	1.34 U	36.3	0.523 U	3.80 J	0.466 U	0.560 U	88.6	0.684 U	--	0.603 U	5.07	--
PCB-057	NE	NE	ng/kg	1.50 J	1.62 U	1.71 U	1.29 U	0.879 U	0.404 U	0.559 U	0.404 U	0.365 U	0.473 U	0.540 U	0.444 U	--	0.344 U	0.454 U	--
PCB-058	NE	NE	ng/kg	0.630 U	1.60 U	1.70 U	1.28 U	0.929 U	0.427 U	0.591 U	0.427 U	0.386 U	0.500 U	0.571 U	0.457 U	--	0.354 U	0.468 U	--
PCB-059	NE	NE	ng/kg	81	53.8	53.7	28.5	1.02 U	16.1	0.651 U	1.93 J	0.425 U	0.550 U	31.1	0.517 U	--	0.401 U	1.85 J	--
PCB-060	NE	NE	ng/kg	212	155	110	75.9	1.34 U	36.3	0.523 U	3.80 J	0.466 U	0.560 U	88.6	0.684 U	--	0.603 U	5.07	--
PCB-061	NE	NE	ng/kg	469	376	221	177	2.62 J	94.9	0.559 U	7.65	0.365 U	0.473 U	222	0.437 U	--	0.339 U	7.51	--
PCB-062	NE	NE	ng/kg	0.742 U	1.84 U	1.95 U	1.47 U	0.949 U	0.436 U	0.604 U	0.437 U	0.395 U	0.511 U	0.584 U	0.517 U	--	0.401 U	0.529 U	--
PCB-063	NE	NE	ng/kg	13.8	9.31	9.41	4.69	0.855 U	2.51 J	0.544 U	0.394 U	0.355 U	0.460 U	6.14	0.439 U	--	0.340 U	0.450 U	--
PCB-064	NE	NE	ng/kg	234	173	138	93.7	2.46 J	46.8	0.586 U	5.14	0.383 U	0.496 U	89.5	0.469 U	--	0.363 U	4.05	--
PCB-065	NE	NE	ng/kg	0.651 U	1.79 U	1.89 U	1.43 U	1.00 U	0.461 U	0.638 U	0.462 U	0.417 U	0.540 U	0.617 U	0.469 U	--	0.363 U	0.480 U	--
PCB-066	NE	NE	ng/kg	313	225	156	104	2.08 J	58.4	0.534 U	5.89	0.349 U	0.452 U	140	0.431 U	--	0.334 U	6.16	--
PCB-067	NE	NE	ng/kg	9.97	7.14	6.44	3.85 J	0.862 U	1.51 J	0.548 U	0.397 U	0.358 U	0.464 U	4.2	0.453 U	--	0.351 U	0.463 U	--
PCB-068	NE	NE	ng/kg	0.600 U	1.58 U	1.67 U	1.26 U	0.843 U	0.387 U	0.536 U	0.388 U	0.350 U	0.453 U	0.518 U	0.435 U	--	0.337 U	0.445 U	--
PCB-069	NE	NE	ng/kg	512	437	266	222	3.06 J	112	0.652 U	7.66	0.426 U	0.552 U	213	1.20 J	--	0.376 U	6.17	--
PCB-070	NE	NE	ng/kg	469	376	221	177	2.62 J	94.9	0.559 U	7.65	0.365 U	0.473 U	222	0.437 U	--	0.339 U	7.51	--
PCB-071	NE	NE	ng/kg	234	173	138	93.7	2.46 J	46.8	0.586 U	5.14	0.383 U	0.496 U	89.5	0.469 U	--	0.363 U	4.05	--
PCB-072	NE	NE	ng/kg	234	173	138	93.7	2.46 J	46.8	0.586 U	5.14	0.383 U	0.496 U	89.5	0.469 U	--	0.363 U	4.05	--
PCB-073	NE	NE	ng/kg	0.662 U	1.79 U	1.90 U	1.43 U	0.886 U	0.407 U	0.563 U	0.407 U	0.368 U	0.476 U	0.545 U	0.502 U	--	0.389 U	0.650 U	--
PCB-074	NE	NE	ng/kg	179	125	89.6	64.5	0.818 U	32.9	0.520 U	3.17 J	0.340 U	0.440 U	78.7	0.436 U	--	0.338 U	4.41	--
PCB-075	NE	NE	ng/kg	47.8	29.9	28.7	13.6	0.987 U	9.91	0.628 U	1.46 J	0.410 U	0.531 U	14.2	0.488 U	--	0.378 U	1.57 J	--
PCB-076	NE	NE	ng/kg	313	225	156	104	2.08 J	58.4	0.534 U	5.89	0.349 U	0.452 U	140	0.431 U	--	0.334 U	6.16	--
PCB-077	NE	NE	ng/kg	22.9	18.2	18.4	9.78	1.33 U	3.66 J	0.523 U	0.522 U	0.464 U	0.561 U	9.47	0.727 U	--	0.662 U	1.18 J	--
PCB-078	NE	NE	ng/kg	1.28 U	2.35 U	1.91 U	1.97 U	1.31 U	0.651 U	0.514 U	0.521 U	0.458 U	0.550 U	0.926 U	0.688 U	--	0.607 U	0.632 U	--
PCB-079	NE	NE	ng/kg	7.14	8.56	7.22	4.95	1.26 U	1.62 J	0.494 U	0.501 U	0.439 U	0.529 U	4.16	0.652 U	--	0.575 U	0.599 U	--
PCB-080	NE	NE	ng/kg	0.535 U	1.44 U	1.52 U	1.15 U	0.767 U	0.353 U	0.488 U	0.353 U	0.319 U	0.413 U	0.472 U	0.384 U	--	0.298 U	0.393 U	--
PCB-081	NE	NE	ng/kg	10.8	13.8	11.4	8.83	1.21 U	3.62 J	0.469 U	0.483 U	0.418 U	0.500 U	8.53	0.604 U	--	0.515 U	0.580 U	--
PCB-082	NE	NE	ng/kg	100	100	47.4	57.9	1.29 U	24.1	1.02 U	1.05 U	0.779 U	1.14 U	51.1	0.555 U	--	0.996 U	1.43 J	--
PCB-083	NE	NE	ng/kg	33.5	32.6	18.7	18.4	0.999 U	8.43	0.792 U	0.816 U	0.607 U	0.891 U	17.2	0.418 U	--	0.751 U	0.553 U	--
PCB-084	NE	NE	ng/kg	328	290	159	171	1.13 U	80.3	0.894 U	3.54 J	0.685 U	1.01 U	147	0.453 U	--	0.815 U	2.84 J	--
PCB-085	NE	NE	ng/kg	129	134	59	69.2	0.915 U	30.6	0.726 U	1.68 J	0.556 U	0.816 U	60.7	0.398 U	--	0.714 U	1.94 J	--
PCB-086	NE	NE	ng/kg	0.667 U	1.55 U	1.66 U	1.50 U	1.02 U	0.432 U	0.805 U	0.829 U	0.616 U	0.905 U	1.81 U	0.395 U	--	0.711 U	0.523 U	--
PCB-087	NE	NE	ng/kg	326	334	154	189	0.927 U	84	0.735 U	3.96 J	0.563 U	0.827 U	185	0.379 U	--	0.682 U	3.28 J	--
PCB-088	NE	NE	ng/kg	120	94.5	55.3	55.2	0.534 U	29.4	0.545 U	1.52 J	0.516 U	0.801 U	71	0.372 U	--	0.578 U	2.01 J	--
PCB-089	NE	NE	ng/kg	9.27	9.67	6.42	5.15	1.20 U	2.14 J	0.953 U	0.982 U	0.730 U	1.07 U	3.87 J	0.475 U	--	0.854 U	0.628 U	--
PCB-090	NE	NE	ng/kg	925	851	523	476	3.13 J	221	0.814 U	9.63	0.623 U	0.915 U	557	1.64 J	--	0.767 U	8.01	--
PCB-091	NE	NE	ng/kg	120	94.5	55.3	55.2	0.534 U	29.4	0.545 U	1.52 J	0.516 U	0.801 U	71	0.372 U	--	0.578 U	2.01 J	--
PCB-092	NE	NE	ng/kg	328	290	159	171	1.13 U	80.3	0.894 U	3.54 J	0.685 U	1.01 U	147	0.453 U	--	0.815 U	2.84 J	--
PCB-093	NE	NE	ng/kg	0.607 U	99.2	136	23.6	0.605 U	1.75 U	0.618 U	0.387 U	0.584 U	0.907 U	1.03 U	0.386 U	--	0.601 U	0.879 U	--

Analyte	Sediment Screening Level for Protection of Benthic Organisms	Sediment Screening Level for Protection of Human Health and Higher Trophic Level Ecological Receptors	Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-A	PT-13
			Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
			Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
			Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
PCB-094	NE	NE	ng/kg	**4.63**	2.71 U	1.75 U	1.64 U	0.613 U	1.77 U	0.625 U	0.392 U	0.591 U	0.918 U	1.05 U	0.429 U	--	0.667 U	0.977 U	--
PCB-095	NE	NE	ng/kg	**718**	**473**	**232**	**76.8**	**2.52 J**	**183**	0.521 U	**6.65**	0.493 U	0.765 U	**114**	**1.08 J**	--	0.560 U	**7.06**	--
PCB-096	NE	NE	ng/kg	**5.17**	**4.58**	**4.25**	**3.29 J**	0.419 U	1.21 U	0.427 U	0.268 U	0.404 U	0.628 U	**2.25 J**	0.286 U	--	0.445 U	0.651 U	--
PCB-097	NE	NE	ng/kg	**221**	**222**	**104**	**123**	1.03 U	**58.9**	0.817 U	**2.95 J**	0.626 U	0.918 U	**121**	0.412 U	--	0.740 U	**2.48 J**	--
PCB-098	NE	NE	ng/kg	0.532 U	2.29 U	1.48 U	**197**	0.510 U	1.47 U	0.520 U	0.326 U	0.492 U	0.764 U	**338**	0.373 U	--	0.580 U	0.848 U	--
PCB-099	NE	NE	ng/kg	**319**	**327**	**156**	**173**	0.991 U	**84.4**	0.786 U	**4.25**	0.602 U	0.884 U	**167**	0.406 U	--	0.730 U	**4.16**	--
PCB-100	NE	NE	ng/kg	**2.55 J**	2.21 U	1.43 U	1.34 U	0.519 U	1.50 U	0.530 U	0.332 U	0.501 U	0.778 U	0.887 U	0.359 U	--	0.558 U	0.817 U	--
PCB-101	NE	NE	ng/kg	**925**	**851**	**523**	**476**	**3.13 J**	**221**	0.814 U	**9.63**	0.623 U	0.915 U	**557**	**1.64 J**	--	0.767 U	**8.01**	--
PCB-102	NE	NE	ng/kg	0.532 U	2.29 U	1.48 U	**197**	0.510 U	1.47 U	0.520 U	0.326 U	0.492 U	0.764 U	**338**	0.373 U	--	0.580 U	0.848 U	--
PCB-103	NE	NE	ng/kg	**5.4**	2.12 U	**4.27**	1.28 U	0.496 U	1.43 U	0.506 U	0.317 U	0.478 U	0.743 U	**2.71 J**	0.341 U	--	0.531 U	0.777 U	--
PCB-104	NE	NE	ng/kg	0.410 U	1.72 U	1.11 U	1.04 U	0.394 U	1.14 U	0.402 U	0.252 U	0.381 U	0.591 U	0.673 U	0.273 U	--	0.424 U	0.621 U	--
PCB-105	NE	NE	ng/kg	**301**	**285**	**125**	**146**	1.40 U	**72.2**	0.795 U	**3.45 J**	0.516 U	0.648 U	**161**	0.772 U	--	0.672 U	**3.45 J**	--
PCB-106	NE	NE	ng/kg	**765**	**676**	**310**	**339**	1.61 U	**176**	0.986 U	**7.97**	0.520 U	0.759 U	**423**	0.781 U	--	0.719 U	**7.6**	--
PCB-107	NE	NE	ng/kg	**50.9**	**48.6**	**26.6**	**24.7**	1.45 U	**12.2**	0.894 U	0.626 U	0.568 U	0.745 U	**26.2**	0.798 U	--	0.662 U	0.681 U	--
PCB-108	NE	NE	ng/kg	**50.9**	**48.6**	**26.6**	**24.7**	1.45 U	**12.2**	0.894 U	0.626 U	0.568 U	0.745 U	**26.2**	0.798 U	--	0.662 U	0.681 U	--
PCB-109	NE	NE	ng/kg	0.522 U	1.27 U	1.37 U	1.24 U	0.867 U	0.369 U	0.688 U	0.708 U	0.527 U	0.773 U	1.54 U	0.354 U	--	0.635 U	0.468 U	--
PCB-110	NE	NE	ng/kg	**754**	**759**	**381**	**426**	**3.07 J**	**187**	0.586 U	**8.21**	0.449 U	0.659 U	**430**	**1.41 J**	--	0.572 U	**7.6**	--
PCB-111	NE	NE	ng/kg	**16.3**	**17.3**	**8.88**	**9.35**	0.744 U	**3.83 J**	0.590 U	0.607 U	0.451 U	0.663 U	**10**	0.305 U	--	0.549 U	0.404 U	--
PCB-112	NE	NE	ng/kg	**33.5**	**32.6**	**18.7**	**18.4**	0.999 U	**8.43**	0.792 U	0.816 U	0.607 U	0.891 U	**17.2**	0.418 U	--	0.751 U	0.553 U	--
PCB-113	NE	NE	ng/kg	0.527 U	**18.3**	1.41 U	**4.04**	0.837 U	0.356 U	0.663 U	0.683 U	0.508 U	0.746 U	1.49 U	0.346 U	--	0.622 U	0.458 U	--
PCB-114	NE	NE	ng/kg	**20.2**	**18.2**	**12**	**10.7**	1.34 U	**5.49**	0.831 U	0.568 U	0.585 U	0.708 U	**11.6**	0.838 U	--	0.644 U	0.647 U	--
PCB-115	NE	NE	ng/kg	**16.3**	**17.3**	**8.88**	**9.35**	0.744 U	**3.83 J**	0.590 U	0.607 U	0.451 U	0.663 U	**10**	0.305 U	--	0.549 U	0.404 U	--
PCB-116	NE	NE	ng/kg	**129**	**134**	**59**	**69.2**	0.915 U	**30.6**	0.726 U	**1.68 J**	0.556 U	0.816 U	**60.7**	0.398 U	--	0.714 U	**1.94 J**	--
PCB-117	NE	NE	ng/kg	**326**	**334**	**154**	**189**	0.927 U	**84**	0.735 U	**3.96 J**	0.563 U	0.827 U	**185**	0.379 U	--	0.682 U	**3.28 J**	--
PCB-118	NE	NE	ng/kg	**765**	**676**	**310**	**339**	1.61 U	**176**	0.986 U	**7.97**	0.520 U	0.759 U	**423**	0.781 U	--	0.719 U	**7.6**	--
PCB-119	NE	NE	ng/kg	**11**	**11.7**	**8.31**	**5.39**	0.767 U	**2.66 J**	0.608 U	0.627 U	0.466 U	0.684 U	**5.52**	0.313 U	--	0.563 U	0.415 U	--
PCB-120	NE	NE	ng/kg	0.462 U	**2.29 J**	1.20 U	**2.27 J**	0.719 U	0.306 U	0.570 U	0.587 U	0.437 U	0.641 U	1.28 U	0.300 U	--	0.540 U	0.397 U	--
PCB-121	NE	NE	ng/kg	0.455 U	1.97 U	1.27 U	1.20 U	0.434 U	1.25 U	0.443 U	0.278 U	0.419 U	0.651 U	0.741 U	0.306 U	--	0.475 U	0.696 U	--
PCB-122	NE	NE	ng/kg	**9.52**	**10.8**	**6.81**	**5.6**	1.31 U	**2.32 J**	0.803 U	0.563 U	0.511 U	0.669 U	**5.13**	0.774 U	--	0.643 U	0.661 U	--
PCB-123	NE	NE	ng/kg	**12**	**13.1**	**4.87**	**7.36**	1.15 U	**3.21 J**	0.769 U	0.605 U	0.522 U	0.700 U	**6.26**	0.710 U	--	0.544 U	0.604 U	--
PCB-124	NE	NE	ng/kg	**29.5**	**25.6**	**14.1**	**13.4**	1.50 U	**8.69**	0.923 U	0.647 U	0.587 U	0.769 U	**20.3**	0.806 U	--	0.669 U	0.688 U	--
PCB-125	NE	NE	ng/kg	**326**	**334**	**154**	**189**	0.927 U	**84**	0.735 U	**3.96 J**	0.563 U	0.827 U	**185**	0.379 U	--	0.682 U	**3.28 J**	--
PCB-126	NE	NE	ng/kg	**4.61**	**3.78 J**	**8.85**	1.59 U	1.60 U	0.541 U	1.10 U	0.646 U	0.577 U	0.878 U	**2.79 J**	0.987 U	--	1.05 U	0.765 U	--
PCB-127	NE	NE	ng/kg	0.944 U	1.92 U	2.09 U	1.52 U	1.34 U	0.518 U	0.826 U	0.579 U	0.525 U	0.688 U	0.804 U	0.845 U	--	0.702 U	0.722 U	--
PCB-128	NE	NE	ng/kg	**162**	**140**	**85.1**	**84**	0.989 U	**47.5**	0.545 U	1.14 U	0.507 U	0.995 U	**112**	0.647 U	--	0.611 U	**1.52 J**	--
PCB-129	NE	NE	ng/kg	**50.2**	**41**	**27.3**	**27**	1.36 U	**14.1**	0.750 U	1.57 U	0.698 U	1.37 U	**35.7**	0.859 U	--	0.811 U	0.872 U	--
PCB-130	NE	NE	ng/kg	**61.8**	**44.6**	**34.3**	**29**	1.18 U	**15.6**	0.651 U	1.36 U	0.606 U	1.19 U	**46.4**	0.812 U	--	0.766 U	0.824 U	--
PCB-131	NE	NE	ng/kg	**28.8**	**19.9**	**18.6**	**14.4**	1.20 U	**7.11**	0.659 U	1.38 U	0.613 U	1.20 U	**22.4**	0.726 U	--	0.685 U	0.737 U	--
PCB-132	NE	NE	ng/kg	**298**	**242**	**195**	**169**	1.02 U	**85.4**	0.563 U	**2.57 J**	0.524 U	1.03 U	**234**	0.643 U	--	0.607 U	**2.82 J**	--
PCB-133	NE	NE	ng/kg	**28.8**	**19.9**	**18.6**	**14.4**	1.20 U	**7.11**	0.659 U	1.38 U	0.613 U	1.20 U	**22.4**	0.726 U	--	0.685 U	0.737 U	--
PCB-134	NE	NE	ng/kg	**55.2**	**40.6**	**36.7**	**27.2**	1.29 U	**17.2**	0.712 U	1.49 U	0.662 U	1.30 U	**44.3**	0.748 U	--	0.705 U	0.759 U	--
PCB-135	NE	NE	ng/kg	**144**	**87.2**	**97.3**	**57.5**	1.35 U	**42.6**	0.743 U	1.56 U	0.691 U	1.36 U	**122**	0.711 U	--	0.670 U	0.721 U	--
PCB-136	NE	NE	ng/kg	**146**	**131**	**138**	**117**	0.405 U	**50.3**	0.398 U	0.971 U	0.363 U	0.479 U	**180**	0.387 U	--	0.334 U	0.669 U	--
PCB-137	NE	NE	ng/kg	**52.9**	**46.5**	**20.9**	**27.4**	1.24 U	**15.9**	0.682 U	1.43 U	0.635 U	1.24 U	**31.4**	0.756 U	--	0.713 U	0.767 U	--
PCB-138	NE	NE	ng/kg	**1,010**	**786**	**663**	**517**	**2.61 J**	**312**	0.474 U	**8.69**	0.441 U	0.865 U	**834**	**1.63 J**	--	0.509 U	**6.81**	--
PCB-139	NE	NE	ng/kg	**892**	**633**	**691**	**476**	1.15 U	**270**	0.635 U	**7.42**	0.591 U	1.16 U	**709**	**1.36 J**	--	0.635 U	**5.89**	--
PCB-140	NE	NE	ng/kg	**5.03**	**4.71**	**3.28 J**	2.17 U	1.15 U	0.880 U	0.635 U	1.33 U	0.591 U	1.16 U	**3.10 J**	0.677 U	--	0.639 U	0.687 U	--
PCB-141	NE	NE	ng/kg	**225**	**166**	**176**	**120**	1.14 U	**73.7**	0.628 U	**2.11 J**	0.584 U	1.15 U	**204**	0.704 U	--	0.665 U	**1.81 J**	--
PCB-142	NE	NE	ng/kg	0.680 U	2.00 U	1.42 U	2.58 U	1.32 U	1.01 U	0.729 U	1.53 U	0.678 U	1.33 U	0.639 U	0.808 U	--	0.763 U	0.821 U	--
PCB-143	NE	NE	ng/kg	**55.2**	**40.6**	**36.7**	**27.2**	1.29 U	**17.2**	0.712 U	1.49 U	0.662 U	1.30 U	**44.3**	0.748 U	--	0.705 U	0.759 U	--
PCB-144	NE	NE	ng/kg	**57.2**	**37.8**	**43.9**	**29.5**	1.18 U	**19**	0.651 U	1.36 U	0.606 U	1.19 U	**51.5**	0.687 U	--	0.648 U	0.697 U	--
PCB-145	NE	NE	ng/kg	0.859 U	0.930 U	1.62 U	1.95 U	0.414 U	0.356 U	0.407 U	0.994 U	0.372 U	0.491 U	0.751 U	0.397 U	--	0.343 U	0.686 U	--
PCB-146	NE	NE	ng/kg	**126**	**93.9**	**91.1**	**64.4**	0.984 U	**40.7**	0.542 U	1.14 U	0.505 U	0.990 U	**112**	0.617 U	--	0.582 U	0.627 U	--
PCB-147	NE	NE	ng/kg	**16**	**12.5**	**6.26**	**8.24**	1.15 U	**5.29**	0.632 U	1.32 U	0.588 U	1.15 U	**10.1**	0.663 U	--	0.625 U	0.673 U	--
PCB-148	NE	NE	ng/kg	1.14 U	1.20 U	2.09 U	2.52 U	0.468 U	0.402 U	0.460 U	1.12 U	0.420 U	0.555 U	0.849 U	0.494 U	--	0.426 U	0.853 U	--
PCB-149	NE	NE	ng/kg	**892**	**633**	**691**	**476**	1.15 U	**270**	0.635 U	**7.42**	0.591 U	1.16 U	**709**	**1.36 J**	--	0.635 U	**5.89**	--
PCB-150	NE	NE	ng/kg	0.840 U	0.886 U	1.54 U	1.86 U	0.400 U	0.344 U	0.394 U	0.960 U	0.359 U	0.474 U	0.726 U	0.392 U	--	0.338 U	0.677 U	--
PCB-151	NE	NE	ng/kg	**125**	**85.3**	**162**	**69.2**	1.19 U	**70.4**	0.658 U	**2.32 J**	0.613 U	1.20 U	**156**	0.709 U	--	0.669 U	**1.79 J**	--
PCB-152	NE	NE	ng/kg	0.817 U	0.887 U	1.54 U	1.86 U	0.399 U	0.342 U	0.392 U	0.956 U	0.357 U	0.472 U	0.723 U	0.380 U	--	0.328 U	0.656 U	--
PCB-153	NE	NE	ng/kg	**962**	**707**	**712**	**509**	**1.89 J**	**313**	0.492 U	**8.18**	0.458 U	0.898 U	**770**	**1.32 J**	--	0.564 U	**6.7**	--
PCB-154	NE	NE	ng/kg	**6.71**	**7.47**	**5.92**	2.01 U	0.426 U	**2.06 J**	0.418 U	1.02 U	0.382 U	0.504 U	**5.51**	0.439 U	--	0.379 U	0.758 U	--
PCB-155	NE	NE	ng/kg	0.759 U	0.792 U	1.38 U	1.66 U	0.364 U	0.313 U	0.358 U	0.873 U	0.326 U	0.431 U	0.660 U	0.349 U	--	0.302 U	0.604 U	--

Analyte	Sediment Screening Level for Protection of Benthic Organisms	Sediment Screening Level for Protection of Human Health and Higher Trophic Level Ecological Receptors	Sample Location	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	Composite	PT-10-Z	PT-8	PT-11-Z	PT-12-A	PT-13
			Sample ID	D-1	D-2	D-3A	D-3B	D-4A	D-4B	D-5A	D-5B	D-6A	D-6B	D-7	PT-10-36.0-37.0	PT-108-25.0-26.0	PT-11-36.0-37.0	PT-12-30.0-31.0	PT-13-27.0-28.0
			Sample Date	01/13/2015	01/12/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/12/2015	01/13/2015	01/13/2015	01/14/2015	01/16/2015	01/15/2015	01/15/2015	01/15/2015
			Sample Depth	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	Various	-36 to -37 ft MLLW	-25 to -26 ft MLLW	-36 to -37 ft MLLW	-30 to -31 ft MLLW	-27 to -28 ft MLLW
PCB-156	NE	NE	ng/kg	99.3	84.8	57.3	49.9	0.837 U	30.5	0.447 U	0.972 U	0.415 U	0.833 U	79.7	0.524 U	--	0.488 U	0.554 U	--
PCB-157	NE	NE	ng/kg	20.8	19.5	11.9	10.6	0.819 U	5.54	0.462 U	0.983 U	0.474 U	0.850 U	13.5	0.638 U	--	0.571 U	0.594 U	--
PCB-158	NE	NE	ng/kg	128	103	83.6	70.8	0.844 U	39.2	0.465 U	0.974 U	0.433 U	0.849 U	105	0.530 U	--	0.500 U	1.15 J	--
PCB-159	NE	NE	ng/kg	11.1	7.81	11.9	7.33	0.800 U	4.51	0.441 U	0.924 U	0.410 U	0.805 U	8.98	0.507 U	--	0.478 U	0.514 U	--
PCB-160	NE	NE	ng/kg	128	103	83.6	70.8	0.844 U	39.2	0.465 U	0.974 U	0.433 U	0.849 U	105	0.530 U	--	0.500 U	1.15 J	--
PCB-161	NE	NE	ng/kg	298	242	195	169	1.02 U	85.4	0.563 U	2.57 J	0.524 U	1.03 U	234	0.643 U	--	0.607 U	2.82 J	--
PCB-162	NE	NE	ng/kg	162	140	85.1	84	0.989 U	47.5	0.545 U	1.14 U	0.507 U	0.995 U	112	0.647 U	--	0.611 U	1.52 J	--
PCB-163	NE	NE	ng/kg	1,010	786	663	517	2.61 J	312	0.474 U	8.69	0.441 U	0.865 U	834	1.63 J	--	0.509 U	6.81	--
PCB-164	NE	NE	ng/kg	1,010	786	663	517	2.61 J	312	0.474 U	8.69	0.441 U	0.865 U	834	1.63 J	--	0.509 U	6.81	--
PCB-165	NE	NE	ng/kg	126	93.9	91.1	64.4	0.984 U	40.7	0.542 U	1.14 U	0.505 U	0.990 U	112	0.617 U	--	0.582 U	0.627 U	--
PCB-166	NE	NE	ng/kg	3.70 J	1.33 U	2.86 J	1.72 U	0.893 U	0.682 U	0.492 U	1.03 U	0.458 U	0.898 U	2.30 J	0.569 U	--	0.537 U	0.578 U	--
PCB-167	NE	NE	ng/kg	38.1	30.3	22	18.1	0.826 U	12	0.453 U	0.915 U	0.426 U	0.825 U	32.3	0.584 U	--	0.503 U	0.547 U	--
PCB-168	NE	NE	ng/kg	0.464 U	1.38 U	3.38 J	1.78 U	0.884 U	0.675 U	0.487 U	1.02 U	0.453 U	0.889 U	0.427 U	0.568 U	--	0.535 U	0.576 U	--
PCB-169	NE	NE	ng/kg	0.458 U	1.30 U	10	1.67 U	0.863 U	0.646 U	0.483 U	0.991 U	0.400 U	0.857 U	0.384 U	0.523 U	--	0.586 U	0.613 U	--
PCB-170	NE	NE	ng/kg	282	186	274	164	1.36 U	142	0.987 U	2.42 J	1.01 U	1.02 U	337	0.750 U	--	0.556 U	2.36 J	--
PCB-171	NE	NE	ng/kg	90.9	64.3	87.2	53.4	1.24 U	42.7	0.900 U	0.879 U	0.925 U	0.928 U	95.6	0.683 U	--	0.506 U	0.552 U	--
PCB-172	NE	NE	ng/kg	50.1	34.9	50.2	27.7	1.30 U	25.1	0.943 U	0.921 U	0.969 U	0.973 U	60	0.704 U	--	0.522 U	0.569 U	--
PCB-173	NE	NE	ng/kg	7.8	6.25	8.9	5.35	1.44 U	3.92 J	1.05 U	1.02 U	1.08 U	1.08 U	8.24	0.770 U	--	0.571 U	0.622 U	--
PCB-174	NE	NE	ng/kg	305	214	290	181	1.22 U	137	0.888 U	2.66 J	0.913 U	0.916 U	297	0.622 U	--	0.461 U	2.32 J	--
PCB-175	NE	NE	ng/kg	13.8	9.95	15.1	9.06	1.24 U	5.95	0.901 U	0.880 U	0.926 U	0.930 U	16.3	0.652 U	--	0.483 U	0.526 U	--
PCB-176	NE	NE	ng/kg	45.3	34	47.9	27	0.934 U	21.1	0.679 U	0.663 U	0.697 U	0.700 U	45.9	0.480 U	--	0.356 U	0.388 U	--
PCB-177	NE	NE	ng/kg	182	128	180	106	1.34 U	84.8	0.972 U	0.949 U	0.999 U	1.00 U	177	0.708 U	--	0.525 U	0.572 U	--
PCB-178	NE	NE	ng/kg	60	41.7	60.6	36.4	1.28 U	27.5	0.928 U	0.907 U	0.954 U	0.958 U	60.8	0.699 U	--	0.518 U	0.565 U	--
PCB-179	NE	NE	ng/kg	126	97.9	128	80.8	0.892 U	55.4	0.648 U	0.633 U	0.666 U	0.669 U	115	0.474 U	--	0.352 U	1.32 J	--
PCB-180	NE	NE	ng/kg	630	416	566	352	1.05 U	315	0.765 U	5.1	0.787 U	0.790 U	694	0.589 U	--	0.437 U	4.59	--
PCB-181	NE	NE	ng/kg	0.793 U	1.41 U	1.61 U	1.73 U	1.27 U	0.543 U	0.920 U	0.898 U	0.945 U	0.949 U	0.656 U	0.734 U	--	0.544 U	0.593 U	--
PCB-182	NE	NE	ng/kg	361	275	350	220	1.14 U	172	0.831 U	3.10 J	0.854 U	0.858 U	354	0.607 U	--	0.450 U	3.55 J	--
PCB-183	NE	NE	ng/kg	192	142	192	122	1.11 U	95	0.807 U	2.61 J	0.830 U	0.833 U	204	1.46 J	--	1.20 J	3.21 J	--
PCB-184	NE	NE	ng/kg	0.545 U	0.990 U	1.13 U	1.21 U	0.889 U	0.381 U	0.646 U	0.631 U	0.664 U	0.666 U	0.461 U	0.466 U	--	0.346 U	0.377 U	--
PCB-185	NE	NE	ng/kg	38.3	30.8	41.7	24.5	1.27 U	18.8	0.926 U	0.904 U	0.952 U	0.955 U	39.8	0.691 U	--	0.512 U	0.558 U	--
PCB-186	NE	NE	ng/kg	0.600 U	1.06 U	1.20 U	1.30 U	0.960 U	0.412 U	0.698 U	0.681 U	0.717 U	0.720 U	0.498 U	0.494 U	--	0.366 U	0.399 U	--
PCB-187	NE	NE	ng/kg	361	275	350	220	1.14 U	172	0.831 U	3.10 J	0.854 U	0.858 U	354	0.607 U	--	0.450 U	3.55 J	--
PCB-188	NE	NE	ng/kg	0.611 U	1.16 U	1.24 U	1.36 U	0.963 U	0.384 U	0.652 U	0.667 U	0.774 U	0.690 U	0.476 U	0.506 U	--	0.371 U	0.439 U	--
PCB-189	NE	NE	ng/kg	10.8	9.23	14	6.49	0.879 U	5.72	0.688 U	0.639 U	0.595 U	0.689 U	17.5	0.506 U	--	0.379 U	0.374 U	--
PCB-190	NE	NE	ng/kg	56.1	41.1	61.6	35.7	1.01 U	32.4	0.732 U	0.715 U	0.752 U	0.755 U	74.4	0.536 U	--	0.398 U	0.433 U	--
PCB-191	NE	NE	ng/kg	13.9	9.72	14.1	7.74	0.921 U	6.19	0.669 U	0.654 U	0.688 U	0.691 U	16.3	0.508 U	--	0.377 U	0.411 U	--
PCB-192	NE	NE	ng/kg	0.644 U	1.10 U	1.26 U	1.35 U	1.05 U	0.452 U	0.765 U	0.747 U	0.787 U	0.790 U	0.546 U	0.566 U	--	0.420 U	0.458 U	--
PCB-193	NE	NE	ng/kg	34.8	24.1	34.8	19.5	0.944 U	17.7	0.686 U	0.670 U	0.705 U	0.708 U	39.7	0.510 U	--	0.378 U	0.412 U	--
PCB-194	NE	NE	ng/kg	157	101	158	96.8	0.501 U	79.8	0.430 U	1.27 U	0.347 U	0.477 U	291	0.420 U	--	0.502 U	2.15 J	--
PCB-195	NE	NE	ng/kg	62.9	39.3	69.5	38.3	0.566 U	36.4	0.486 U	1.43 U	0.392 U	0.540 U	121	0.465 U	--	0.555 U	0.548 U	--
PCB-196	NE	NE	ng/kg	187	121	186	129	0.783 U	107	0.576 U	1.43 U	0.409 U	0.671 U	317	0.599 U	--	0.597 U	4.26	--
PCB-197	NE	NE	ng/kg	7.94	5.52	10.9	6.3	0.627 U	4.7	0.461 U	1.15 U	0.328 U	0.537 U	13.7	0.446 U	--	0.445 U	0.518 U	--
PCB-198	NE	NE	ng/kg	9.16	7.36	12.5	6.34	0.866 U	5.52	0.636 U	1.58 U	0.452 U	0.741 U	16.7	0.677 U	--	0.674 U	0.785 U	--
PCB-199	NE	NE	ng/kg	165	115	159	110	0.912 U	92.7	0.670 U	1.67 U	0.476 U	0.781 U	250	0.645 U	--	0.643 U	4.79	--
PCB-200	NE	NE	ng/kg	19.4	13.7	20.7	13.9	0.607 U	11.4	0.446 U	1.11 U	0.317 U	0.520 U	30.3	0.452 U	--	0.450 U	0.524 U	--
PCB-201	NE	NE	ng/kg	24.2	20.2	27.4	17.5	0.623 U	13.7	0.458 U	1.14 U	0.325 U	0.533 U	35.1	0.451 U	--	0.449 U	0.523 U	--
PCB-202	NE	NE	ng/kg	32.8	28.2	31.1	24.6	0.613 U	17.2	0.451 U	1.12 U	0.320 U	0.525 U	41.7	0.463 U	--	0.461 U	1.57 J	--
PCB-203	NE	NE	ng/kg	187	121	186	129	0.783 U	107	0.576 U	1.43 U	0.409 U	0.671 U	317	0.599 U	--	0.597 U	4.26	--
PCB-204	NE	NE	ng/kg	0.335 U	1.70 U	0.803 U	1.41 U	0.619 U	0.416 U	0.455 U	1.13 U	0.323 U	0.530 U	0.399 U	0.449 U	--	0.447 U	0.521 U	--
PCB-205	NE	NE	ng/kg	7.98	5.3	13.4	4.71	0.402 U	4.36	0.345 U	1.02 U	0.278 U	0.383 U	16.6	0.326 U	--	0.389 U	0.384 U	--
PCB-206	NE	NE	ng/kg	68.5	68	81	61.1	0.974 U	38.7	0.351 U	0.632 U	0.318 U	0.336 U	106	0.412 U	--	0.506 U	12.4	--
PCB-207	NE	NE	ng/kg	9.69	10.5	14.1	7.46	0.754 U	5.69	0.259 U	0.478 U	0.239 U	0.251 U	16.2	0.296 U	--	0.376 U	1.25 J	--
PCB-208	NE	NE	ng/kg	18.7	21.6	25.3	16.4	0.725 U	10.8	0.238 U	0.450 U	0.224 U	0.233 U	21.8	0.278 U	--	0.364 U	4.57	--
PCB-209	NE	NE	ng/kg	42.4	164	121	120	1.04 U	27.3	0.213 U	0.546 U	0.271 U	0.247 U	30.3	0.308 U	--	0.272 U	14.9	--
Total PCBs (OC Normalized)	12	NA	mg/kg OC	0.2	0.2	0.3	0.1	0.02	0.1	0.001 U	0.2	0.001 U	0.001 U	0.7	0.002	--	0.002	0.005	--
Total PCBs	130,000	3,500	ng/kg	27,102 T	22,080 T	17,935 T	13,887 T	65.1 T	7,913 T	1.7 UT	270 T	1.4 UT	1.5 UT	19,387 T	50.2 T	--	4.1 T	355 T	--
Total Dioxin-Like PCBs TEQ (ND=0.5DL)	NE	2	ng/kg	0.5 T	0.4 T	1.2 T	0.1 T	0.1 UT	0.05 T	0.06 UT	0.05 T	0.03 UT	0.06 UT	0.3 T	0.06 UT	--	0.06 UT	0.05 T	--
Organometallic Compounds																			
Tributyltin Ion	NE	NE	µg/kg	3.7	1.8 J	3.6 U	3.6 U	3.5 U	2.2 J	3.5 U	3.5 U	3.4 U	3.4 U	3.7 U	3.6 U	--	3.4 U	3.7 U	--
Dioxins/Furans																			
Total Dioxin/Furan TEQ (ND=0.5DL)	5	5	ng/kg	32.3 JT	25.1 JT	7.6 JT	26.1 JT	0.5 T	9.8 JT	0.3 T	0.7 JT	0.15 JT	0.5 JT	14.7 JT	0.7 JT		0.4 T	6.9 T	

Notes:

-- = not tested
BT = bioaccumulation trigger
cPAH = carcinogenic polycyclic aromatic hydrocarbon
DL = detection limit
HPAH = high molecular weight polycyclic aromatic hydrocarbon
J = Estimated concentration
JT = Estimated concentration total
LPAH = low molecular weight polycyclic aromatic hydrocarbon
mg/kg = milligram per kilogram
mg/kg OC = milligram per kilogram organic carbon normalized
ML = maximum level
NA = not applicable because TOC outside of range for comparison to TOC-normalized screening levels
NE = not established
ng/kg = nanogram per kilogram
PCB = polychlorinated biphenyl
SL = screening level
TEQ = toxicity equivalent
U = The analyte is not detected at or above the reported concentration.
µg/kg = microgram per kilogram
Bold indicates the analyte was detected.
Blue border indicates total organic carbon is outside the range of 0.5% to 3.5% and will be compared to dry weight screening levels for protection of benthic organisms.
Orange shading indicates exceedance of screening level protective of benthic organisms
Yellow shading indicates exceedance of screening level protective of human health and higher trophic level ecological receptors
Red shading indicates exceedance of screening levels protective of benthic organisms and protective of human health and higher trophic level ecological receptors.
Light blue shading indicates a non-detect that exceeds any screening level

Table 7

Dioxin/Furan Constituents and Toxic Equivalent Calculations

Mill A Former Site Interim Action Dredging Project

Everett, Washington

Sample ID	Congener	EDL	Result	Qualifier	TEF	TEQ(a)	Units	Detected?
D-1	1,2,3,4,6,7,8-HpCDD	0.747	190		0.01	1.9	ng/kg	Y
D-1	1,2,3,4,6,7,8-HpCDF	1.1	35.9		0.01	0.359	ng/kg	Y
D-1	1,2,3,4,7,8,9-HpCDF	0.872	2.14		0.01	0.0214	ng/kg	Y
D-1	1,2,3,4,7,8-HxCDD	0.765	4.28		0.1	0.428	ng/kg	Y
D-1	1,2,3,4,7,8-HxCDF	0.711	4.06	J	0.1	0.406	ng/kg	Y
D-1	1,2,3,6,7,8-HxCDD	0.652	11.7		0.1	1.17	ng/kg	Y
D-1	1,2,3,6,7,8-HxCDF	0.273	3.08		0.1	0.308	ng/kg	Y
D-1	1,2,3,7,8,9-HxCDD	0.473	6.57		0.1	0.657	ng/kg	Y
D-1	1,2,3,7,8,9-HxCDF	0.888	1.42		0.1	0.142	ng/kg	Y
D-1	1,2,3,7,8-PeCDD	0.374	4.51		1	4.51	ng/kg	Y
D-1	1,2,3,7,8-PeCDF	0.514	4.31	J	0.03	0.1293	ng/kg	Y
D-1	2,3,4,6,7,8-HxCDF	0.692	3.61	J	0.1	0.361	ng/kg	Y
D-1	2,3,4,7,8-PeCDF	0.667	5.72		0.3	1.716	ng/kg	Y
D-1	2,3,7,8-TCDD	0.173	1.48		1	1.48	ng/kg	Y
D-1	2,3,7,8-TCDF	0.234	183		0.1	18.3	ng/kg	Y
D-1	OCDD	1.73	1390		0.0003	0.417	ng/kg	Y
D-1	OCDF	1.51	53.5		0.0003	0.01605	ng/kg	Y
D-1	**Dioxin/Furan TEQ**		**32.3**	**JT**	**--**	**--**	**ng/kg**	**Y**
D-2	1,2,3,4,6,7,8-HpCDD	0.746	178		0.01	1.78	ng/kg	Y
D-2	1,2,3,4,6,7,8-HpCDF	1.1	29.7		0.01	0.297	ng/kg	Y
D-2	1,2,3,4,7,8,9-HpCDF	0.87	1.77	U	0.01	0.00885	ng/kg	N
D-2	1,2,3,4,7,8-HxCDD	0.763	7.87		0.1	0.787	ng/kg	Y
D-2	1,2,3,4,7,8-HxCDF	0.71	3.08	J	0.1	0.308	ng/kg	Y
D-2	1,2,3,6,7,8-HxCDD	0.651	13.7		0.1	1.37	ng/kg	Y
D-2	1,2,3,6,7,8-HxCDF	0.272	2.56		0.1	0.256	ng/kg	Y
D-2	1,2,3,7,8,9-HxCDD	0.472	9.75		0.1	0.975	ng/kg	Y
D-2	1,2,3,7,8,9-HxCDF	0.887	0.954	J	0.1	0.0954	ng/kg	Y
D-2	1,2,3,7,8-PeCDD	0.373	5.37		1	5.37	ng/kg	Y
D-2	1,2,3,7,8-PeCDF	0.513	3.76	J	0.03	0.1128	ng/kg	Y
D-2	2,3,4,6,7,8-HxCDF	0.691	3.07	J	0.1	0.307	ng/kg	Y
D-2	2,3,4,7,8-PeCDF	0.666	4.11		0.3	1.233	ng/kg	Y
D-2	2,3,7,8-TCDD	0.173	1.6		1	1.6	ng/kg	Y
D-2	2,3,7,8-TCDF	0.234	104		0.1	10.4	ng/kg	Y
D-2	OCDD	1.72	627		0.0003	0.1881	ng/kg	Y
D-2	OCDF	1.51	41.9		0.0003	0.01257	ng/kg	Y
D-2	**Dioxin/Furan TEQ**		**25.1**	**JT**	**--**	**--**	**ng/kg**	**Y**

Sample ID	Congener	EDL	Result	Qualifier	TEF	TEQ(a)	Units	Detected?
D-3A	1,2,3,4,6,7,8-HpCDD	0.737	43.3		0.01	0.433	ng/kg	Y
D-3A	1,2,3,4,6,7,8-HpCDF	1.09	9.97		0.01	0.0997	ng/kg	Y
D-3A	1,2,3,4,7,8,9-HpCDF	0.86	0.669	J	0.01	0.00669	ng/kg	Y
D-3A	1,2,3,4,7,8-HxCDD	0.755	2.8		0.1	0.28	ng/kg	Y
D-3A	1,2,3,4,7,8-HxCDF	0.702	1.41	J	0.1	0.141	ng/kg	Y
D-3A	1,2,3,6,7,8-HxCDD	0.644	4.5		0.1	0.45	ng/kg	Y
D-3A	1,2,3,6,7,8-HxCDF	0.269	1.43		0.1	0.143	ng/kg	Y
D-3A	1,2,3,7,8,9-HxCDD	0.467	3.21		0.1	0.321	ng/kg	Y
D-3A	1,2,3,7,8,9-HxCDF	0.877	0.541		0.1	0.0541	ng/kg	Y
D-3A	1,2,3,7,8-PeCDD	0.369	3.15		1	3.15	ng/kg	Y
D-3A	1,2,3,7,8-PeCDF	0.507	2.28	J	0.03	0.0684	ng/kg	Y
D-3A	2,3,4,6,7,8-HxCDF	0.683	1.6	J	0.1	0.16	ng/kg	Y
D-3A	2,3,4,7,8-PeCDF	0.659	2.39		0.3	0.717	ng/kg	Y
D-3A	2,3,7,8-TCDD	0.171	1.08	U	1	0.54	ng/kg	N
D-3A	2,3,7,8-TCDF	0.231	14.1		0.1	1.41	ng/kg	Y
D-3A	OCDD	1.7	241		0.0003	0.0723	ng/kg	Y
D-3A	OCDF	1.49	15.9		0.0003	0.00477	ng/kg	Y
D-3A	**Dioxin/Furan TEQ**		**8.1**	**JT**	**--**	**--**	**ng/kg**	**Y**
D-3B	1,2,3,4,6,7,8-HpCDD	0.738	141		0.01	1.41	ng/kg	Y
D-3B	1,2,3,4,6,7,8-HpCDF	1.09	34.2		0.01	0.342	ng/kg	Y
D-3B	1,2,3,4,7,8,9-HpCDF	0.861	1.87		0.01	0.0187	ng/kg	Y
D-3B	1,2,3,4,7,8-HxCDD	0.756	6.65		0.1	0.665	ng/kg	Y
D-3B	1,2,3,4,7,8-HxCDF	0.703	3.77	J	0.1	0.377	ng/kg	Y
D-3B	1,2,3,6,7,8-HxCDD	0.645	11.8		0.1	1.18	ng/kg	Y
D-3B	1,2,3,6,7,8-HxCDF	0.27	3.42		0.1	0.342	ng/kg	Y
D-3B	1,2,3,7,8,9-HxCDD	0.468	7.83		0.1	0.783	ng/kg	Y
D-3B	1,2,3,7,8,9-HxCDF	0.878	1.14		0.1	0.114	ng/kg	Y
D-3B	1,2,3,7,8-PeCDD	0.369	7.12		1	7.12	ng/kg	Y
D-3B	1,2,3,7,8-PeCDF	0.508	5.73	J	0.03	0.1719	ng/kg	Y
D-3B	2,3,4,6,7,8-HxCDF	0.684	4.16	J	0.1	0.416	ng/kg	Y
D-3B	2,3,4,7,8-PeCDF	0.659	6.29		0.3	1.887	ng/kg	Y
D-3B	2,3,7,8-TCDD	0.171	2.39		1	2.39	ng/kg	Y
D-3B	2,3,7,8-TCDF	0.231	86		0.1	8.6	ng/kg	Y
D-3B	OCDD	1.7	740		0.0003	0.222	ng/kg	Y
D-3B	OCDF	1.49	57.1		0.0003	0.01713	ng/kg	Y
D-3B	**Dioxin/Furan TEQ**		**26.1**	**JT**	**--**	**--**	**ng/kg**	**Y**
D-4A	1,2,3,4,6,7,8-HpCDD	0.745	2.07	U	0.01	0.01035	ng/kg	N
D-4A	1,2,3,4,6,7,8-HpCDF	1.1	0.127	U	0.01	0.000635	ng/kg	N
D-4A	1,2,3,4,7,8,9-HpCDF	0.0596	0.0596	U	0.01	0.000298	ng/kg	N
D-4A	1,2,3,4,7,8-HxCDD	0.763	0.129	U	0.1	0.00645	ng/kg	N
D-4A	1,2,3,4,7,8-HxCDF	0.709	0.0576	U	0.1	0.00288	ng/kg	N
D-4A	1,2,3,6,7,8-HxCDD	0.65	0.153		0.1	0.0153	ng/kg	Y
D-4A	1,2,3,6,7,8-HxCDF	0.0437	0.993	U	0.1	0.002185	ng/kg	N
D-4A	1,2,3,7,8,9-HxCDD	0.472	0.211	U	0.1	0.01055	ng/kg	N
D-4A	1,2,3,7,8,9-HxCDF	0.886	0.0735	U	0.1	0.003675	ng/kg	N
D-4A	1,2,3,7,8-PeCDD	0.372	0.0973	U	1	0.04865	ng/kg	N
D-4A	1,2,3,7,8-PeCDF	0.512	0.123	U	0.03	0.001845	ng/kg	N

Sample ID	Congener	EDL	Result	Qualifier	TEF	TEQ(a)	Units	Detected?
D-4A	2,3,4,6,7,8-HxCDF	0.0477	0.0477	U	0.1	0.002385	ng/kg	N
D-4A	2,3,4,7,8-PeCDF	0.0636	0.0636	U	0.3	0.00954	ng/kg	N
D-4A	2,3,7,8-TCDD	0.173	0.145	U	1	0.0725	ng/kg	N
D-4A	2,3,7,8-TCDF	0.233	0.109	U	0.1	0.00545	ng/kg	N
D-4A	OCDD	1.72	12.7	U	0.0003	0.001905	ng/kg	N
D-4A	OCDF	1.51	0.222	U	0.0003	0.0000333	ng/kg	N
D-4A	**Dioxin/Furan TEQ**		**0.2**	**T**	**--**	**--**	**ng/kg**	**Y**
D-4B	1,2,3,4,6,7,8-HpCDD	0.737	57.3		0.01	0.573	ng/kg	Y
D-4B	1,2,3,4,6,7,8-HpCDF	1.09	13.4		0.01	0.134	ng/kg	Y
D-4B	1,2,3,4,7,8,9-HpCDF	0.86	0.946	J	0.01	0.00946	ng/kg	Y
D-4B	1,2,3,4,7,8-HxCDD	0.755	2.91		0.1	0.291	ng/kg	Y
D-4B	1,2,3,4,7,8-HxCDF	0.702	1.8	J	0.1	0.18	ng/kg	Y
D-4B	1,2,3,6,7,8-HxCDD	0.644	4.77		0.1	0.477	ng/kg	Y
D-4B	1,2,3,6,7,8-HxCDF	0.269	1.56		0.1	0.156	ng/kg	Y
D-4B	1,2,3,7,8,9-HxCDD	0.467	3.31		0.1	0.331	ng/kg	Y
D-4B	1,2,3,7,8,9-HxCDF	0.877	0.82		0.1	0.082	ng/kg	Y
D-4B	1,2,3,7,8-PeCDD	0.369	3.14		1	3.14	ng/kg	Y
D-4B	1,2,3,7,8-PeCDF	0.507	2.2	J	0.03	0.066	ng/kg	Y
D-4B	2,3,4,6,7,8-HxCDF	0.683	1.82	J	0.1	0.182	ng/kg	Y
D-4B	2,3,4,7,8-PeCDF	0.659	2.6		0.3	0.78	ng/kg	Y
D-4B	2,3,7,8-TCDD	0.171	0.991	U	1	0.4955	ng/kg	N
D-4B	2,3,7,8-TCDF	0.231	31.5		0.1	3.15	ng/kg	Y
D-4B	OCDD	1.7	388		0.0003	0.1164	ng/kg	Y
D-4B	OCDF	1.49	18.9		0.0003	0.00567	ng/kg	Y
D-4B	**Dioxin/Furan TEQ**		**10.2**	**JT**	**--**	**--**	**ng/kg**	**Y**
D-5A	1,2,3,4,6,7,8-HpCDD	0.742	1	U	0.01	0.005	ng/kg	N
D-5A	1,2,3,4,6,7,8-HpCDF	1.1	0.111	U	0.01	0.000555	ng/kg	N
D-5A	1,2,3,4,7,8,9-HpCDF	0.0534	0.0534	U	0.01	0.000267	ng/kg	N
D-5A	1,2,3,4,7,8-HxCDD	0.0475	0.0475	U	0.1	0.002375	ng/kg	N
D-5A	1,2,3,4,7,8-HxCDF	0.0317	0.0317	U	0.1	0.001585	ng/kg	N
D-5A	1,2,3,6,7,8-HxCDD	0.648	0.095	U	0.1	0.00475	ng/kg	N
D-5A	1,2,3,6,7,8-HxCDF	0.271	0.0593		0.1	0.00593	ng/kg	Y
D-5A	1,2,3,7,8,9-HxCDD	0.47	0.194		0.1	0.0194	ng/kg	Y
D-5A	1,2,3,7,8,9-HxCDF	0.882	0.101	U	0.1	0.00505	ng/kg	N
D-5A	1,2,3,7,8-PeCDD	0.371	0.0851		1	0.0851	ng/kg	Y
D-5A	1,2,3,7,8-PeCDF	0.51	0.0653	U	0.03	0.0009795	ng/kg	N
D-5A	2,3,4,6,7,8-HxCDF	0.687	0.0455		0.1	0.00455	ng/kg	Y
D-5A	2,3,4,7,8-PeCDF	0.0376	0.0376	U	0.3	0.00564	ng/kg	N
D-5A	2,3,7,8-TCDD	0.172	0.125	U	1	0.0625	ng/kg	N
D-5A	2,3,7,8-TCDF	0.0336	0.0336	U	0.1	0.00168	ng/kg	N
D-5A	OCDD	1.71	7.41	U	0.0003	0.0011115	ng/kg	N
D-5A	OCDF	1.5	0.346		0.0003	0.0001038	ng/kg	Y
D-5A	**Dioxin/Furan TEQ**		**0.2**	**T**	**--**	**--**	**ng/kg**	**Y**

Sample ID	Congener	EDL	Result	Qualifier	TEF	TEQ(a)	Units	Detected?
D-5B	1,2,3,4,6,7,8-HpCDD	0.743	2.11	U	0.01	0.01055	ng/kg	N
D-5B	1,2,3,4,6,7,8-HpCDF	1.1	0.475	U	0.01	0.002375	ng/kg	N
D-5B	1,2,3,4,7,8,9-HpCDF	0.866	0.149	U	0.01	0.000745	ng/kg	N
D-5B	1,2,3,4,7,8-HxCDD	0.76	0.125	U	0.1	0.00625	ng/kg	N
D-5B	1,2,3,4,7,8-HxCDF	0.707	0.107	J	0.1	0.0107	ng/kg	Y
D-5B	1,2,3,6,7,8-HxCDD	0.649	0.248	U	0.1	0.0124	ng/kg	N
D-5B	1,2,3,6,7,8-HxCDF	0.271	0.097	U	0.1	0.00485	ng/kg	N
D-5B	1,2,3,7,8,9-HxCDD	0.47	0.313		0.1	0.0313	ng/kg	Y
D-5B	1,2,3,7,8,9-HxCDF	0.883	0.18	U	0.1	0.009	ng/kg	N
D-5B	1,2,3,7,8-PeCDD	0.371	0.162	U	1	0.081	ng/kg	N
D-5B	1,2,3,7,8-PeCDF	0.511	0.129	U	0.03	0.001935	ng/kg	N
D-5B	2,3,4,6,7,8-HxCDF	0.688	0.0891	U	0.1	0.004455	ng/kg	N
D-5B	2,3,4,7,8-PeCDF	0.663	0.117	U	0.3	0.01755	ng/kg	N
D-5B	2,3,7,8-TCDD	0.172	0.186	U	1	0.093	ng/kg	N
D-5B	2,3,7,8-TCDF	0.233	1.51		0.1	0.151	ng/kg	Y
D-5B	OCDD	1.71	17.4	U	0.0003	0.00261	ng/kg	N
D-5B	OCDF	1.5	0.952		0.0003	0.0002856	ng/kg	Y
D-5B	**Dioxin/Furan TEQ**		**0.4**	**JT**	**--**	**--**	**ng/kg**	**Y**
D-6A	1,2,3,4,6,7,8-HpCDD	0.744	1.37	U	0.01	0.00685	ng/kg	N
D-6A	1,2,3,4,6,7,8-HpCDF	1.1	0.107	U	0.01	0.000535	ng/kg	N
D-6A	1,2,3,4,7,8,9-HpCDF	0.868	0.0456	J	0.01	0.000456	ng/kg	Y
D-6A	1,2,3,4,7,8-HxCDD	0.0516	0.0516	U	0.1	0.00258	ng/kg	N
D-6A	1,2,3,4,7,8-HxCDF	0.0317	0.0317	U	0.1	0.001585	ng/kg	N
D-6A	1,2,3,6,7,8-HxCDD	0.0536	0.0536	U	0.1	0.00268	ng/kg	N
D-6A	1,2,3,6,7,8-HxCDF	0.272	0.0298	U	0.1	0.00149	ng/kg	N
D-6A	1,2,3,7,8,9-HxCDD	0.471	0.131	U	0.1	0.00655	ng/kg	N
D-6A	1,2,3,7,8,9-HxCDF	0.885	0.0853		0.1	0.00853	ng/kg	Y
D-6A	1,2,3,7,8-PeCDD	0.0516	0.0516	U	1	0.0258	ng/kg	N
D-6A	1,2,3,7,8-PeCDF	0.0337	0.0337	U	0.03	0.0005055	ng/kg	N
D-6A	2,3,4,6,7,8-HxCDF	0.689	0.0456	U	0.1	0.00228	ng/kg	N
D-6A	2,3,4,7,8-PeCDF	0.0357	0.0357	U	0.3	0.005355	ng/kg	N
D-6A	2,3,7,8-TCDD	0.0317	0.0317	U	1	0.01585	ng/kg	N
D-6A	2,3,7,8-TCDF	0.0198	0.0198	U	0.1	0.00099	ng/kg	N
D-6A	OCDD	1.72	13.2	U	0.0003	0.00198	ng/kg	N
D-6A	OCDF	1.5	0.518	J	0.0003	0.0001554	ng/kg	Y
D-6A	**Dioxin/Furan TEQ**		**0.1**	**JT**	**--**	**--**	**ng/kg**	**Y**
D-6B	1,2,3,4,6,7,8-HpCDD	0.741	1.45	U	0.01	0.00725	ng/kg	N
D-6B	1,2,3,4,6,7,8-HpCDF	1.1	0.292	U	0.01	0.00146	ng/kg	N
D-6B	1,2,3,4,7,8,9-HpCDF	0.865	0.241	J	0.01	0.00241	ng/kg	Y
D-6B	1,2,3,4,7,8-HxCDD	0.759	0.107	U	0.1	0.00535	ng/kg	N
D-6B	1,2,3,4,7,8-HxCDF	0.706	0.0909	J	0.1	0.00909	ng/kg	Y
D-6B	1,2,3,6,7,8-HxCDD	0.647	0.15	U	0.1	0.0075	ng/kg	N
D-6B	1,2,3,6,7,8-HxCDF	0.271	0.115	U	0.1	0.00575	ng/kg	N
D-6B	1,2,3,7,8,9-HxCDD	0.469	0.229	U	0.1	0.01145	ng/kg	N
D-6B	1,2,3,7,8,9-HxCDF	0.881	0.14	U	0.1	0.007	ng/kg	N
D-6B	1,2,3,7,8-PeCDD	0.371	0.0988	U	1	0.0494	ng/kg	N

Sample ID	Congener	EDL	Result	Qualifier	TEF	TEQ(a)	Units	Detected?
D-6B	1,2,3,7,8-PeCDF	0.51	0.081	U	0.03	0.001215	ng/kg	N
D-6B	2,3,4,6,7,8-HxCDF	0.687	0.136	U	0.1	0.0068	ng/kg	N
D-6B	2,3,4,7,8-PeCDF	0.662	0.0711	U	0.3	0.010665	ng/kg	N
D-6B	2,3,7,8-TCDD	0.0336	0.0336	U	1	0.0168	ng/kg	N
D-6B	2,3,7,8-TCDF	0.232	0.0455	U	0.1	0.002275	ng/kg	N
D-6B	OCDD	1.71	19.6	U	0.0003	0.00294	ng/kg	N
D-6B	OCDF	1.5	1.52		0.0003	0.000228	ng/kg	N
D-6B	**Dioxin/Furan TEQ**		**0.1**	**JT**	**--**	**--**	**ng/kg**	**Y**
D-7	1,2,3,4,6,7,8-HpCDD	0.746	108		0.01	1.08	ng/kg	Y
D-7	1,2,3,4,6,7,8-HpCDF	1.1	30.6		0.01	0.306	ng/kg	Y
D-7	1,2,3,4,7,8,9-HpCDF	0.871	1.48		0.01	0.0148	ng/kg	Y
D-7	1,2,3,4,7,8-HxCDD	0.764	3.25		0.1	0.325	ng/kg	Y
D-7	1,2,3,4,7,8-HxCDF	0.71	2.05	J	0.1	0.205	ng/kg	Y
D-7	1,2,3,6,7,8-HxCDD	0.652	6.35		0.1	0.635	ng/kg	Y
D-7	1,2,3,6,7,8-HxCDF	0.273	1.59		0.1	0.159	ng/kg	Y
D-7	1,2,3,7,8,9-HxCDD	0.473	3.77		0.1	0.377	ng/kg	Y
D-7	1,2,3,7,8,9-HxCDF	0.888	0.647		0.1	0.0647	ng/kg	Y
D-7	1,2,3,7,8-PeCDD	0.373	3.09		1	3.09	ng/kg	Y
D-7	1,2,3,7,8-PeCDF	0.513	2.63	J	0.03	0.0789	ng/kg	Y
D-7	2,3,4,6,7,8-HxCDF	0.692	1.98	J	0.1	0.198	ng/kg	Y
D-7	2,3,4,7,8-PeCDF	0.667	3.15		0.3	0.945	ng/kg	Y
D-7	2,3,7,8-TCDD	0.173	1.13		1	1.13	ng/kg	Y
D-7	2,3,7,8-TCDF	0.234	60.3		0.1	6.03	ng/kg	Y
D-7	OCDD	1.72	749	U	0.0003	0.11235	ng/kg	N
D-7	OCDF	1.51	94.3		0.0003	0.02829	ng/kg	Y
D-7	**Dioxin/Furan TEQ**		**14.8**	**JT**	**--**	**--**	**ng/kg**	**Y**
PT-10-36.0-37.0	1,2,3,4,6,7,8-HpCDD	0.743	2.1	U	0.01	0.0105	ng/kg	N
PT-10-36.0-37.0	1,2,3,4,6,7,8-HpCDF	1.1	0.427	U	0.01	0.002135	ng/kg	N
PT-10-36.0-37.0	1,2,3,4,7,8,9-HpCDF	0.866	0.246	U	0.01	0.00123	ng/kg	N
PT-10-36.0-37.0	1,2,3,4,7,8-HxCDD	0.76	0.248		0.1	0.0248	ng/kg	Y
PT-10-36.0-37.0	1,2,3,4,7,8-HxCDF	0.707	0.323	J	0.1	0.0323	ng/kg	Y
PT-10-36.0-37.0	1,2,3,6,7,8-HxCDD	0.649	0.281	U	0.1	0.01405	ng/kg	N
PT-10-36.0-37.0	1,2,3,6,7,8-HxCDF	0.271	0.271	U	0.1	0.01355	ng/kg	N
PT-10-36.0-37.0	1,2,3,7,8,9-HxCDD	0.47	0.371		0.1	0.0371	ng/kg	Y
PT-10-36.0-37.0	1,2,3,7,8,9-HxCDF	0.883	0.269	U	0.1	0.01345	ng/kg	N
PT-10-36.0-37.0	1,2,3,7,8-PeCDD	0.371	0.317	U	1	0.1585	ng/kg	N
PT-10-36.0-37.0	1,2,3,7,8-PeCDF	0.511	0.41	U	0.03	0.00615	ng/kg	N
PT-10-36.0-37.0	2,3,4,6,7,8-HxCDF	0.688	0.259		0.1	0.0259	ng/kg	Y
PT-10-36.0-37.0	2,3,4,7,8-PeCDF	0.663	0.352	U	0.3	0.0528	ng/kg	N
PT-10-36.0-37.0	2,3,7,8-TCDD	0.172	0.244	U	1	0.122	ng/kg	N
PT-10-36.0-37.0	2,3,7,8-TCDF	0.233	1.09		0.1	0.109	ng/kg	Y
PT-10-36.0-37.0	OCDD	1.71	15.6	U	0.0003	0.00234	ng/kg	N
PT-10-36.0-37.0	OCDF	1.5	0.547	U	0.0003	0.00008205	ng/kg	N
PT-10-36.0-37.0	**Dioxin/Furan TEQ**		**0.6**	**JT**	**--**	**--**	**ng/kg**	**Y**

Sample ID	Congener	EDL	Result	Qualifier	TEF	TEQ(a)	Units	Detected?
PT-11-36.0-37.0	1,2,3,4,6,7,8-HpCDD	0.738	0.747	U	0.01	0.003735	ng/kg	N
PT-11-36.0-37.0	1,2,3,4,6,7,8-HpCDF	1.09	0.0768	U	0.01	0.000384	ng/kg	N
PT-11-36.0-37.0	1,2,3,4,7,8,9-HpCDF	0.0335	0.0335	U	0.01	0.0001675	ng/kg	N
PT-11-36.0-37.0	1,2,3,4,7,8-HxCDD	0.756	0.0453	U	0.1	0.002265	ng/kg	N
PT-11-36.0-37.0	1,2,3,4,7,8-HxCDF	0.0236	0.0236	U	0.1	0.00118	ng/kg	N
PT-11-36.0-37.0	1,2,3,6,7,8-HxCDD	0.645	0.0719		0.1	0.00719	ng/kg	Y
PT-11-36.0-37.0	1,2,3,6,7,8-HxCDF	0.0217	0.0217	U	0.1	0.001085	ng/kg	N
PT-11-36.0-37.0	1,2,3,7,8,9-HxCDD	0.468	0.0943		0.1	0.00943	ng/kg	Y
PT-11-36.0-37.0	1,2,3,7,8,9-HxCDF	0.878	0.0906	U	0.1	0.00453	ng/kg	N
PT-11-36.0-37.0	1,2,3,7,8-PeCDD	0.369	0.0571	U	1	0.02855	ng/kg	N
PT-11-36.0-37.0	1,2,3,7,8-PeCDF	0.508	0.0559		0.03	0.001677	ng/kg	Y
PT-11-36.0-37.0	2,3,4,6,7,8-HxCDF	0.684	0.0374	U	0.1	0.00187	ng/kg	N
PT-11-36.0-37.0	2,3,4,7,8-PeCDF	0.0394	0.0394	U	0.3	0.00591	ng/kg	N
PT-11-36.0-37.0	2,3,7,8-TCDD	0.0295	0.0295	U	1	0.01475	ng/kg	N
PT-11-36.0-37.0	2,3,7,8-TCDF	0.0236	0.0236	U	0.1	0.00118	ng/kg	N
PT-11-36.0-37.0	OCDD	1.7	7.57	U	0.0003	0.0011355	ng/kg	N
PT-11-36.0-37.0	OCDF	1.49	0.167	U	0.0003	0.00002505	ng/kg	N
PT-11-36.0-37.0	**Dioxin/Furan TEQ**		**0.1**	**T**	**--**	**--**	**ng/kg**	**Y**
PT-12-30.0-31.0	1,2,3,4,6,7,8-HpCDD	0.746	57.3		0.01	0.573	ng/kg	Y
PT-12-30.0-31.0	1,2,3,4,6,7,8-HpCDF	1.1	6.01		0.01	0.0601	ng/kg	Y
PT-12-30.0-31.0	1,2,3,4,7,8,9-HpCDF	0.87	1.37		0.01	0.0137	ng/kg	Y
PT-12-30.0-31.0	1,2,3,4,7,8-HxCDD	0.763	3.78		0.1	0.378	ng/kg	Y
PT-12-30.0-31.0	1,2,3,4,7,8-HxCDF	0.71	1.92	J	0.1	0.192	ng/kg	Y
PT-12-30.0-31.0	1,2,3,6,7,8-HxCDD	0.651	5.38		0.1	0.538	ng/kg	Y
PT-12-30.0-31.0	1,2,3,6,7,8-HxCDF	0.272	2.12		0.1	0.212	ng/kg	Y
PT-12-30.0-31.0	1,2,3,7,8,9-HxCDD	0.472	4.57		0.1	0.457	ng/kg	Y
PT-12-30.0-31.0	1,2,3,7,8,9-HxCDF	0.887	0.866	J	0.1	0.0866	ng/kg	Y
PT-12-30.0-31.0	1,2,3,7,8-PeCDD	0.373	2.87		1	2.87	ng/kg	Y
PT-12-30.0-31.0	1,2,3,7,8-PeCDF	0.513	1.83	J	0.03	0.0549	ng/kg	Y
PT-12-30.0-31.0	2,3,4,6,7,8-HxCDF	0.691	2.58	J	0.1	0.258	ng/kg	Y
PT-12-30.0-31.0	2,3,4,7,8-PeCDF	0.666	2.53		0.3	0.759	ng/kg	Y
PT-12-30.0-31.0	2,3,7,8-TCDD	0.173	0.672	U	1	0.336	ng/kg	N
PT-12-30.0-31.0	2,3,7,8-TCDF	0.234	3.44		0.1	0.344	ng/kg	Y
PT-12-30.0-31.0	OCDD	1.72	65.8	U	0.0003	0.00987	ng/kg	N
PT-12-30.0-31.0	OCDF	1.51	3.83		0.0003	0.001149	ng/kg	Y
PT-12-30.0-31.0	**Dioxin/Furan TEQ**		**7.1**	**JT**	**--**	**--**	**ng/kg**	**Y**
PT-13-29.0-30.0	1,2,3,4,6,7,8-HpCDD	0.735	1.08	U	0.01	0.0054	ng/kg	N
PT-13-29.0-30.0	1,2,3,4,6,7,8-HpCDF	1.09	0.18	U	0.01	0.0009	ng/kg	N
PT-13-29.0-30.0	1,2,3,4,7,8,9-HpCDF	0.047	0.047	U	0.01	0.000235	ng/kg	N
PT-13-29.0-30.0	1,2,3,4,7,8-HxCDD	0.752	0.104		0.1	0.0104	ng/kg	Y
PT-13-29.0-30.0	1,2,3,4,7,8-HxCDF	0.699	0.0392	U	0.1	0.00196	ng/kg	N
PT-13-29.0-30.0	1,2,3,6,7,8-HxCDD	0.642	0.0725	U	0.1	0.003625	ng/kg	N
PT-13-29.0-30.0	1,2,3,6,7,8-HxCDF	0.268	0.0541		0.1	0.00541	ng/kg	Y
PT-13-29.0-30.0	1,2,3,7,8,9-HxCDD	0.465	0.165	U	0.1	0.00825	ng/kg	N
PT-13-29.0-30.0	1,2,3,7,8,9-HxCDF	0.874	0.0995		0.1	0.00995	ng/kg	Y
PT-13-29.0-30.0	1,2,3,7,8-PeCDD	0.367	0.0627	U	1	0.03135	ng/kg	N
PT-13-29.0-30.0	1,2,3,7,8-PeCDF	0.505	0.0337		0.03	0.001011	ng/kg	Y

Sample ID	Congener	EDL	Result	Qualifier	TEF	TEQ(a)	Units	Detected?
PT-13-29.0-30.0	2,3,4,6,7,8-HxCDF	0.0313	0.0313	U	0.1	0.001565	ng/kg	N
PT-13-29.0-30.0	2,3,4,7,8-PeCDF	0.0372	0.0372	U	0.3	0.00558	ng/kg	N
PT-13-29.0-30.0	2,3,7,8-TCDD	0.0274	0.0274	U	1	0.0137	ng/kg	N
PT-13-29.0-30.0	2,3,7,8-TCDF	0.0235	0.0235	U	0.1	0.001175	ng/kg	N
PT-13-29.0-30.0	OCDD	1.7	10.7	U	0.0003	0.001605	ng/kg	N
PT-13-29.0-30.0	OCDF	1.48	0.749		0.0003	0.0002247	ng/kg	Y
PT-13-29.0-30.0	**Dioxin/Furan TEQ**		**0.1**	**T**	**--**	**--**	**ng/kg**	**Y**
PT-14-29.0-30.0	1,2,3,4,6,7,8-HpCDD	0.746	0.836	U	0.01	0.00418	ng/kg	N
PT-14-29.0-30.0	1,2,3,4,6,7,8-HpCDF	1.1	0.0577	U	0.01	0.0002885	ng/kg	N
PT-14-29.0-30.0	1,2,3,4,7,8,9-HpCDF	0.179	0.179	U	0.01	0.000895	ng/kg	N
PT-14-29.0-30.0	1,2,3,4,7,8-HxCDD	0.764	0.0412		0.1	0.00412	ng/kg	Y
PT-14-29.0-30.0	1,2,3,4,7,8-HxCDF	0.0219	0.0219	U	0.1	0.001095	ng/kg	N
PT-14-29.0-30.0	1,2,3,6,7,8-HxCDD	0.652	0.0517	U	0.1	0.002585	ng/kg	N
PT-14-29.0-30.0	1,2,3,6,7,8-HxCDF	0.0219	0.0219	U	0.1	0.001095	ng/kg	N
PT-14-29.0-30.0	1,2,3,7,8,9-HxCDD	0.0398	0.0398	U	0.1	0.00199	ng/kg	N
PT-14-29.0-30.0	1,2,3,7,8,9-HxCDF	0.888	0.0756	U	0.1	0.00378	ng/kg	N
PT-14-29.0-30.0	1,2,3,7,8-PeCDD	0.0398	0.0398	U	1	0.0199	ng/kg	N
PT-14-29.0-30.0	1,2,3,7,8-PeCDF	0.513	0.0577	U	0.03	0.0008655	ng/kg	N
PT-14-29.0-30.0	2,3,4,6,7,8-HxCDF	0.0219	0.0219	U	0.1	0.001095	ng/kg	N
PT-14-29.0-30.0	2,3,4,7,8-PeCDF	0.0318	0.0318	U	0.3	0.00477	ng/kg	N
PT-14-29.0-30.0	2,3,7,8-TCDD	0.173	0.151	U	1	0.0755	ng/kg	N
PT-14-29.0-30.0	2,3,7,8-TCDF	0.0259	0.0259	U	0.1	0.001295	ng/kg	N
PT-14-29.0-30.0	OCDD	1.72	4.89	U	0.0003	0.0007335	ng/kg	N
PT-14-29.0-30.0	OCDF	0.0637	1.99	U	0.0003	0.000009555	ng/kg	N
PT-14-29.0-30.0	**Dioxin/Furan TEQ**		**0.1**	**T**	**--**	**--**	**ng/kg**	**Y**
PT-3-43.0-44.0	1,2,3,4,6,7,8-HpCDD	0.743	2.02	U	0.01	0.0101	ng/kg	N
PT-3-43.0-44.0	1,2,3,4,6,7,8-HpCDF	1.1	0.268	U	0.01	0.00134	ng/kg	N
PT-3-43.0-44.0	1,2,3,4,7,8,9-HpCDF	0.867	0.2	U	0.01	0.001	ng/kg	N
PT-3-43.0-44.0	1,2,3,4,7,8-HxCDD	0.761	0.0894		0.1	0.00894	ng/kg	Y
PT-3-43.0-44.0	1,2,3,4,7,8-HxCDF	0.708	0.0614	U	0.1	0.00307	ng/kg	N
PT-3-43.0-44.0	1,2,3,6,7,8-HxCDD	0.649	0.123	U	0.1	0.00615	ng/kg	N
PT-3-43.0-44.0	1,2,3,6,7,8-HxCDF	0.272	0.0396	U	0.1	0.00198	ng/kg	N
PT-3-43.0-44.0	1,2,3,7,8,9-HxCDD	0.471	0.165	U	0.1	0.00825	ng/kg	N
PT-3-43.0-44.0	1,2,3,7,8,9-HxCDF	0.0337	0.0337	U	0.1	0.001685	ng/kg	N
PT-3-43.0-44.0	1,2,3,7,8-PeCDD	0.0436	0.0436	U	1	0.0218	ng/kg	N
PT-3-43.0-44.0	1,2,3,7,8-PeCDF	0.511	0.0416	U	0.03	0.000624	ng/kg	N
PT-3-43.0-44.0	2,3,4,6,7,8-HxCDF	0.689	0.0496	U	0.1	0.00248	ng/kg	N
PT-3-43.0-44.0	2,3,4,7,8-PeCDF	0.0278	0.0278	U	0.3	0.00417	ng/kg	N
PT-3-43.0-44.0	2,3,7,8-TCDD	0.0337	0.0337	U	1	0.01685	ng/kg	N
PT-3-43.0-44.0	2,3,7,8-TCDF	0.0258	0.0258	U	0.1	0.00129	ng/kg	N
PT-3-43.0-44.0	OCDD	1.72	20.6	U	0.0003	0.00309	ng/kg	N
PT-3-43.0-44.0	OCDF	1.5	1.5		0.0003	0.00045	ng/kg	Y
PT-3-43.0-44.0	**Dioxin/Furan TEQ**		**0.1**	**T**	**--**	**--**	**ng/kg**	**Y**

Sample ID	Congener	EDL	Result	Qualifier	TEF	TEQ(a)	Units	Detected?
PT-5-43.0-44.0	1,2,3,4,6,7,8-HpCDD	0.736	2.45	U	0.01	0.01225	ng/kg	N
PT-5-43.0-44.0	1,2,3,4,6,7,8-HpCDF	1.09	0.475	U	0.01	0.002375	ng/kg	N
PT-5-43.0-44.0	1,2,3,4,7,8,9-HpCDF	0.859	0.194	U	0.01	0.00097	ng/kg	N
PT-5-43.0-44.0	1,2,3,4,7,8-HxCDD	0.754	0.173	U	0.1	0.00865	ng/kg	N
PT-5-43.0-44.0	1,2,3,4,7,8-HxCDF	0.701	0.0569	U	0.1	0.002845	ng/kg	N
PT-5-43.0-44.0	1,2,3,6,7,8-HxCDD	0.643	0.179	U	0.1	0.00895	ng/kg	N
PT-5-43.0-44.0	1,2,3,6,7,8-HxCDF	0.269	0.165	U	0.1	0.00825	ng/kg	N
PT-5-43.0-44.0	1,2,3,7,8,9-HxCDD	0.466	0.457	U	0.1	0.02285	ng/kg	N
PT-5-43.0-44.0	1,2,3,7,8,9-HxCDF	0.875	0.192		0.1	0.0192	ng/kg	Y
PT-5-43.0-44.0	1,2,3,7,8-PeCDD	0.368	0.108	U	1	0.054	ng/kg	N
PT-5-43.0-44.0	1,2,3,7,8-PeCDF	0.506	0.0883	U	0.03	0.0013245	ng/kg	N
PT-5-43.0-44.0	2,3,4,6,7,8-HxCDF	0.682	0.132	U	0.1	0.0066	ng/kg	N
PT-5-43.0-44.0	2,3,4,7,8-PeCDF	0.658	0.0393	U	0.3	0.005895	ng/kg	N
PT-5-43.0-44.0	2,3,7,8-TCDD	0.0334	0.0334	U	1	0.0167	ng/kg	N
PT-5-43.0-44.0	2,3,7,8-TCDF	0.0294	0.0294	U	0.1	0.00147	ng/kg	N
PT-5-43.0-44.0	OCDD	1.7	23.5	U	0.0003	0.003525	ng/kg	N
PT-5-43.0-44.0	OCDF	1.49	2.01	U	0.0003	0.0003015	ng/kg	N
PT-5-43.0-44.0	**Dioxin/Furan TEQ**		**0.2**	**T**	**--**	**--**	**ng/kg**	**Y**
PT-6-43.0-44.0	1,2,3,4,6,7,8-HpCDD	0.745	1.21	U	0.01	0.00605	ng/kg	N
PT-6-43.0-44.0	1,2,3,4,6,7,8-HpCDF	1.1	0.0497	U	0.01	0.0002485	ng/kg	N
PT-6-43.0-44.0	1,2,3,4,7,8,9-HpCDF	0.869	0.0377	U	0.01	0.0001885	ng/kg	N
PT-6-43.0-44.0	1,2,3,4,7,8-HxCDD	0.763	0.0338	U	0.1	0.00169	ng/kg	N
PT-6-43.0-44.0	1,2,3,4,7,8-HxCDF	0.0179	0.0179	U	0.1	0.000895	ng/kg	N
PT-6-43.0-44.0	1,2,3,6,7,8-HxCDD	0.0397	0.0397	U	0.1	0.001985	ng/kg	N
PT-6-43.0-44.0	1,2,3,6,7,8-HxCDF	0.0179	0.0179	U	0.1	0.000895	ng/kg	N
PT-6-43.0-44.0	1,2,3,7,8,9-HxCDD	0.472	0.0775	U	0.1	0.003875	ng/kg	N
PT-6-43.0-44.0	1,2,3,7,8,9-HxCDF	0.886	0.0397	U	0.1	0.001985	ng/kg	N
PT-6-43.0-44.0	1,2,3,7,8-PeCDD	0.0417	0.0417	U	1	0.02085	ng/kg	N
PT-6-43.0-44.0	1,2,3,7,8-PeCDF	0.0278	0.0278	U	0.03	0.000417	ng/kg	N
PT-6-43.0-44.0	2,3,4,6,7,8-HxCDF	0.0199	0.0199	U	0.1	0.000995	ng/kg	N
PT-6-43.0-44.0	2,3,4,7,8-PeCDF	0.0278	0.0278	U	0.3	0.00417	ng/kg	N
PT-6-43.0-44.0	2,3,7,8-TCDD	0.0357	0.0357	U	1	0.01785	ng/kg	N
PT-6-43.0-44.0	2,3,7,8-TCDF	0.0238	0.0238	U	0.1	0.00119	ng/kg	N
PT-6-43.0-44.0	OCDD	1.72	16.2	U	0.0003	0.00243	ng/kg	N
PT-6-43.0-44.0	OCDF	1.51	0.213	U	0.0003	0.00003195	ng/kg	N
PT-6-43.0-44.0	**Dioxin/Furan TEQ**		**0.1**	**UT**	**--**	**--**	**ng/kg**	**N**
PT-8-43.0-44.0	1,2,3,4,6,7,8-HpCDD	0.74	2.38	U	0.01	0.0119	ng/kg	N
PT-8-43.0-44.0	1,2,3,4,6,7,8-HpCDF	1.09	0.807	U	0.01	0.004035	ng/kg	N
PT-8-43.0-44.0	1,2,3,4,7,8,9-HpCDF	0.863	0.465	U	0.01	0.002325	ng/kg	N
PT-8-43.0-44.0	1,2,3,4,7,8-HxCDD	0.757	0.353	U	0.1	0.01765	ng/kg	N
PT-8-43.0-44.0	1,2,3,4,7,8-HxCDF	0.704	0.41	U	0.1	0.0205	ng/kg	N
PT-8-43.0-44.0	1,2,3,6,7,8-HxCDD	0.646	0.432		0.1	0.0432	ng/kg	Y
PT-8-43.0-44.0	1,2,3,6,7,8-HxCDF	0.27	0.424	U	0.1	0.0212	ng/kg	N

Sample ID	Congener	EDL	Result	Qualifier	TEF	TEQ(a)	Units	Detected?
PT-8-43.0-44.0	1,2,3,7,8,9-HxCDD	0.468	0.758		0.1	0.0758	ng/kg	Y
PT-8-43.0-44.0	1,2,3,7,8,9-HxCDF	0.88	0.465	U	0.1	0.02325	ng/kg	N
PT-8-43.0-44.0	1,2,3,7,8-PeCDD	0.37	0.284	U	1	0.142	ng/kg	N
PT-8-43.0-44.0	1,2,3,7,8-PeCDF	0.509	0.234		0.03	0.00702	ng/kg	Y
PT-8-43.0-44.0	2,3,4,6,7,8-HxCDF	0.685	0.316	U	0.1	0.0158	ng/kg	N
PT-8-43.0-44.0	2,3,4,7,8-PeCDF	0.661	0.147	J	0.3	0.0441	ng/kg	Y
PT-8-43.0-44.0	2,3,7,8-TCDD	0.172	0.148	U	1	0.074	ng/kg	N
PT-8-43.0-44.0	2,3,7,8-TCDF	0.232	0.0592	U	0.1	0.00296	ng/kg	N
PT-8-43.0-44.0	OCDD	1.71	20.4	U	0.0003	0.00306	ng/kg	N
PT-8-43.0-44.0	OCDF	1.5	2.56		0.0003	0.000768	ng/kg	Y
PT-8-43.0-44.0	**Dioxin/Furan TEQ**		**0.5**	**JT**	**--**	**--**	**ng/kg**	**Y**

Notes:

EDL = estimated detection limit

(a) Undetected values are included in the TEQ calculation as half of the EDL, except in cases where the validator reclassified estimated maximum possible concentrations (EMPCs) as not detected. In those cases, the result was elevated to the EMPC and included in the TEQ as half the reported result.

J = estimated

JT = estimated total

N = no

ng/kg = nanogram per kilogram

TEQ = toxicity equivalent

U = not detected

UT = not detected total

Y = yes

Table 8. Marine Bioassay Performance Standards and Evaluation Guidelines

Bioassay	Negative Control Performance Standard	Reference Sediment Performance Standard	Dispersive Disposal Site Interpretation Guidelines		Nondispersive Disposal Site Interpretation Guidelines	
			1-hit rule	2-hit rule	1-hit rule	2-hit rule
Amphipod Mortality	$M_C \leq 10\%$	$M_R - M_C \leq 20\%$	$M_T - M_C > 20\%$ and M_T vs. M_R SS (p=.05) **AND**			
			$M_T - M_R > 10\%$	NOCN	$M_T - M_R > 30\%$	NOCN
Larval Development	$N_C \div I \geq 0.70$	$N_R \div N_C \geq 0.65$	$N_T \div N_C < 0.80$ and N_T/N_C vs. N_R/N_C SS (p=.10) **AND**			
			$N_R/N_C - N_T/N_C > 0.15$	NOCN	$N_R/N_C - N_T/N_C > 0.30$	NOCN
Neanthes Growth	$M_C \leq 10\%$ and $MIG_C \geq 0.38$	$M_R \leq 20\%$ and $MIG_R \div MIG_C \geq 0.80$	$MIG_T \div MIG_C < 0.80$ and MIG_T vs. MIG_R SS (p=.05) **AND**			
			$MIG_T/MIG_R < 0.70$	NOCN	$MIG_T/MIG_R < 0.50$	$MIG_T/MIG_R < 0.70$

M = mortality
N = normal larvae
I = initial count
MIG = mean individual growth rate (mg/individual/day)
SS = statistically significant
NOCN = no other conditions necessary

Subscripts:
R = reference sediment
C = negative control
T = test sediment

Table 9

Table IV

Marine Sediment Cleanup Objectives and Cleanup Screening Levels Biological Criteria

Biological Test/Endpoint	Performance Standard Control	Performance Standard Reference	Sediment Cleanup Objective for each biological test	Cleanup Screening Level for each biological test
Amphipod				
10-day Mortality	$M_C \leq 10\%$	$M_R \leq 25\%$	$M_T > 25\%$ Absolute and M_T vs M_R SD ($p \leq 0.05$)	$M_T - M_R \geq 30\%$ and M_T vs M_R SD ($p \leq 0.05$)
Larval				
Bivalve or Echinoderm Abnormality/Mortality	$N_C / I \geq 0.70$	$N_R/N_C \geq 0.65$	$(N_R - N_T)/N_C > 0.15$ and N_T/N_C vs N_R/N_C SD ($p \leq 0.10$)	$(N_R - N_T)/N_C > 0.30$ and N_T/N_C vs N_R/N_C SD ($p \leq 0.10$)
Juvenile Polychaete				
***Neanthes* 20-day Growth**	$M_C < 10\%$ and $MIG_C > 0.72$ mg/individual/day (or case-by-case)	$MIG_R / MIG_C > 0.80$	$MIG_T/MIG_R < 0.70$ and MIG_T vs MIG_R SD ($p \leq 0.05$)	$MIG_T/MIG_R < 0.50$ and MIG_T vs MIG_R SD ($p \leq 0.05$)
Microtox				
Microtox Decreased Luminescence	case-by-case	case-by-case	$ML_T / ML_R < 0.80$ and ML_T vs ML_R SD ($p = 0.05$)	
Benthic Abundance				
Benthic Abundance	See Table IV legend		$A_T/A_R < 0.50$ For any one of three major taxa Class Crustacea, Phylum Mollusca or Class Polychaeta	$A_T/A_R < 0.50$ For any two of three major taxa Class Crustacea, Phylum Mollusca or Class Polychaeta

Table 10

Summary of Conventional Parameters Associated with Bioassay Results

Mill A Former Site Interim Action Dredging Project
Everett, Washington

Analyte	Sample Location	Grab
	Sample ID	CARR-REF
	Sample Date	2/24/2015
	Sample Depth	10 cm
Conventionals		
Total Organic Carbon	%	**0.195**
Total Solids	%	**72.8**
Grain Size		
Gravel (≤ -1)	%	**0**
Very coarse sand (-1 < Phi ≤ 0)	%	**0.2**
Coarse sand (0 < Phi ≤ 1)	%	**1.4**
Medium sand (1 < Phi ≤ 2)	%	**33.8**
Fine sand (2 < Phi ≤ 3)	%	**60.7**
Very fine sand (3 < Phi ≤ 4)	%	**2.8**
Total sand	%	**98.9**
Coarse silt (4 < Phi ≤ 5)	%	**<1.1**
Medium silt (5 < Phi ≤ 6)	%	**<1.1**
Fine silt (6 < Phi ≤ 7)	%	**<1.1**
Very fine silt (7 < Phi ≤ 8)	%	**<1.1**
Total silt	%	**<1.1**
Coarse clay (8 < Phi ≤ 9)	%	**<1.1**
Medium clay (9 < Phi ≤ 10)	%	**<1.1**
Particle/Grain Size, Phi >10	%	**<1.1**
Total clay	%	**<1.1**
Total Fines	%	**1.1**

Table 11. Test Results for *Eohaustorius estuarius*.

Treatment	Replicate	Number Initiated	Number Surviving	Percentage Survival	Mean Percentage		Standard Deviation
					Survival	Mortality	
Control	1	20	20	100	100	0	0.0
	2	20	20	100			
	3	20	20	100			
	4	20	20	100			
	5	20	20	100			
CARR-REF	1	20	20	100	98	2	2.7
	2	20	20	100			
	3	20	19	95			
	4	20	20	100			
	5	20	19	95			
D-1	1	20	20	100	98	2	2.7
	2	20	20	100			
	3	20	19	95			
	4	20	20	100			
	5	20	19	95			
D-2	1	20	20	100	96	4	6.5
	2	20	19	95			
	3	20	20	100			
	4	20	17	85			
	5	20	20	100			
D-3A	1	20	20	100	97	3	6.7
	2	20	20	100			
	3	20	20	100			
	4	20	20	100			
	5	20	17	85			
D-3B	1	20	20	100	95	5	6.1
	2	20	17	85			
	3	20	19	95			
	4	20	20	100			
	5	20	19	95			
D-4B	1	20	20	100	96	4	2.2
	2	20	19	95			
	3	20	19	95			
	4	20	19	95			
	5	20	19	95			
D-7	1	20	19	95	92	8	7.6
	2	20	20	100			
	3	20	19	95			
	4	20	16	80			
	5	20	18	90			

Table 12. Test Results for *Neanthes arenaceodentata*.

Treatment	Rep	Number Initiated	Survivors	Mean Mortality (%)	Individual Growth (mg/ind/day)					
					Dry Weight	Mean	Std Dev	AFDW	Mean	Std Dev
Control	1	5	5	0	1.102	1.07	0.1	0.523	0.514	0.036
	2	5	5		0.927			0.454		
	3	5	5		1.132			0.519		
	4	5	5		1.103			0.551		
	5	5	5		1.076			0.521		
CARR-REF	1	5	4	4	0.572	0.714	0.1	0.351	0.400	0.075
	2	5	5		0.903			0.495		
	3	5	5		0.619			0.406		
	4	5	5		0.836			0.444		
	5	5	5		0.641			0.306		
D-1	1	5	5	0	0.771	0.731	0.1	0.565	0.527	0.089
	2	5	5		0.587			0.407		
	3	5	5		0.843			0.594		
	4	5	5		0.863			0.611		
	5	5	5		0.591			0.459		
D-2	1	5	5	0	0.761	0.819	0.0	0.526	0.552	0.025
	2	5	5		0.812			0.563		
	3	5	5		0.898			0.590		
	4	5	5		0.817			0.542		
	5	5	5		0.809			0.539		
D-3A	1	5	5	0	0.727	0.872	0.1	0.516	0.557	0.042
	2	5	5		0.926			0.559		
	3	5	5		0.970			0.608		
	4	5	5		0.844			0.513		
	5	5	5		0.895			0.589		
D-3B	1	5	5	0	0.753	0.745	0.1	0.530	0.539	0.049
	2	5	5		0.747			0.538		
	3	5	5		0.636			0.470		
	4	5	5		0.840			0.608		
	5	5	5		0.748			0.550		
D-4B	1	5	5	0	0.855	0.811	0.0	0.553	0.544	0.016
	2	5	5		0.807			0.555		
	3	5	5		0.821			0.553		
	4	5	5		0.822			0.541		
	5	5	5		0.749			0.518		
D-7	1	5	5	0	0.870	0.879	0.1	0.536	0.539	0.039
	2	5	5		0.764			0.500		
	3	5	5		1.010			0.588		
	4	5	5		0.914			0.569		
	5	5	5		0.840			0.502		

Table 13. Test Results for *Mytilus galloprovincialis*.

Treatment	Replicate	Number Normal	Number Abnormal	Mean # Normal	Normalized Combined Normal Survivorship (%)[1, 2]	Mean Combined Normal Survivorship (%)	Std. Dev.
Control	1	257	14	275.8	85.6	91.2	7.7
	2	310	18		100.0		
	3	246	10		81.9		
	4	272	24		90.6		
	5	294	20		97.9		
CARR-REF	1	213	9	228.4	77.2	82.8	5.3
	2	215	9		78.0		
	3	248	5		89.9		
	4	236	8		85.6		
	5	230	8		83.4		
D-1	1	209	6	157.6	75.8	57.1	11.7
	2	131	7		47.5		
	3	170	13		61.6		
	4	138	6		50.0		
	5	140	8		50.8		
D-2	1	174	16	167.2	63.1	60.6	4.2
	2	148	9		53.7		
	3	177	15		64.2		
	4	166	13		60.2		
	5	171	15		62.0		
D-3A	1	211	4	232.0	76.5	84.1	7.0
	2	226	8		81.9		
	3	223	7		80.9		
	4	262	8		95.0		
	5	238	11		86.3		
D-3B	1	99	19	105.6	35.9	38.3	9.5
	2	78	15		28.3		
	3	131	24		47.5		
	4	85	36		30.8		
	5	135	45		48.9		
D-4B	1	159	3	171.8	57.7	62.3	4.3
	2	185	11		67.1		
	3	182	7		66.0		
	4	161	16		58.4		
	5	172	8		62.4		
D-7	1	215	8	229.6	78.0	83.2	3.7
	2	231	7		83.8		
	3	239	5		86.7		
	4	239	16		86.7		
	5	224	5		81.2		

[1] Control normality normalized to stocking density (300.2).
[2] Reference and treatment normal survivorship are normalized to the mean Control normality (275.8).

Table 14. Summary of SMS Evaluation.

Treatment	Sediment Cleanup Objectives			Cleanup Screening Levels		
	Amphipod	Polychaete	Larval	Amphipod	Polychaete	Larval
D-1	Pass	Pass	**Fail**	Pass	Pass	Pass
D-2	Pass	Pass	**Fail**	Pass	Pass	Pass
D-3A	Pass	Pass	Pass	Pass	Pass	Pass
D-3B	Pass	Pass	**Fail**	Pass	Pass	**Fail**
D-4B	Pass	Pass	**Fail**	Pass	Pass	Pass
D-7	Pass	Pass	Pass	Pass	Pass	Pass

Table 15. Summary of DMMP Evaluation.

Treatment	2-Hit			1-Hit			Overall Determination
	Amphipod	Polychaete	Larval	Amphipod	Polychaete	Larval	
D-1	Pass	Pass	**Fail**	Pass	Pass	Pass	Pass
D-2	Pass	Pass	**Fail**	Pass	Pass	Pass	Pass
D-3A	Pass	Pass	Pass	Pass	Pass	Pass	Pass
D-3B	Pass	Pass	**Fail**	Pass	Pass	**Fail**	**Fail**
D-4B	Pass	Pass	**Fail**	Pass	Pass	Pass	Pass
D-7	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Table 16

Revisions to DMMU Volumes

Mill A Former Site Interim Action Dredging Project
Everett, Washington

Dredging Location	Dredged Material Ranking[1]	Sediment Classification	Number of DMMUs	DMMU Identification	DMMU Boundary Elevations	Estimated in Agency-approved SAP	Revised as approved by DMMP following sample collection and core log review	Second revision to allow for Ecology-required transition slope armor rock	Number of Sample Cores	Sampling Layer[3]
						Total Dredge Volume per DMMU[2] (CY)	Total Dredge Volume per DMMU[2] (CY)	Total Dredge Volume per DMMU[2] (CY)		
Interim Action Cleanup	High	Heterogeneous	11	D-1	Existing Surface to -22 ft	3,750	3,750	3,940	5	Surface DMMU
				D-2	-22 to -26 ft	3,680	3,680	3,750	7	Subsurface DMMU
				D-3A	-26 ft to -30 ft	2,380	2,380	2,450	3	Subsurface DMMU
				D-3B	-26 ft to -30 ft	2,420	2,420	2,420	5	Subsurface DMMU
				D-4A	-30 ft to -34 ft	2,710	2,710	2,790	2	Subsurface DMMU
				D-4B	-30 ft to -34 ft	3,160	3,160	3,160	6	Subsurface DMMU
				D-5A	-34 ft to -38 ft	3,010	2,800	2,870	3	Subsurface DMMU
				D-5B	-34 ft to -38 ft	3,810	2,710	2,710	7	Subsurface DMMU
				D-6A	-38 ft to -43 ft	2,870	3,920	4,520	3	Subsurface DMMU
										Z-layer
				D-6B	-38 ft to -43 ft	3,520	3,370	4,320	3	Subsurface DMMU
										Z-layer
				D-6C	-38 ft to -43 ft	3,830	Eliminated	Eliminated	--	--
										--
				D-7	Surface in areas from -34 to -43 ft	--	4,240	4,390	3	Subsurface DMMU
										Z-layer
				Total Dredge Volume (CY)		**35,140**	**35,140**	**37,320**		

Notes:

[1] Due to the status of the Site as a MTCA cleanup, the subsurface DMMUs are treated as surface DMMUs with a high ranking as required by the Dredged Material Management Office.

[2] DMMU volume includes 1-foot overdredge allowance and 10% contingency. Volumes calculated using bathymetry survey completed between September 8 and 11, 2014.

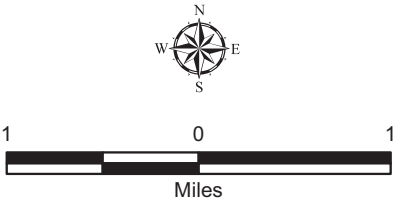
[3] Z-layer samples were collected to characterize the dredge-prism side-slope. Five core locations were completed within the side-slope area.

CY = *In situ* cubic yards

DMMP = Dredged Material Management Program

DMMU = Dredged Material Management Unit

NA = Not Applicable



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Data Sources: ESRI Data & Maps

Projection: NAD 1983 UTM Zone 10N

Vicinity Map

Weyerhaeuser Mill A Former Site
Everett, Washington

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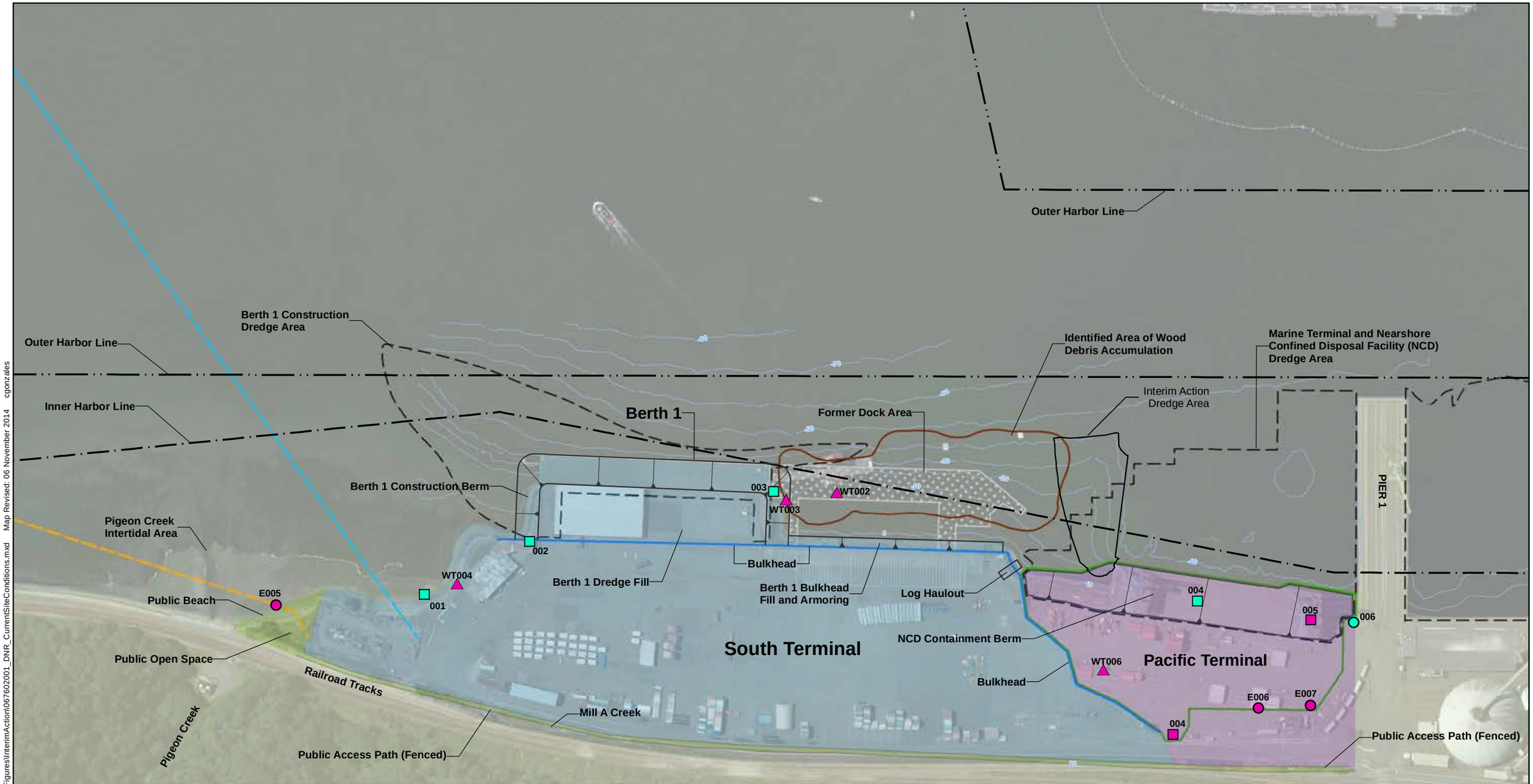
Figure 1

Path: \\sea\projects\0\0676020\GIS\DNR_Comment_Figures\067602001_DNR_VicinityMap.mxd Map Revised: 13 December 2012 amanza



Legend

- South Terminal
- Pacific Terminal
- Open Space/Beach/Access Path
- Construction Berm
- Identified Area of Wood Debris Accumulation
- Historical Piling Area
- Dredged Area
- Nearshore Confined Disposal (NCD) Facility
- Current Kimberly-Clark/City of Everett/ City of Marysville Outfall 100 (approximate)
- Historical Kimberly-Clark/Weyerhaeuser Outfall SW001 (approximate)
- Bulkhead
- Bathymetric and Topographic Contour (10ft, MLLW)
- Historical Industrial Outfall
- Former Combined Sewer Outfall (CSO)
- Former Stormwater Outfall
- Current CSO
- Current Stormwater Outfall

Data Source: Base aerial from Bing Maps, 2011.
Topography and bathymetry from Walker & Associates Survey, 2006.
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N W E S

300 0 300
Feet

Current Property Conditions

Weyerhaeuser Mill A Former Site
Everett, Washington

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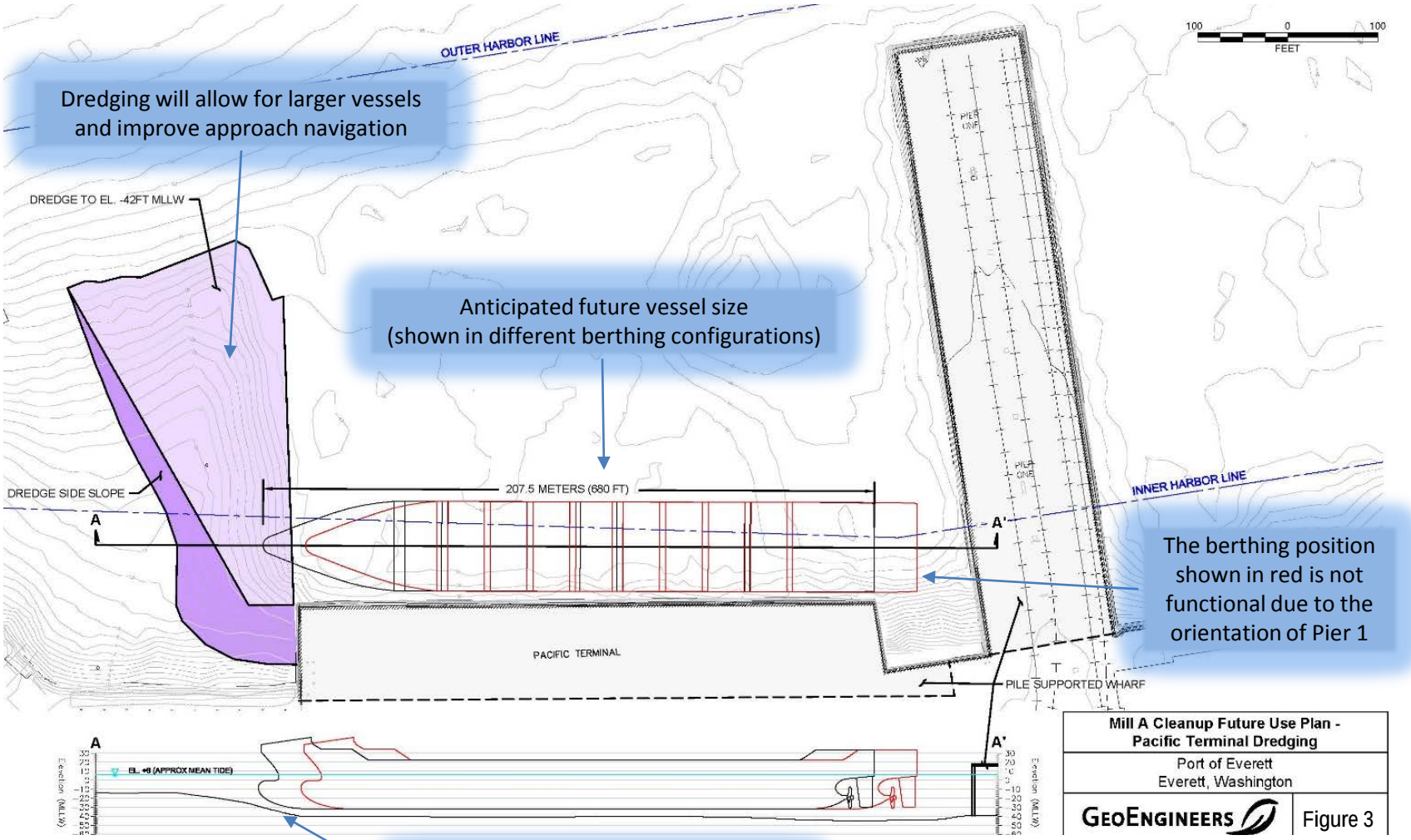
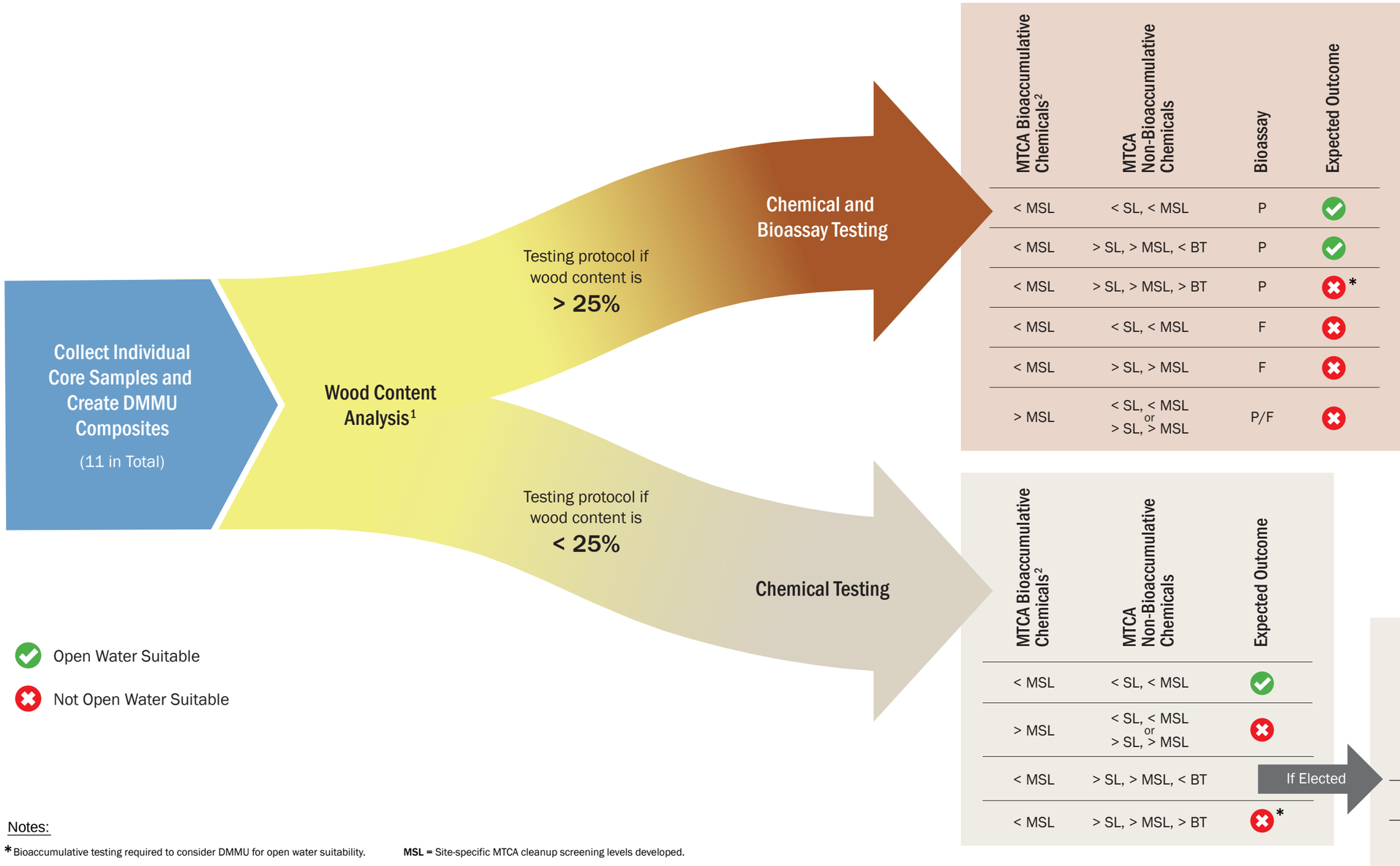
Figure 2

Path: \\sea\projects\0\0676020\GIS\DNR_Comment_Figures\InterimAction\067602001_DNR_CurrentSiteConditions.mxd Map Revised: 06 November 2014 cgonzales

Interim Action (Phase 1) Detail





Notes:

* Bioaccumulative testing required to consider DMMU for open water suitability.

[1] Wood content will be analyzed to determine percentage of dry-weight wood content using ASTM D-2974 Method C.

[2] The MTCA bioaccumulative chemicals are defined in the Former Mill A Cleanup RI/FS Work Plan and include arsenic, cadmium, lead, mercury, carcinogenic polycyclic aromatic hydrocarbons (cPAHs), total polychlorinated biphenyls (PCBs), dioxin-like PCBs and dioxins/furans. MTCA screening levels for these chemicals are natural background or Port Gardner regional background (if available).

SL = DMMP chemical evaluation guidelines.

BT = DMMP bioaccumulation trigger to determine when bioaccumulation testing is required.

MSL = Site-specific MTCA cleanup screening levels developed.

< = Analytical results are less than screening levels or triggers for all analytes.

> = Analytical results are greater than screening levels or triggers for one or more analytes.

P = Bioassay test passed.

F = Bioassay test failed.

DMMU = Dredged Material Management Unit

DMMP = Dredged Material Management Program

MTCA = Model Toxics Control Act

DMMU Sample Analysis and Expected Outcomes

Weyerhaeuser Mill A Former Site
Everett, Washington

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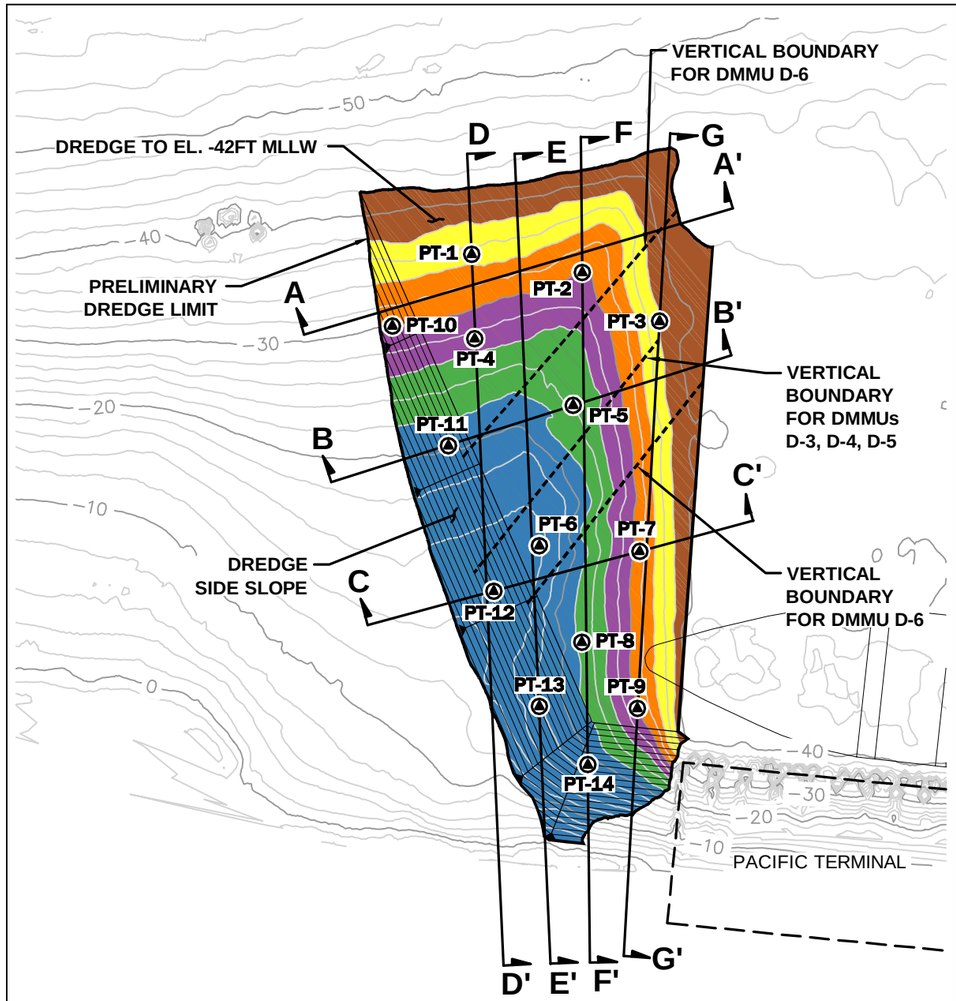
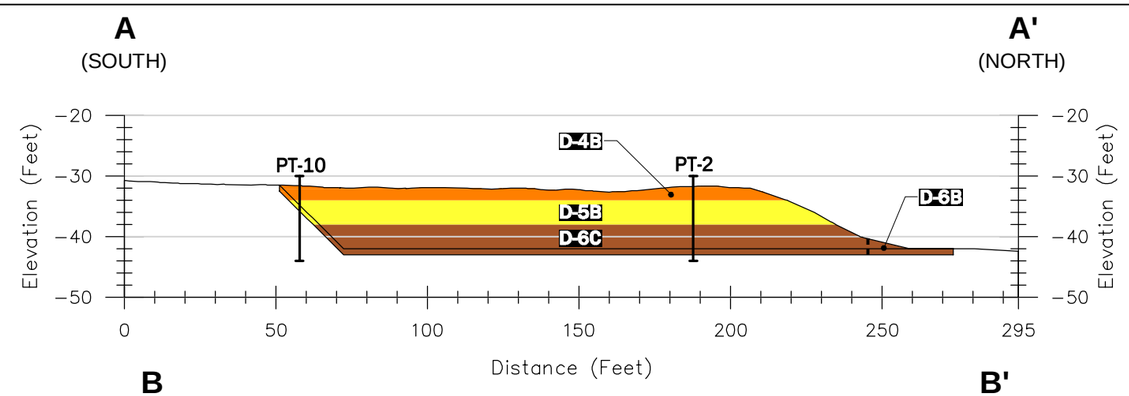
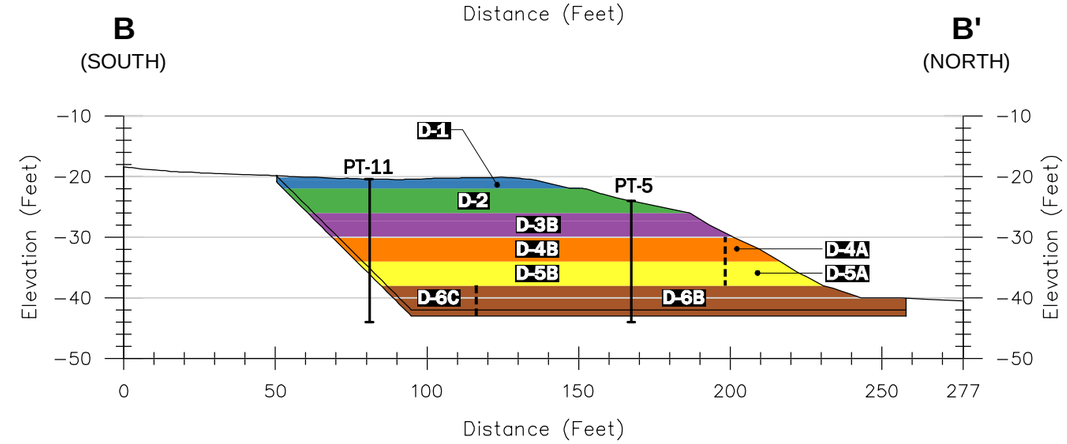
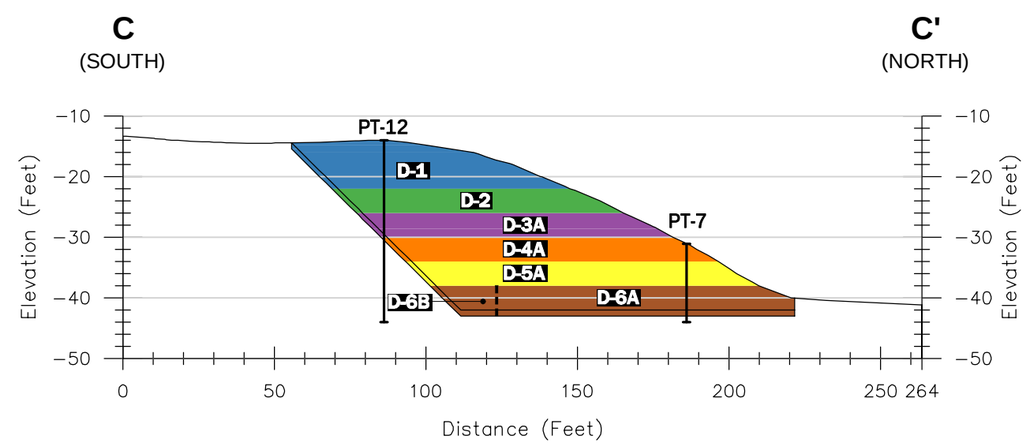
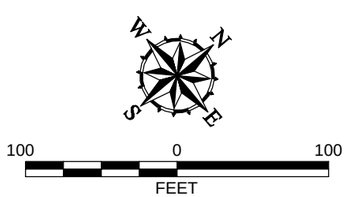
Figure 4











Legend

- PT-1 — Proposed Sediment Core Location
- DMMU Vertical Boundary
- D-1 — DMMU Identification
- A A' — Cross-Section Location

DMMU Elevation Boundaries

- Existing Grade to -22 feet MLLW
- -22 to -26 feet MLLW
- -26 to -30 feet MLLW
- -30 to -34 feet MLLW
- -34 to -38 feet MLLW
- -38 to -43 feet MLLW

Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

Notes

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50 0 50
Horizontal Scale in Feet

25 0 25
Vertical Scale in Feet
Vertical Exaggeration: 2X

Sampling Plan and Cross-Sections A-A' through C-C'

Weyerhaeuser Mill A Former Site
Everett, Washington

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Figure 4

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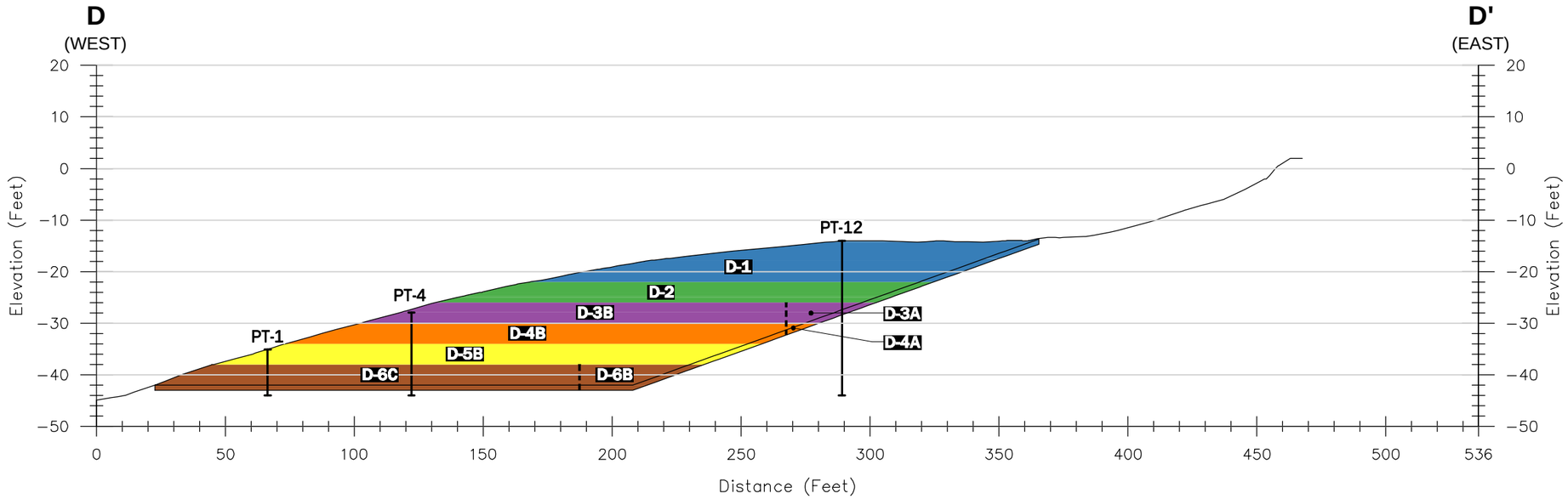

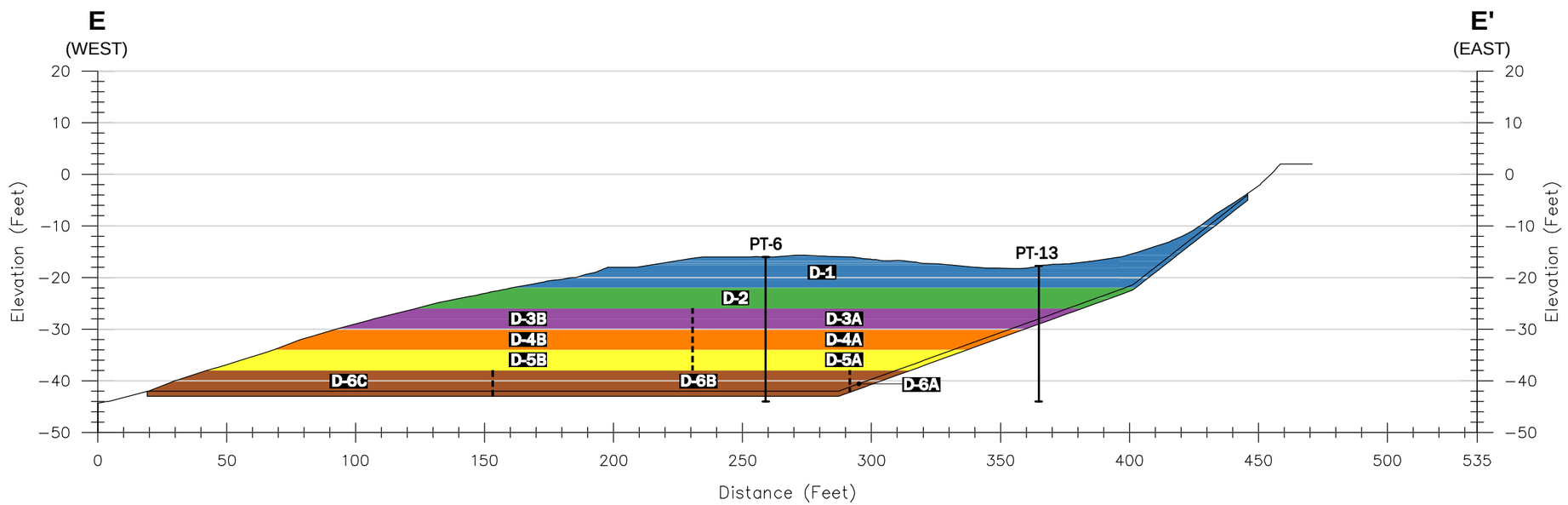

Legend

- DMMU Vertical Boundary
- D-1 DMMU Identification

DMMU Elevation Boundaries

- Existing Grade to -22 feet MLLW
- -22 to -26 feet MLLW
- -26 to -30 feet MLLW
- -30 to -34 feet MLLW
- -34 to -38 feet MLLW
- -38 to -43 feet MLLW

Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

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50 0 50
Horizontal Scale in Feet

25 0 25
Vertical Scale in Feet
Vertical Exaggeration: 2X

Cross-Sections D-D' and E-E'

Weyerhaeuser Mill A Former Site
Everett, Washington

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Figure 5

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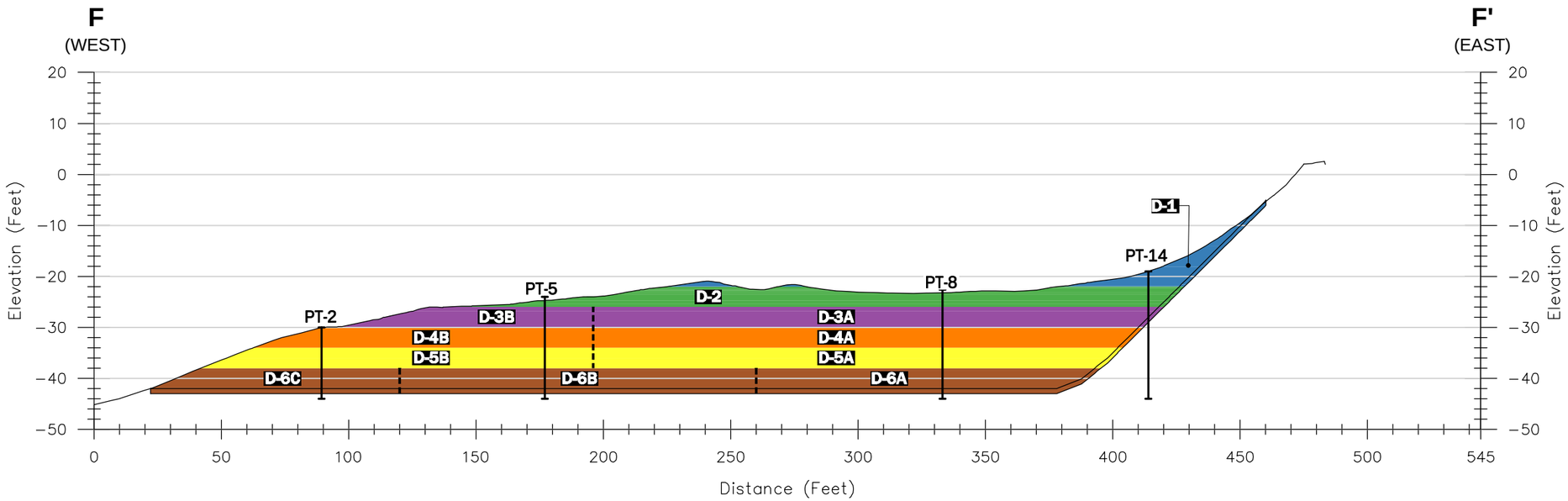

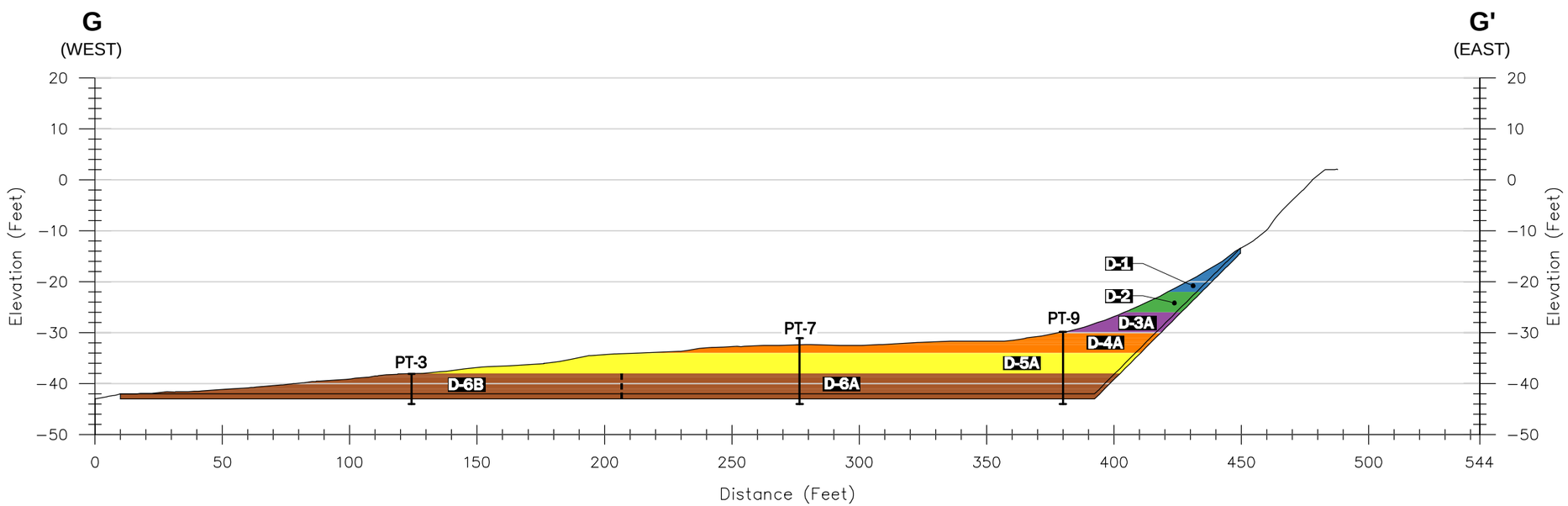

Legend

- DMMU Vertical Boundary
- D-1 DMMU Identification

DMMU Elevation Boundaries

- Existing Grade to -22 feet MLLW
- -22 to -26 feet MLLW
- -26 to -30 feet MLLW
- -30 to -34 feet MLLW
- -34 to -38 feet MLLW
- -38 to -43 feet MLLW

Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

Notes

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50 0 50
Horizontal Scale in Feet

25 0 25
Vertical Scale in Feet
Vertical Exaggeration: 2X

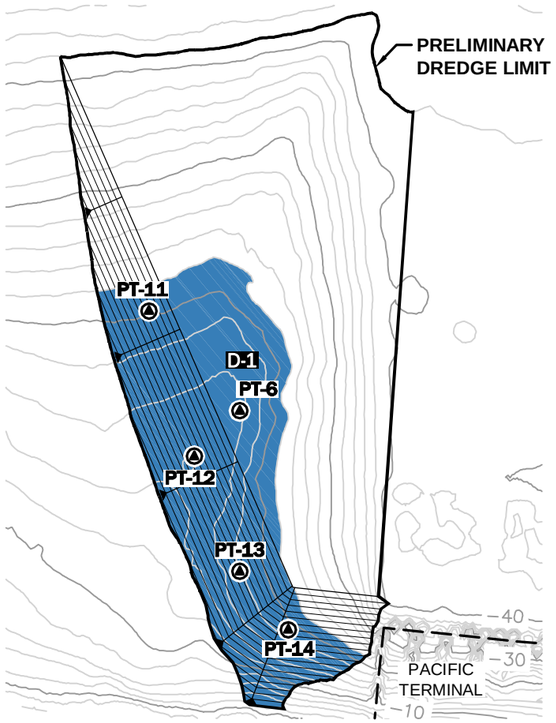
Cross-Sections F-F' and G-G'

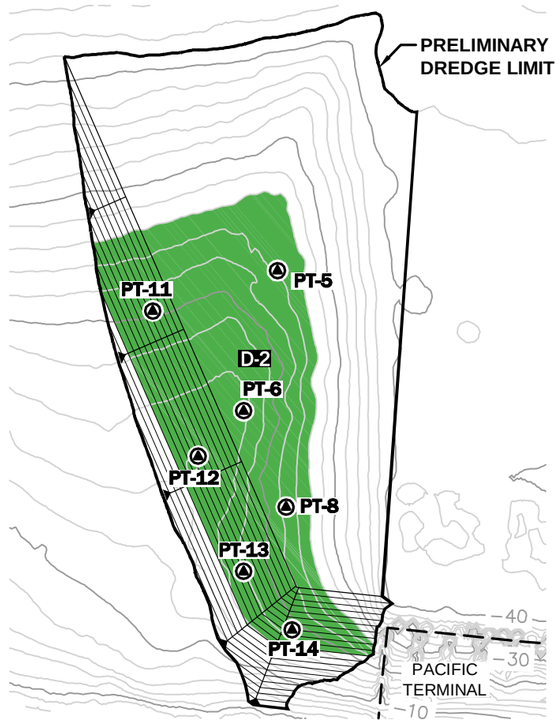
Weyerhaeuser Mill A Former Site
Everett, Washington

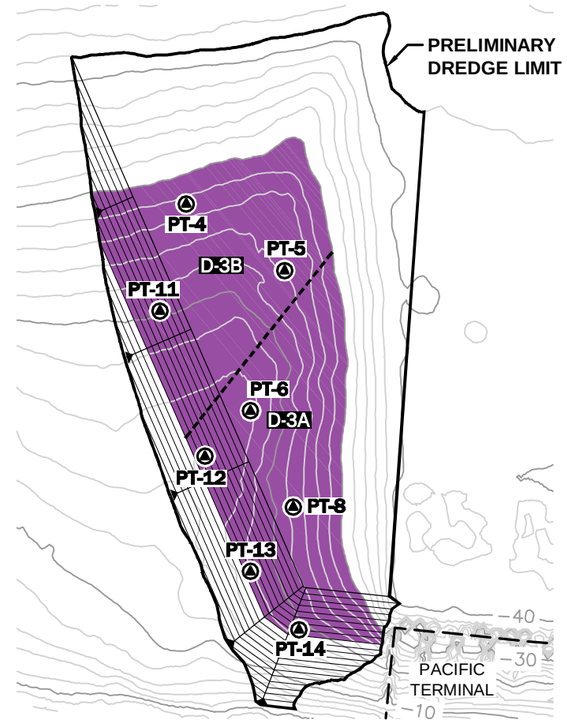
GeoEngineers

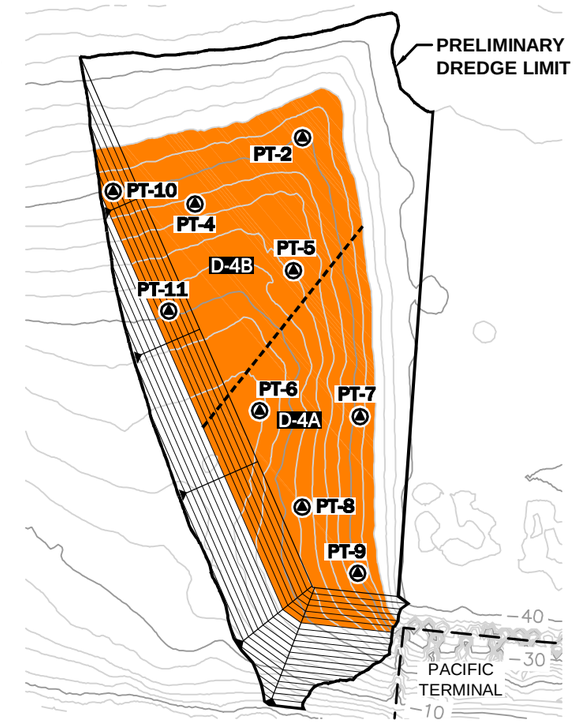
Figure 6

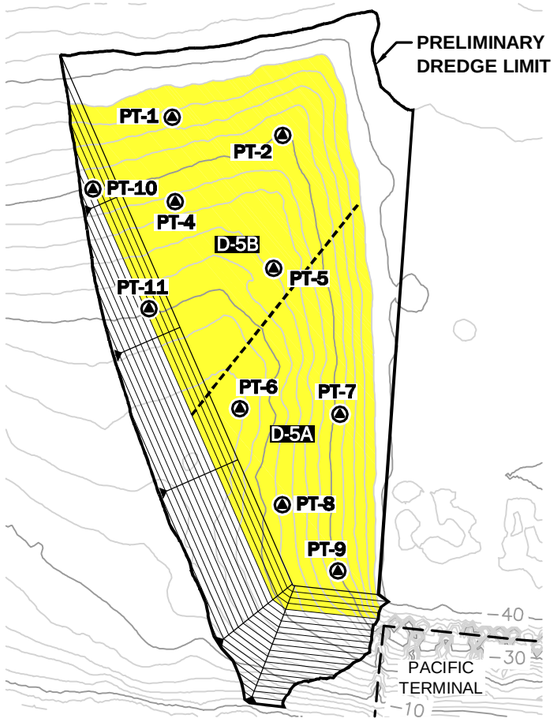
P:\0\0676020\03\CAD\SAP\SAP Site Plan and Sections.dwg\TAB:FF GG modified by thichaud on Dec 16, 2014 - 9:24

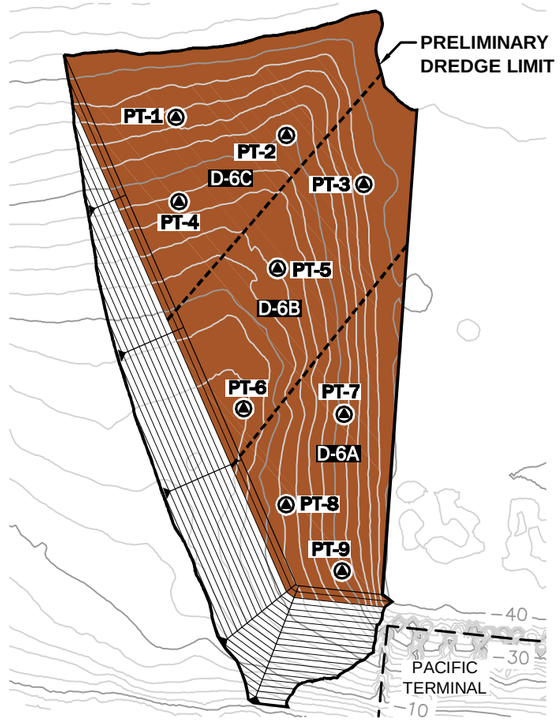


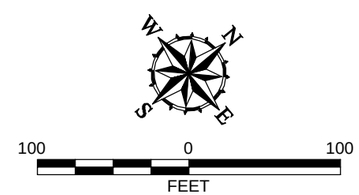












Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

Notes

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Legend

PT-1 Proposed Sediment Core Location

Dashed line: DMMU Vertical Boundary

D-1 DMMU Identification

DMMU Elevation Boundaries

- Existing Grade to -22 feet MLLW
- -22 to -26 feet MLLW
- -26 to -30 feet MLLW
- -30 to -34 feet MLLW
- -34 to -38 feet MLLW
- -38 to -43 feet MLLW

Plan View of DMMU Boundaries

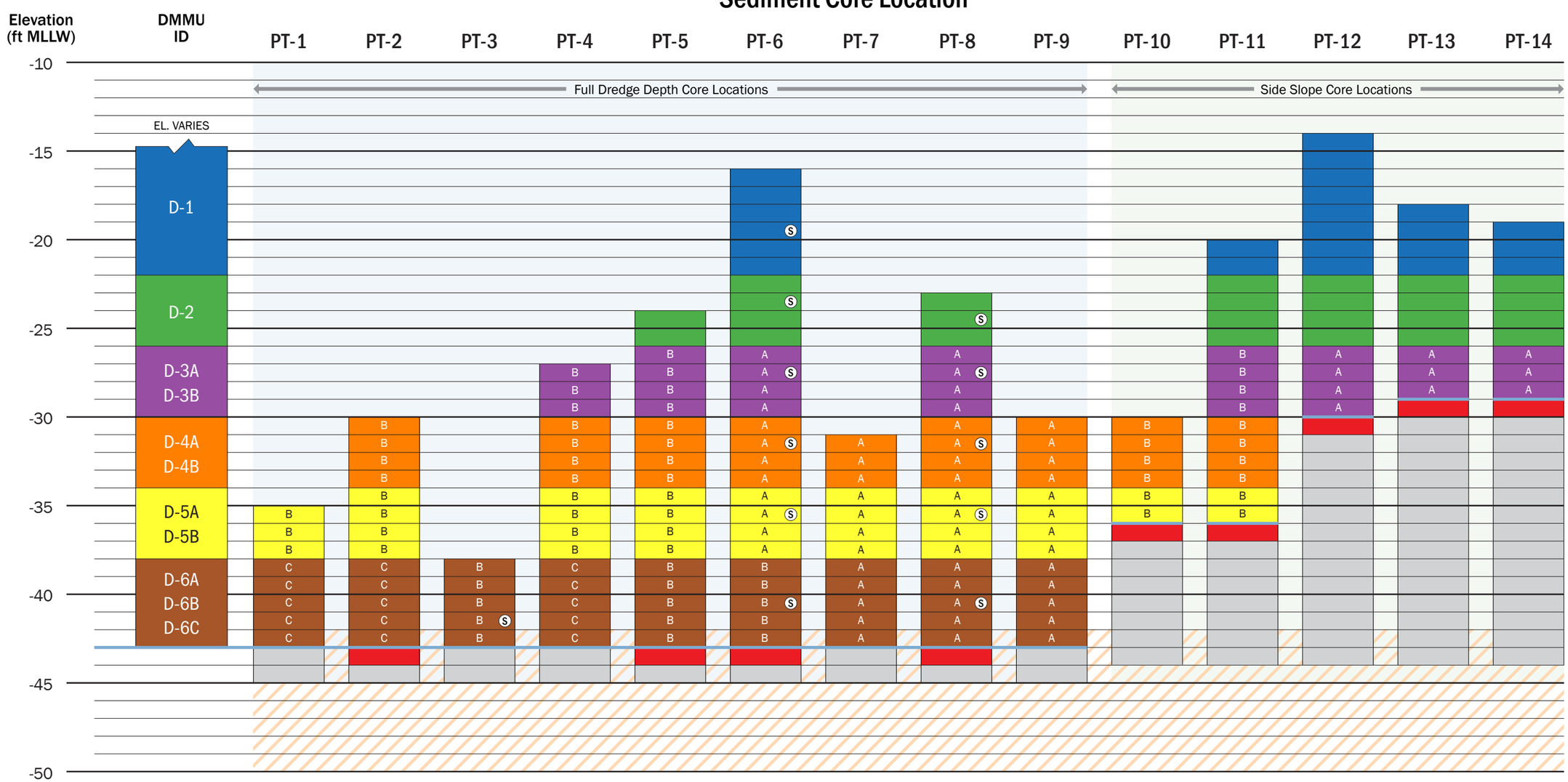
Weyerhaeuser Mill A Former Site
Everett, Washington

GEOENGINEERS

Figure 7

P:\0\0676020\03\CAD\SAP\PLAN VIEW OF DMMU.DWG\TAB:AA CC MODIFIED BY THICHAUD ON DEC 16, 2014 - 9:29

Sediment Core Location



Notes:

The top of each sediment core is shown at the existing mudline elevation for the core location.

The assumed native horizon for this graphic is -42 ft MLLW. Each sample core will be penetrated to a minimum depth of 2-ft into the native horizon or 2-ft beyond the over-dredge limit, whichever is deeper.

Sample locations within the dredge prism side slope will be completed to a minimum of 2-ft below the native horizon. If the native horizon is encountered before reaching the anticipated side slope, the sample will be completed a minimum of 10 ft below the anticipated side slope.

DMMU = Dredged Material Management Unit
FT = Feet
MLLW = Mean Lower Low Water

Legend:

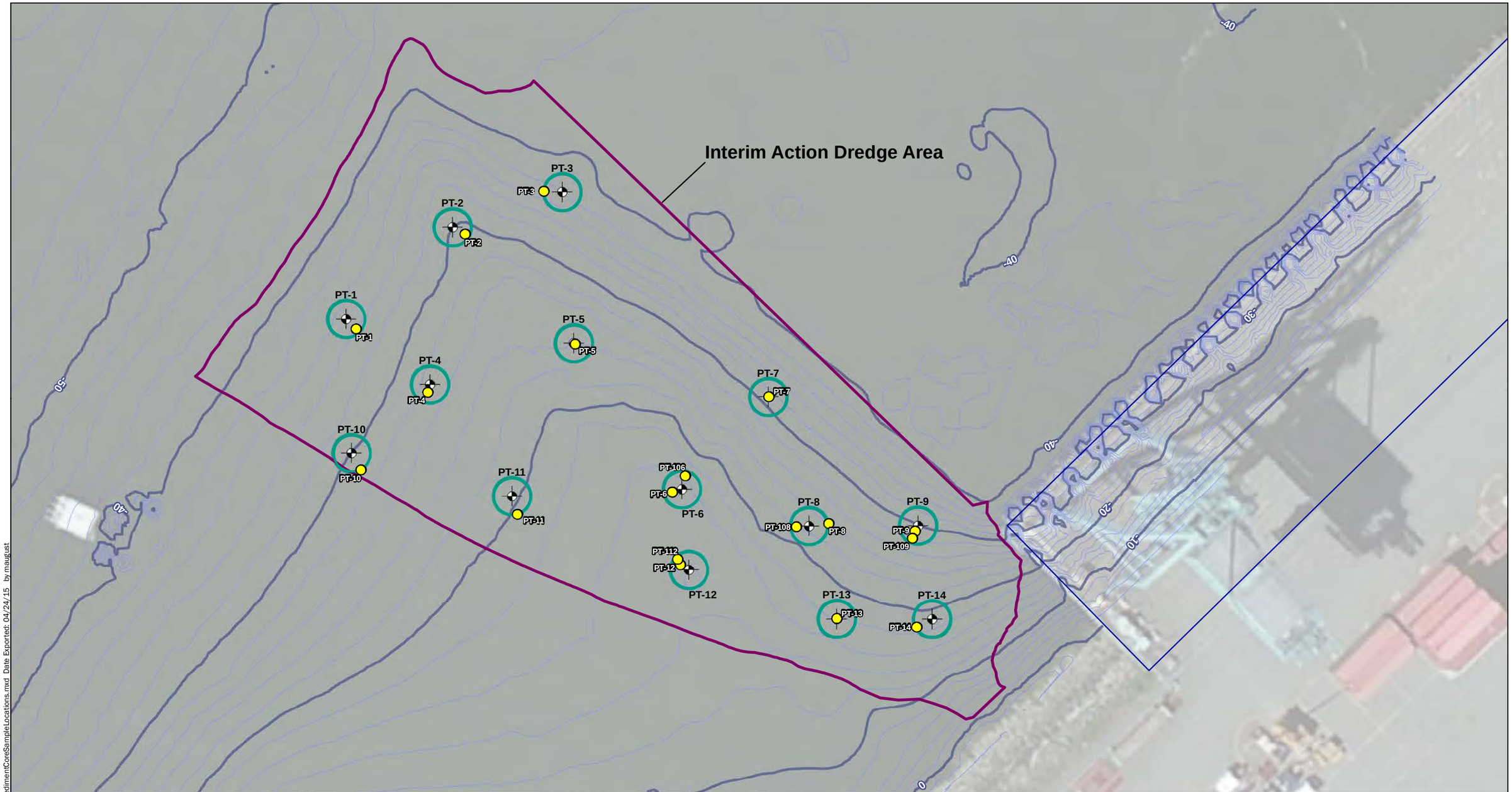
- Dredge Limit (including overdredge allowance)
- Anticipated Native Horizon (assumed at -42 ft MLLW)
- 1-ft sample interval to be collected and used as composite material for corresponding color DMMU and individually archived for possible followup analysis
- 1-ft sample interval to be collected and archived
- 1-ft sample interval to be collected and analyzed for characterization of exposed surface
- (S) Sample to be collected and analyzed for total sulfides

Sediment Core Sampling and Compositing Plan

Weyerhaeuser Mill A Former Site
Everett, Washington

GeoEngineers

Figure 8



Notes:
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Data Source:

Projection: NAD 1983 StatePlane Washington North FIPS 4601 Feet

Legend

- Proposed Core Location
- Actual Core Location
- 10-ft Radius from Proposed Location

N
W E
S

50 0 50
Feet

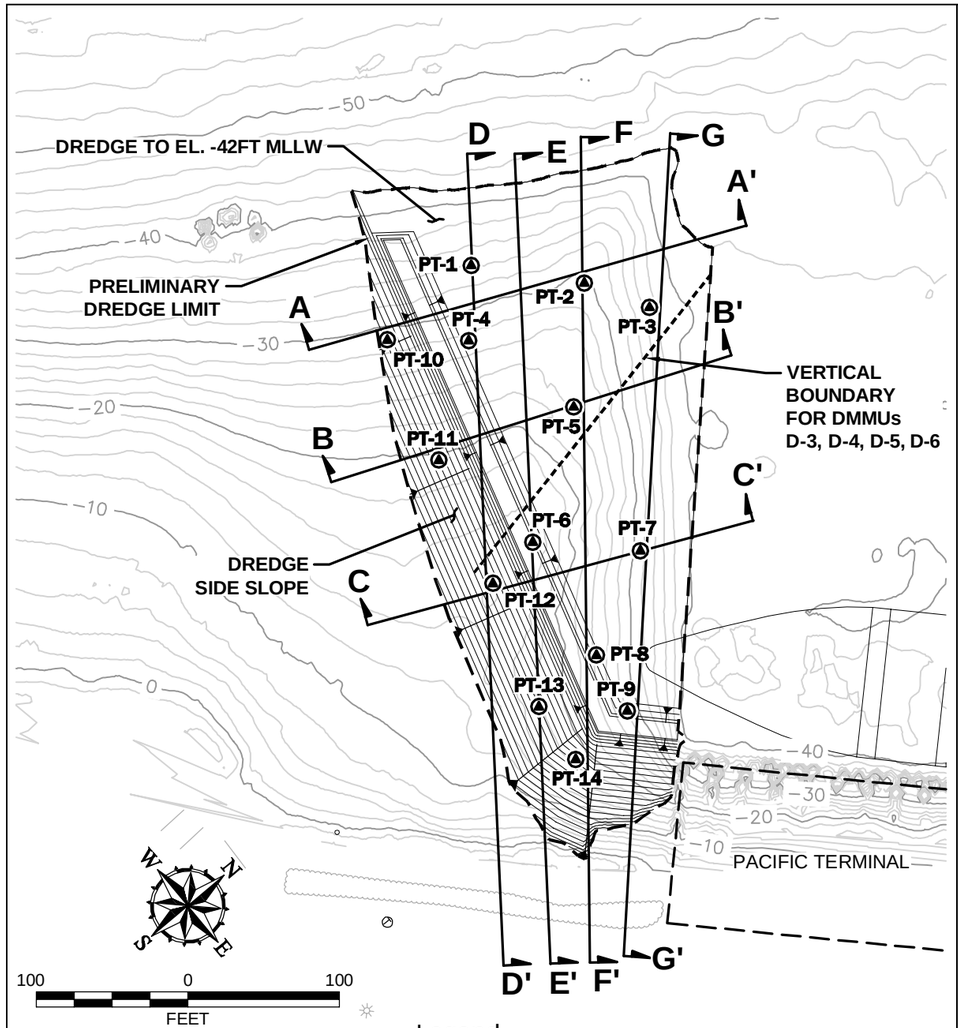
Sediment Core Sample Location

Weyerhaeuser Mill A Former Site
Everett, Washington

GEOENGINEERS

Figure 9

\\sea\projects\O\0676020\GIS\0676020_SedimentCoreSampleLocations.mxd Date Exported: 04/24/15 by maugust



Legend

PT-1	Sediment Core Location
	DMMU Boundary
D-1	DMMU Identification
A A'	Cross-Section Location

DMMU Elevation Boundaries

D-1	Existing Grade to -22 feet MLLW
D-2	-22 to -26 feet MLLW
D-3A & D-3B	-26 to -30 feet MLLW
D-4A & D-4B	-30 to -34 feet MLLW
D-5A & D-5B	-34 to -38 feet MLLW
D-6A & D-6B	-38 to -43 feet MLLW
D-7	Surface DMMU -34 to -43 feet MLLW

Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

Notes

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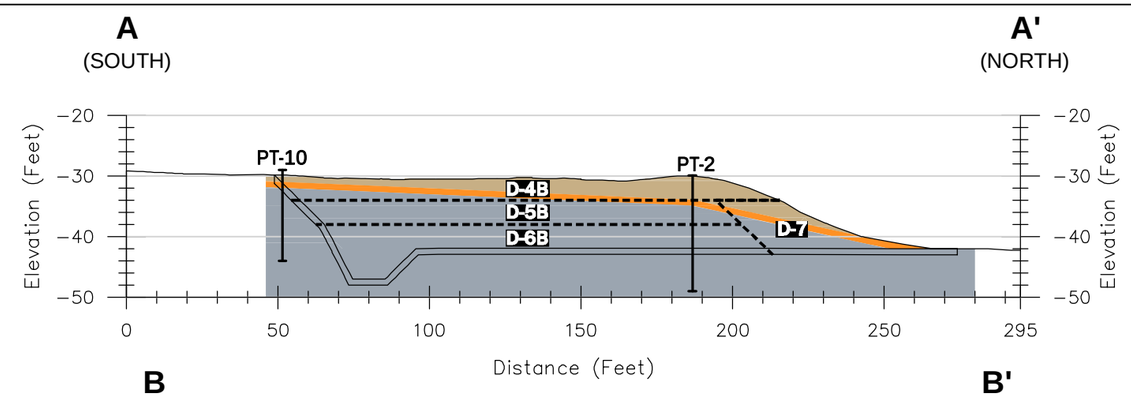
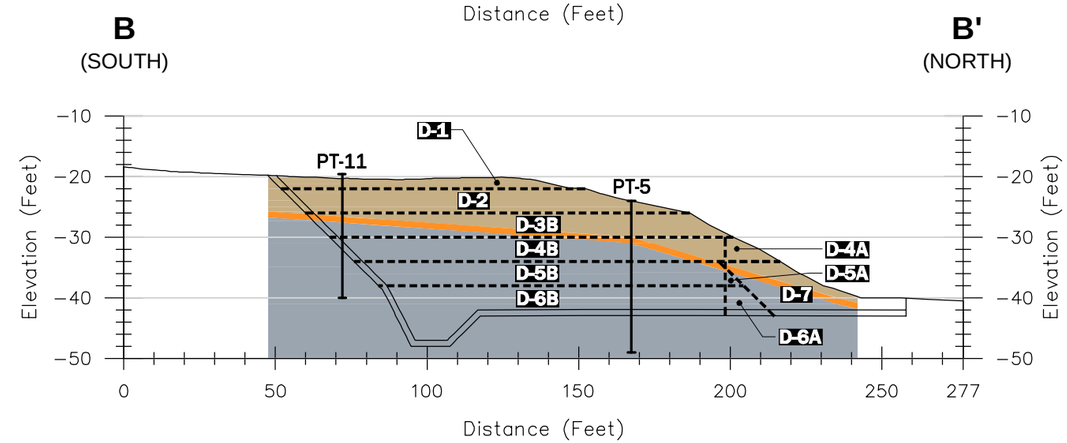
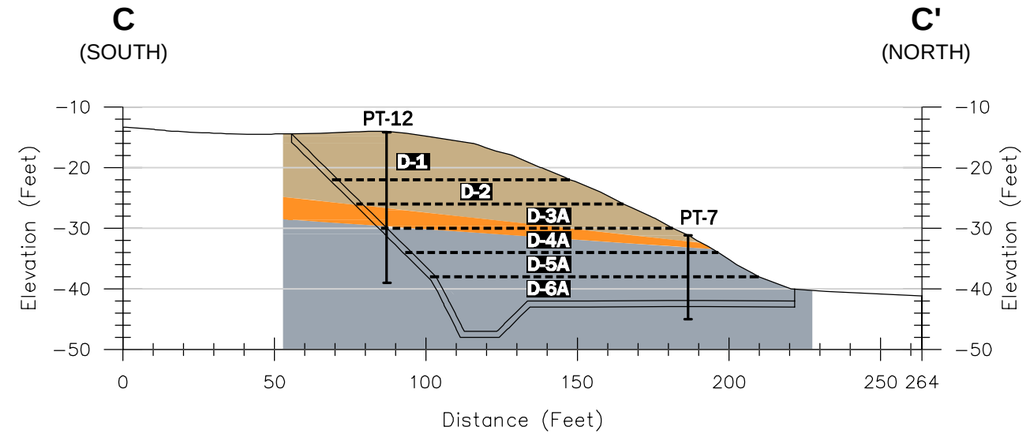






Silt and sand with wood debris greater than 50% by volume (wood debris includes sawdust, fragments of dimensional lumber and wood chips)

Silt/sand with occasional wood debris (less than 50% by volume)

Gray silty sand (native material)

50 0 50
Horizontal Scale in Feet

25 0 25
Vertical Scale in Feet
Vertical Exaggeration: 2X

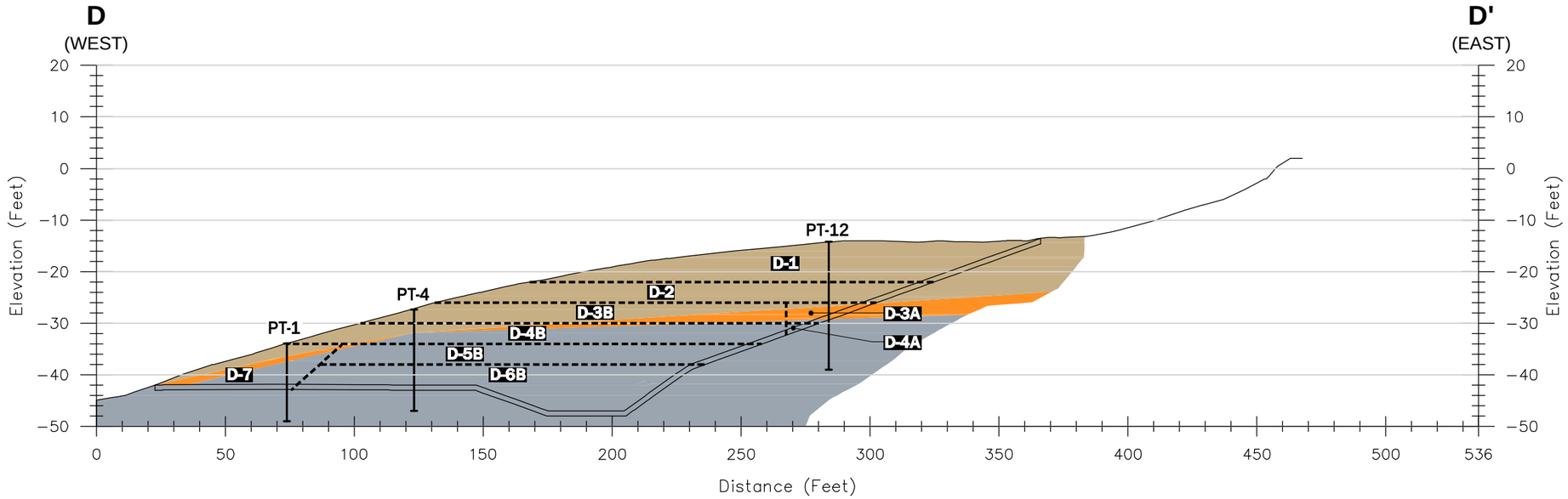
Summary of Stratigraphy - Cross-Sections A-A' through C-C'

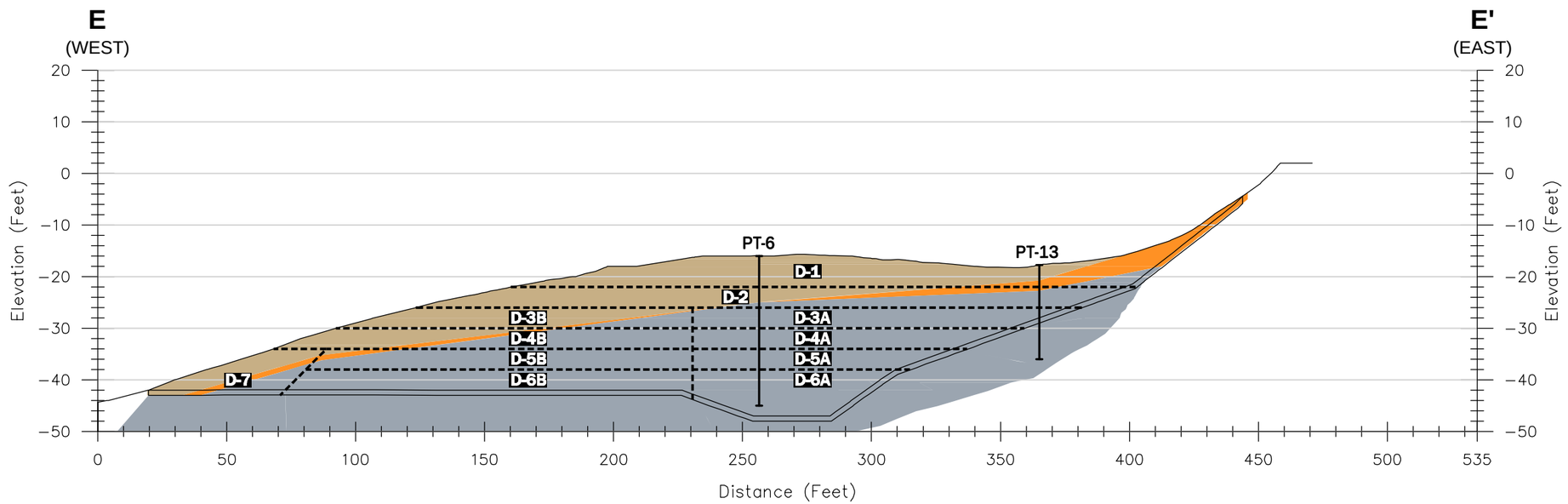
Weyerhaeuser Mill A Former Site
Everett, Washington

GEOENGINEERS

Figure 10

P:\0\0676020\03\CAD\DREDGE MATERIAL CHARACTERIZATION REPORT\FIGS 3-5 SITE PLAN AND SECTIONS.DWG\TAB:SITE PLAN AABBCC MODIFIED BY TMICHAUD ON JUN 02, 2015 - 9:06





Legend

- DMMU Boundary
- D-1 DMMU Identification
- Silt and sand with wood debris greater than 50% by volume (wood debris includes sawdust, fragments of dimensional lumber and wood chips)
- Silt/sand with occasional wood debris (less than 50% by volume)
- Gray silty sand (native material)

DMMU Elevation Boundaries

- D-1 Existing Grade to -22 feet MLLW
- D-2 -22 to -26 feet MLLW
- D-3A & D-3B -26 to -30 feet MLLW
- D-4A & D-4B -30 to -34 feet MLLW
- D-5A & D-5B -34 to -38 feet MLLW
- D-6A & D-6B -38 to -43 feet MLLW
- D-7 Surface DMMU -34 to -43 feet MLLW

Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

Notes

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50 0 50
Horizontal Scale in Feet

25 0 25
Vertical Scale in Feet
Vertical Exaggeration: 2X

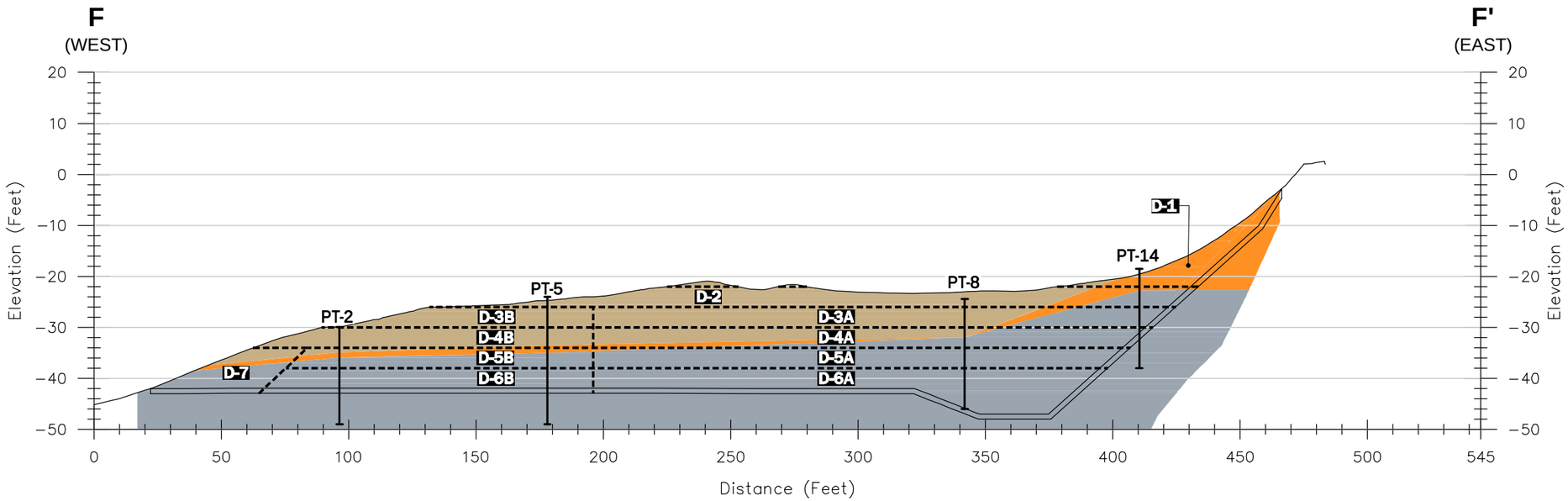
Summary of Stratigraphy - Cross-Sections D-D' and E-E'

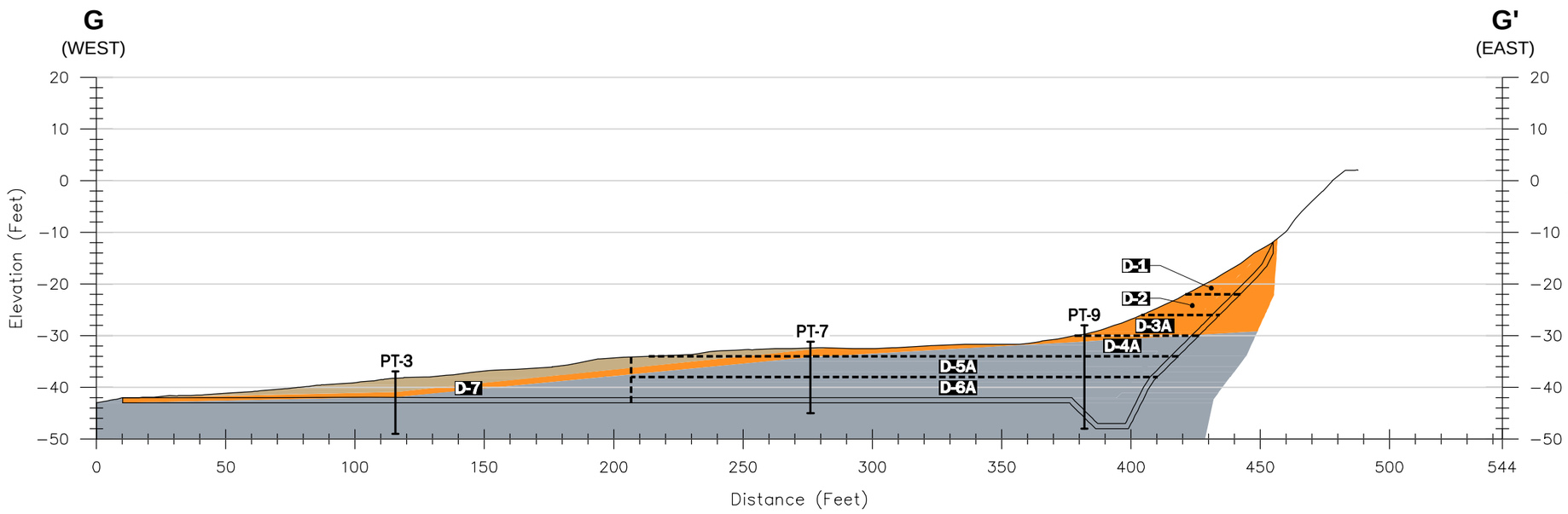
Weyerhaeuser Mill A Former Site
Everett, Washington

GeoEngineers

Figure 11

P:\0\0676020\03\CAD\Dredge Material Characterization Report\Figs 3-5 Site Plan and Sections.dwg\TAB:DDEE modified by tmichaud on Jun 02, 2015 - 9:07





Legend

- - - - - -	DMMU Boundary
D-1	DMMU Identification
	Silt and sand with wood debris greater than 50% by volume (wood debris includes sawdust, fragments of dimensional lumber and wood chips)
	Silt/sand with occasional wood debris (less than 50% by volume)
	Gray silty sand (native material)
	DMMU Elevation Boundaries
D-1	Existing Grade to -22 feet MLLW
D-2	-22 to -26 feet MLLW
D-3A & D-3B	-26 to -30 feet MLLW
D-4A & D-4B	-30 to -34 feet MLLW
D-5A & D-5B	-34 to -38 feet MLLW
D-6A & D-6B	-38 to -43 feet MLLW
D-7	Surface DMMU -34 to -43 feet MLLW

Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

Notes

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50 0 50
Horizontal Scale in Feet

25 0 25
Vertical Scale in Feet
Vertical Exaggeration: 2X

Summary of Stratigraphy - Cross-Sections F-F' and G-G'

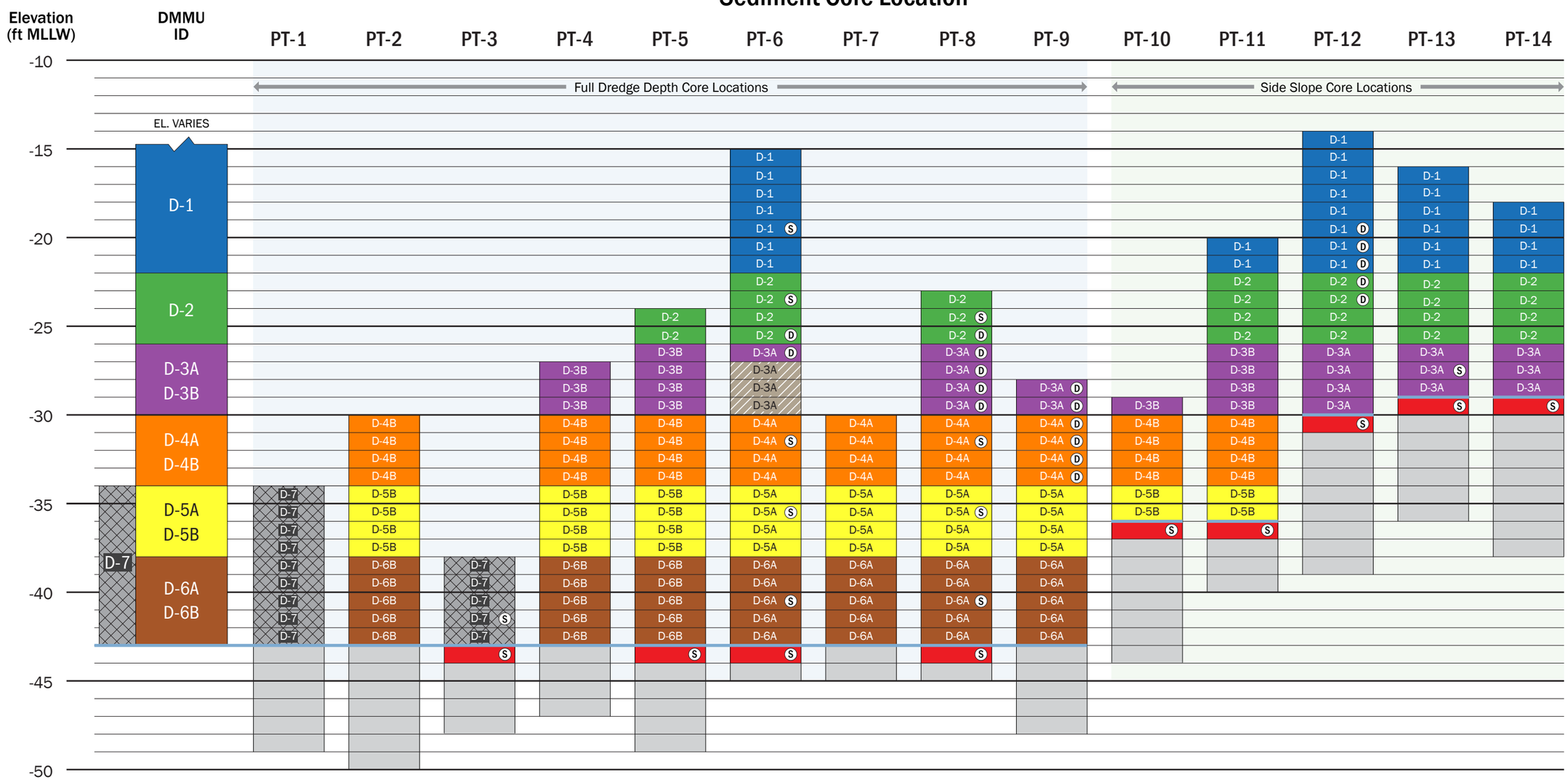
Weyerhaeuser Mill A Former Site
Everett, Washington

GeoEngineers

Figure 12

P:\0\0676020\03\CAD\Dredge Material Characterization Report\Figs 3-5 Site Plan and Sections.dwg\TAB:FFGG modified by tmichaud on Jun 02, 2015 - 9:07

Sediment Core Location



Notes:

The top of each sediment core is shown at the existing mudline elevation for the core location.

Mudline elevations and maximum penetration depths are rounded to the nearest foot.

DMMU = Dredged Material Management Unit
FT = Feet
MLLW = Mean Lower Low Water

Legend:

- Dredge Limit (including overdredge allowance)
- 1-ft sample interval collected and used as composite material for corresponding color DMMU and individually archived
- 1-ft sample interval collected and archived
- 1-ft sample interval collected and analyzed for characterization of exposed surface (Z-layer)
- Sample interval not collected due to poor recovery
- (S) Sample collected and analyzed for total sulfides
- (D) Sample collected from duplicate core (i.e. 106, 108, 109, 112)

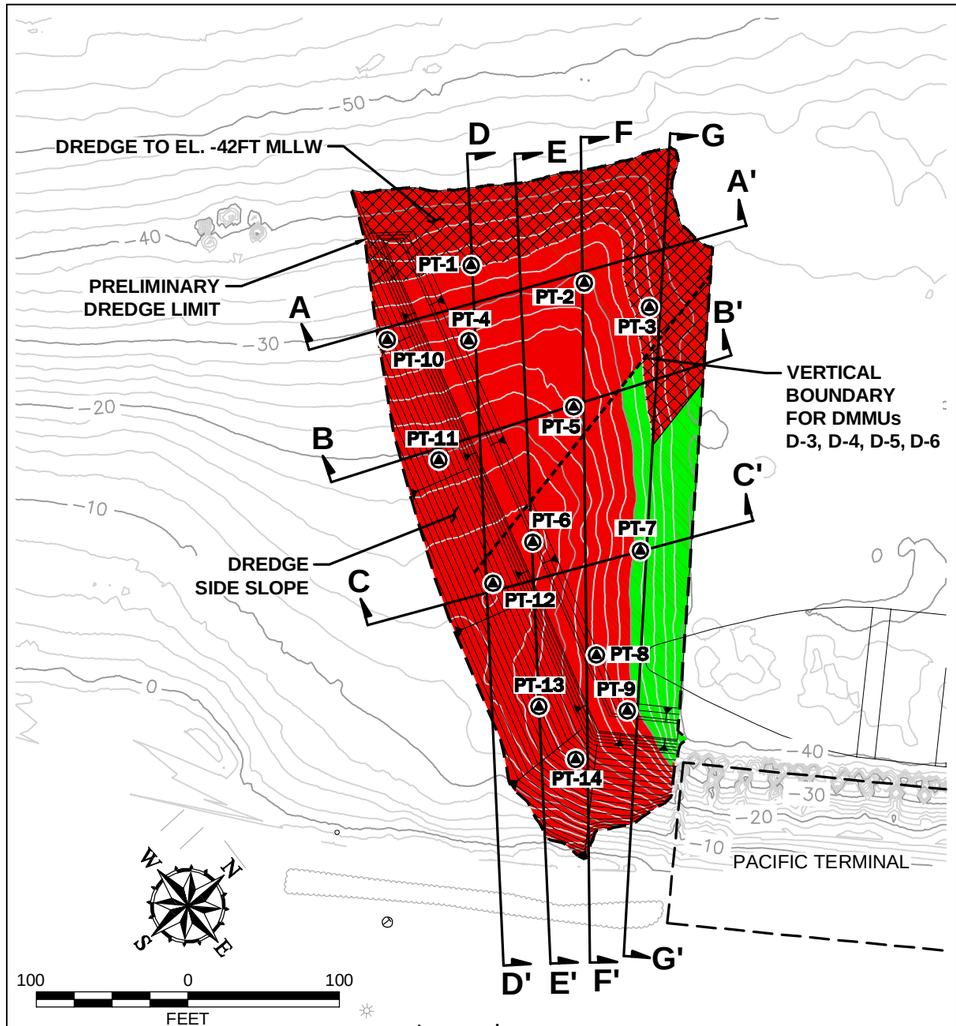
Sediment Core Sampling and DMMU Compositing Summary

Weyerhaeuser Mill A Former Site
Everett, Washington

GeoEngineers

Figure 13

\\sea\projects\0\0676020\03\Figures\Figure 6 Mill a sediment core sampling and dmmu compositing summary.ai Date Exported: 06-05/15 by spride



Legend

PT-1	Sediment Core Location
	DMMU Boundary
D-1	DMMU Identification
A A'	Cross-Section Location

Chemical analytical results indicate one or more analytes exceeding screening levels.

Chemical analytical results indicate no exceedances of screening levels.

DMMU Elevation Boundaries

D-1	Existing Grade to -22 feet MLLW
D-2	-22 to -26 feet MLLW
D-3A & D-3B	-26 to -30 feet MLLW
D-4A & D-4B	-30 to -34 feet MLLW
D-5A & D-5B	-34 to -38 feet MLLW
D-6A & D-6B	-38 to -43 feet MLLW
D-7	Surface DMMU -34 to -43 feet MLLW

Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

Notes

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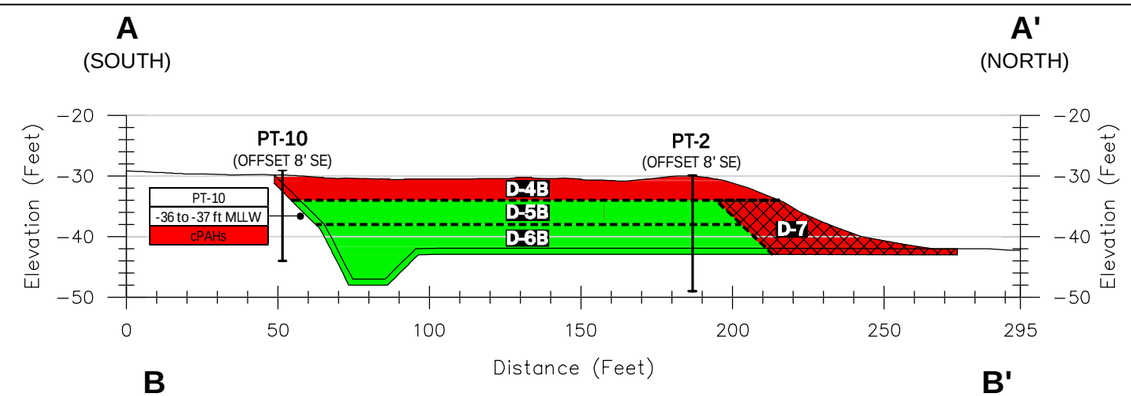
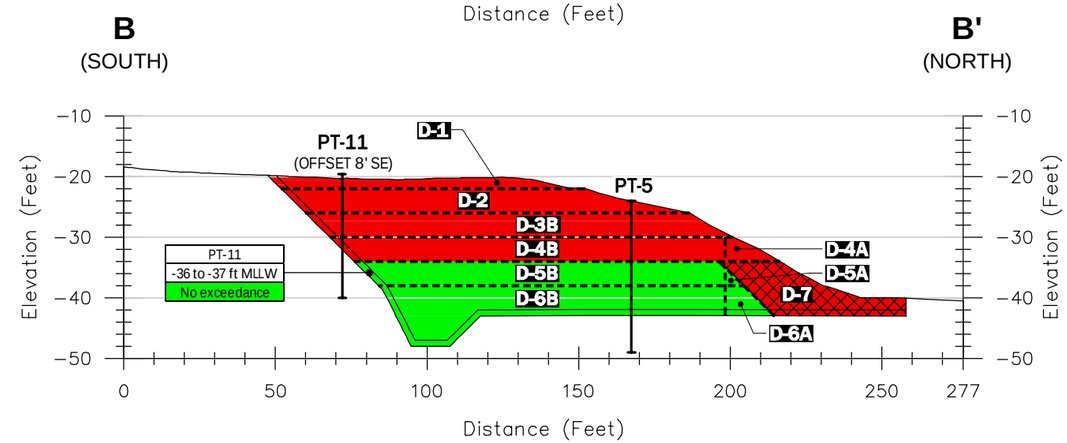
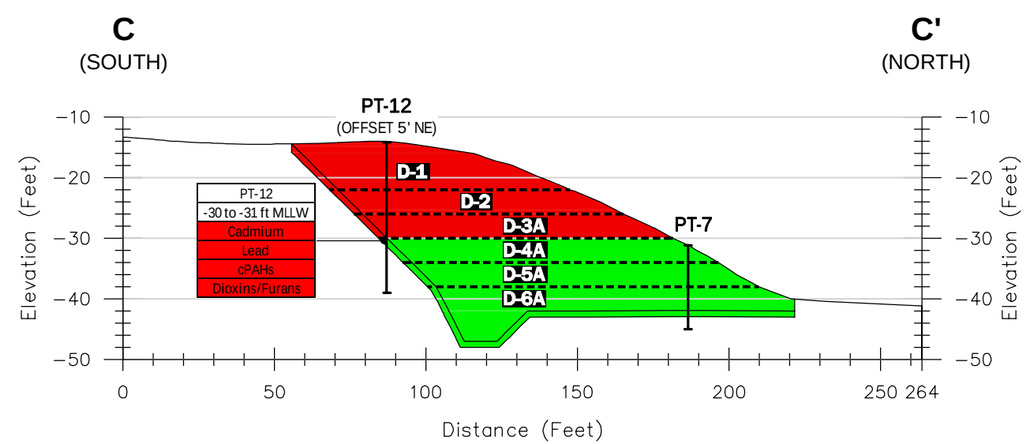






50 0 50
Horizontal Scale in Feet

25 0 25
Vertical Scale in Feet
Vertical Exaggeration: 2X

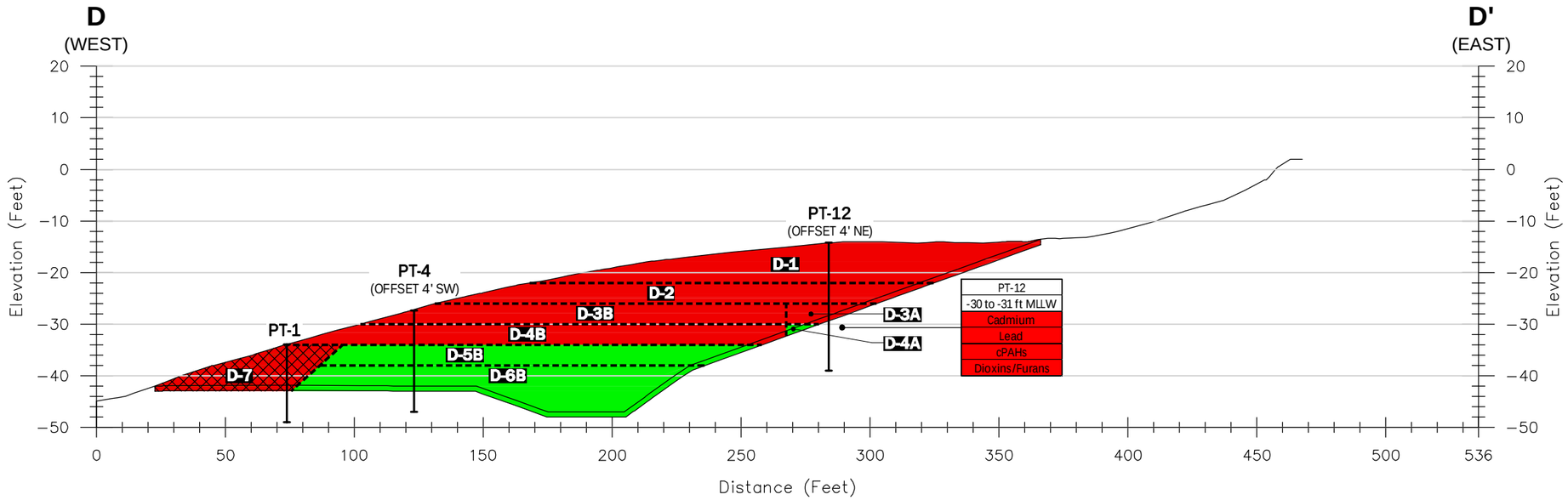
Chemical Analytical Results - Cross-Sections A-A' through C-C'

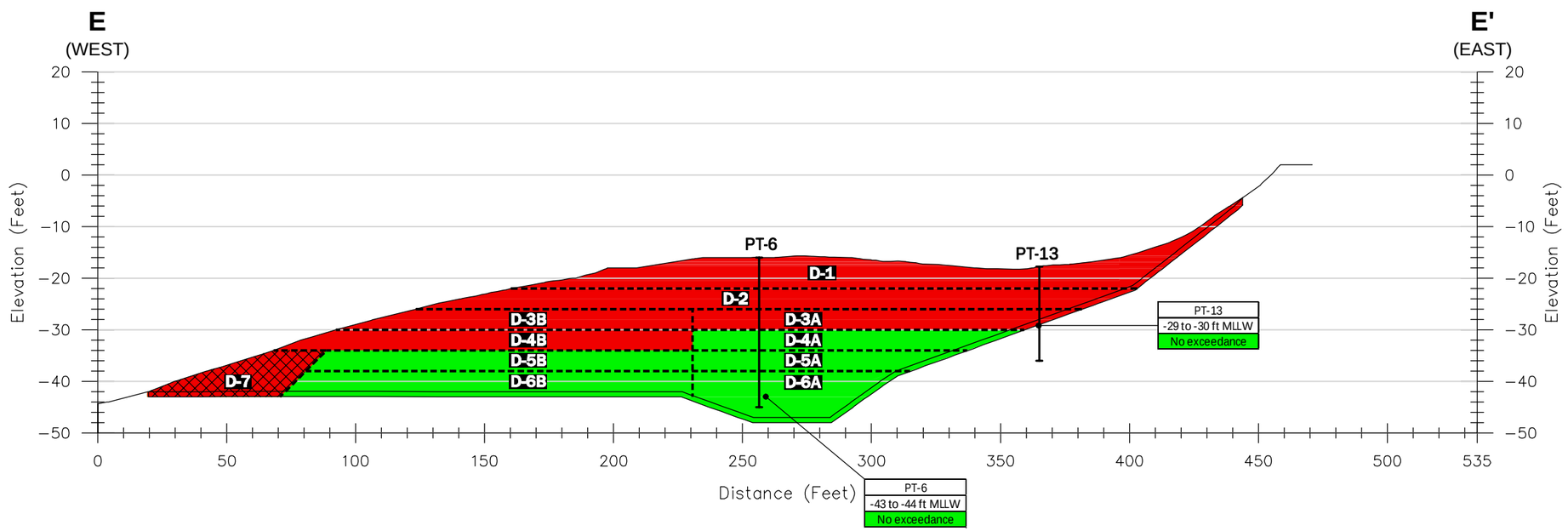
Weyerhaeuser Mill A Former Site
Everett, Washington

GEOENGINEERS

Figure 14

P:\0\0676020\03\CAD\Dredge Material Characterization Report\Figs 7-9 Sampling Plan Site Plan and Sections.dwg\TAB:Site Plan AABBCC modified by tmichaud on Jun 04, 2015 - 13:42





Legend

- DMMU Boundary
- D-1 DMMU Identification
- Chemical analytical results indicate one or more analytes exceeding screening levels.
- Chemical analytical results indicate no exceedances of screening levels.

DMMU Elevation Boundaries

D-1	Existing Grade to -22 feet MLLW
D-2	-22 to -26 feet MLLW
D-3A & D-3B	-26 to -30 feet MLLW
D-4A & D-4B	-30 to -34 feet MLLW
D-5A & D-5B	-34 to -38 feet MLLW
D-6A & D-6B	-38 to -43 feet MLLW
D-7	Surface DMMU -34 to -43 feet MLLW

Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

Notes

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50 0 50
Horizontal Scale in Feet

25 0 25
Vertical Scale in Feet
Vertical Exaggeration: 2X

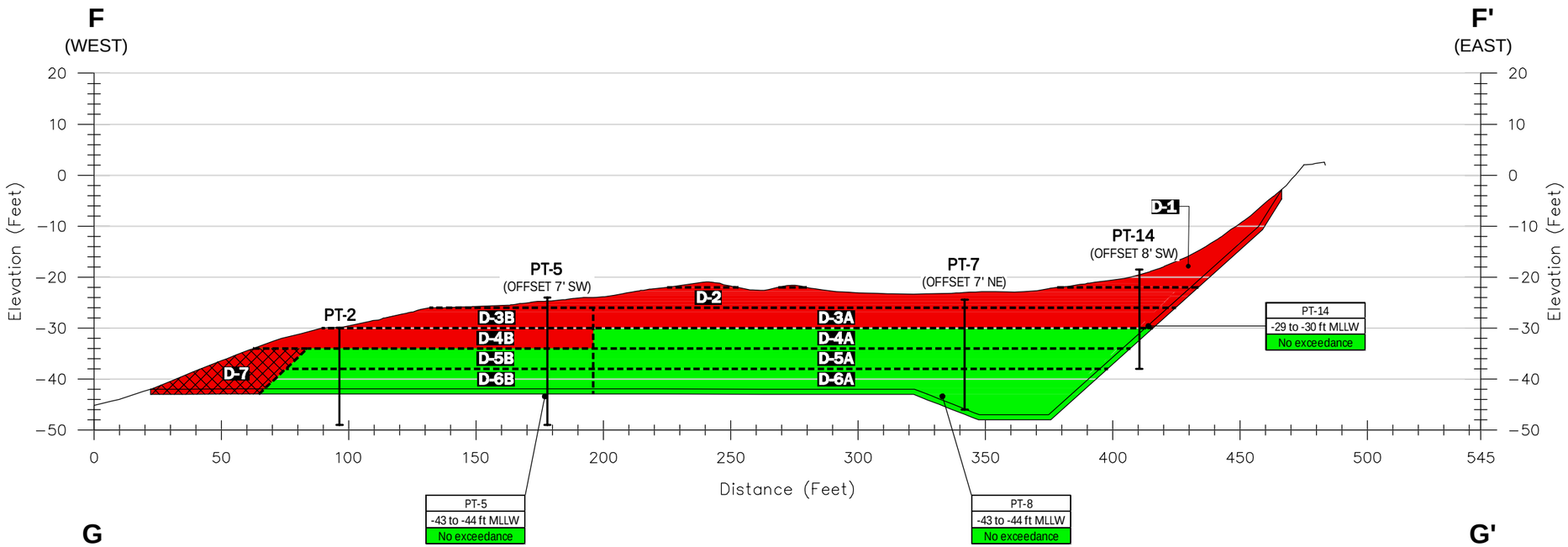
Chemical Analytical Results - Cross-Sections D-D' and E-E'

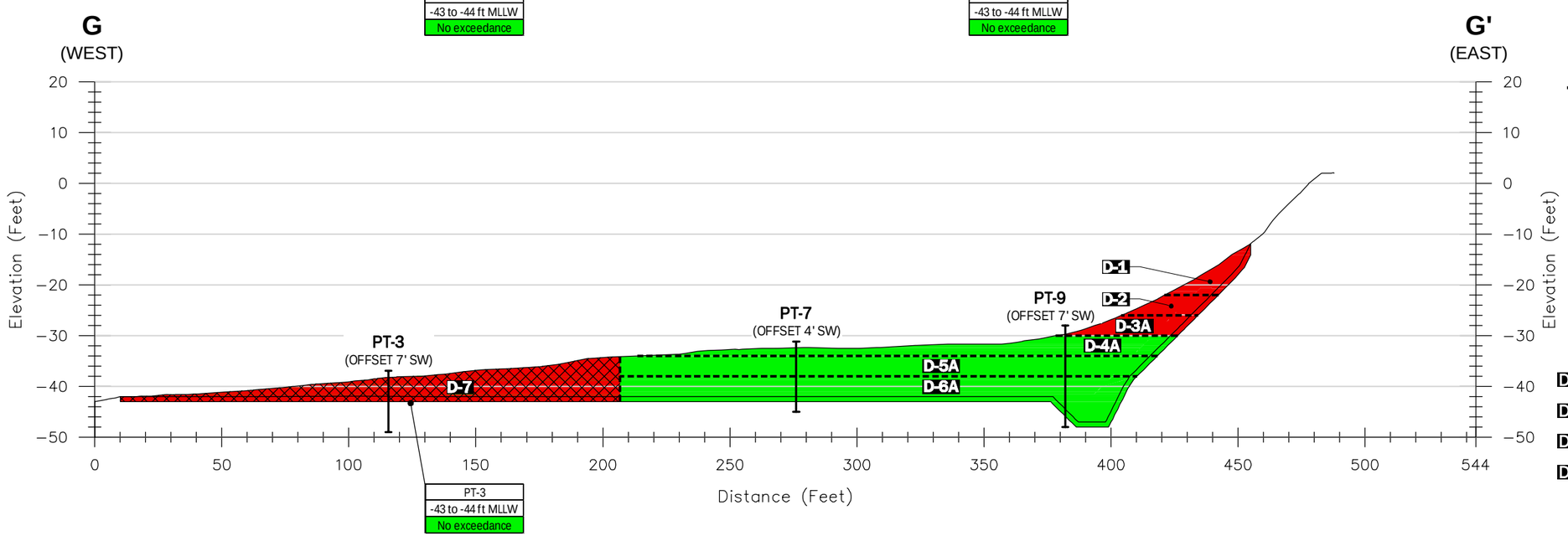
Weyerhaeuser Mill A Former Site
Everett, Washington

GeoEngineers

Figure 15

P:\0\0676020\03\CAD\Dredge Material Characterization Report\Figs 7-9 Sampling Plan Site Plan and Sections.dwg\TAB:DDEE modified by tmichaud on Jun 04, 2015 - 13:45





Legend

- DMMU Boundary
- D-1 DMMU Identification
- Chemical analytical results indicate one or more analytes exceeding screening levels.
- Chemical analytical results indicate no exceedances of screening levels.

DMMU Elevation Boundaries

D-1	Existing Grade to -22 feet MLLW
D-2	-22 to -26 feet MLLW
D-3A & D-3B	-26 to -30 feet MLLW
D-4A & D-4B	-30 to -34 feet MLLW
D-5A & D-5B	-34 to -38 feet MLLW
D-6A & D-6B	-38 to -43 feet MLLW
D-7	Surface DMMU -34 to -43 feet MLLW

Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

Notes

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50 0 50
Horizontal Scale in Feet

25 0 25
Vertical Scale in Feet
Vertical Exaggeration: 2X

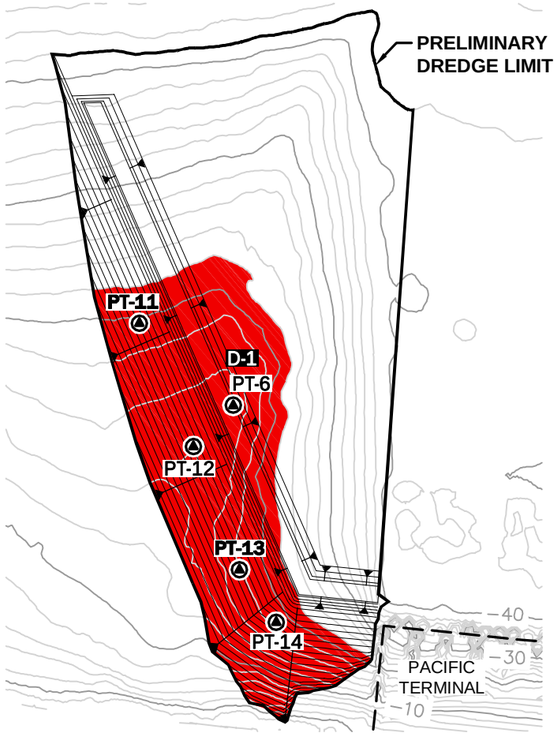
Chemical Analytical Results - Cross-Sections F-F' and G-G'

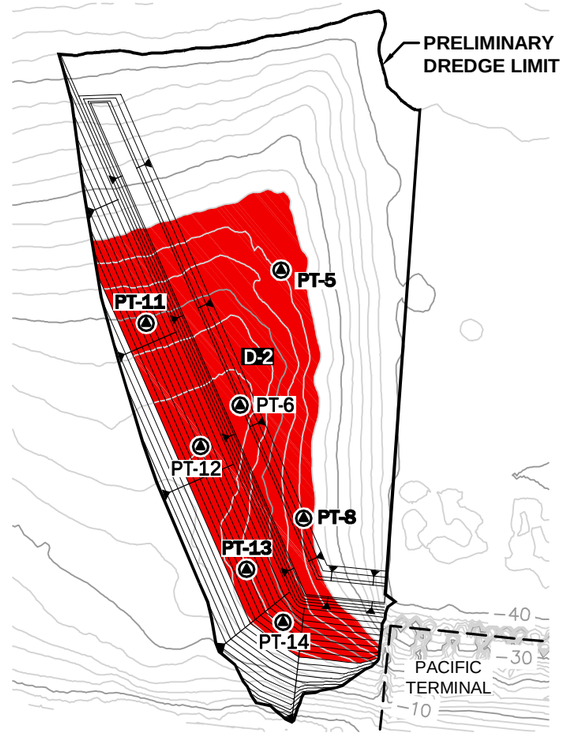
Weyerhaeuser Mill A Former Site
Everett, Washington

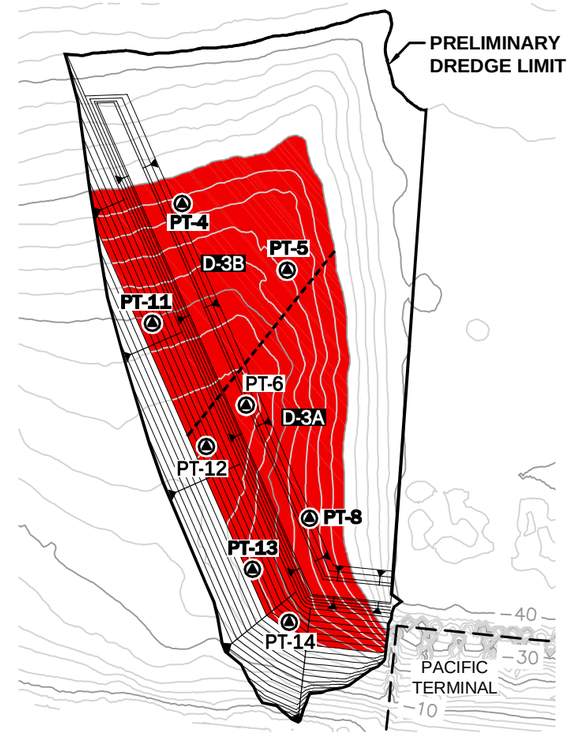
GeoEngineers

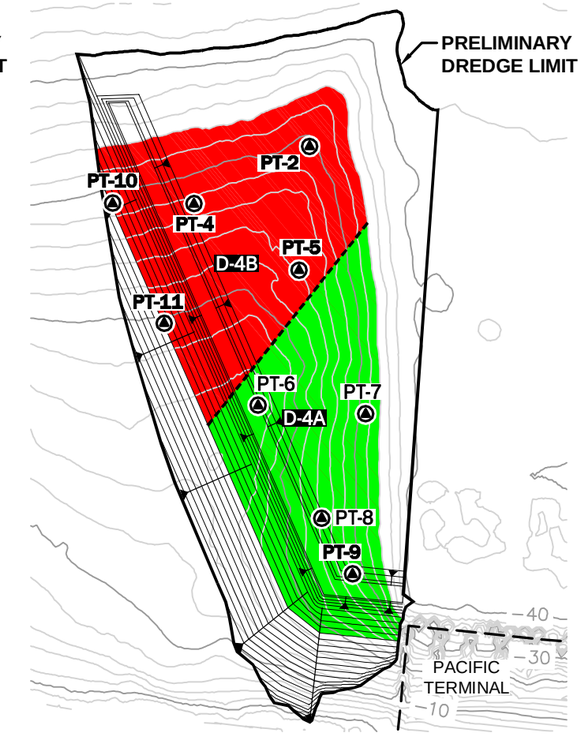
Figure 16

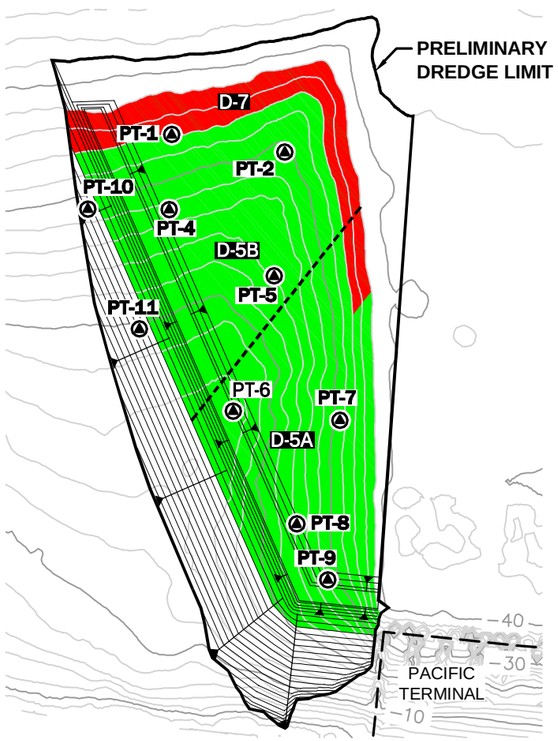
P:\0\0676020\03\CAD\Dredge Material Characterization Report\Figs 7-9 Sampling Plan Site Plan and Sections.dwg\TAB:FFGG modified by tmichaud on Jun 04, 2015 - 13:54

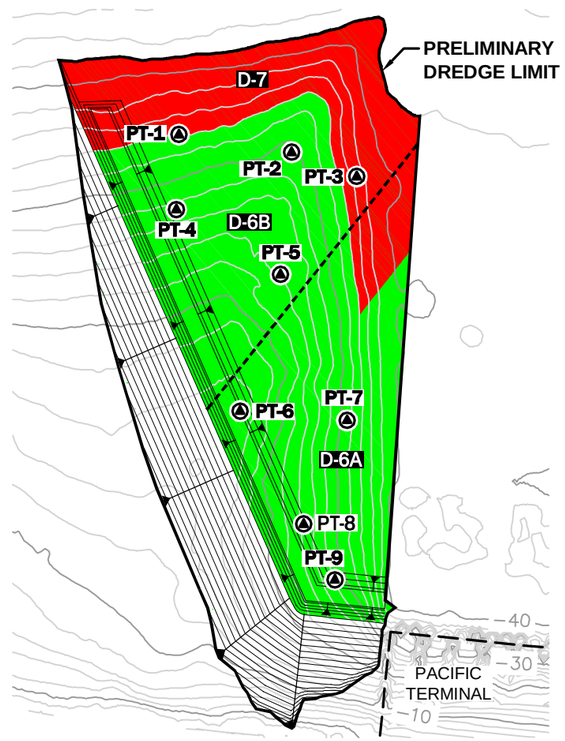






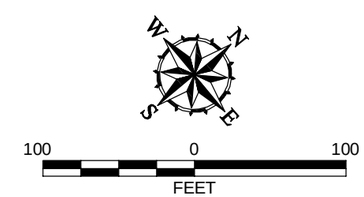






Legend

PT-1	Sediment Core Location
- - - - - - - -	DMMU Vertical Boundary
D-1	DMMU Identification
	Chemical analytical results indicate one or more analytes exceeding screening levels.
	Chemical analytical results indicate no exceedances of screening levels.
	DMMU Elevation Boundaries
D-1	Existing Grade to -22 feet MLLW
D-2	-22 to -26 feet MLLW
D-3A & D-3B	-26 to -30 feet MLLW
D-4A & D-4B	-30 to -34 feet MLLW
D-5A & D-5B	-34 to -38 feet MLLW
D-6A & D-6B	-38 to -43 feet MLLW
D-7	Surface DMMU -34 to -43 feet MLLW



Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

Notes

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Chemical Analytical Results - Plan View

Weyerhaeuser Mill A Former Site
Everett, Washington

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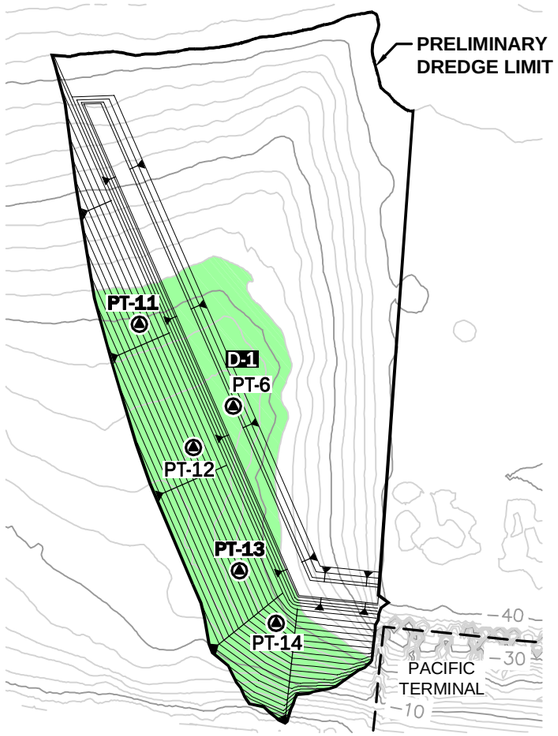
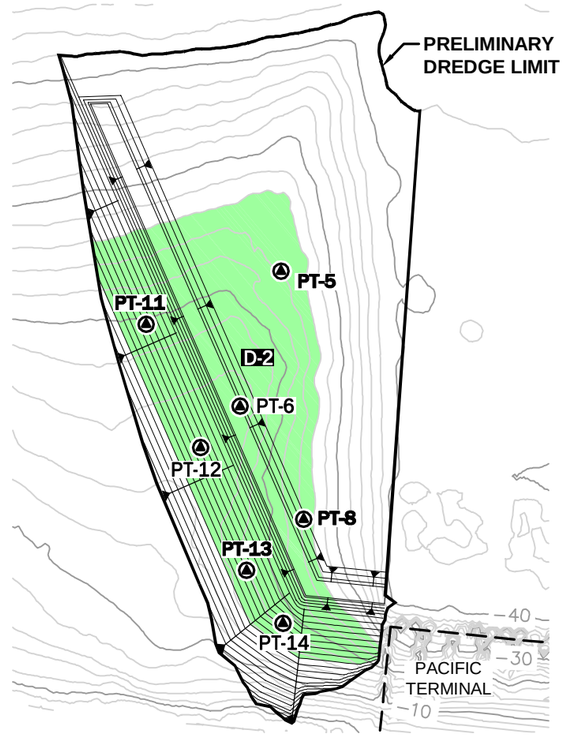
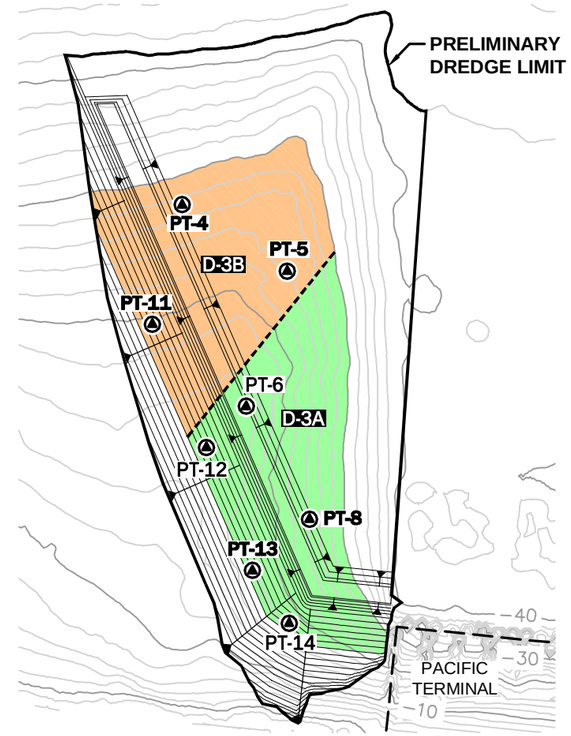
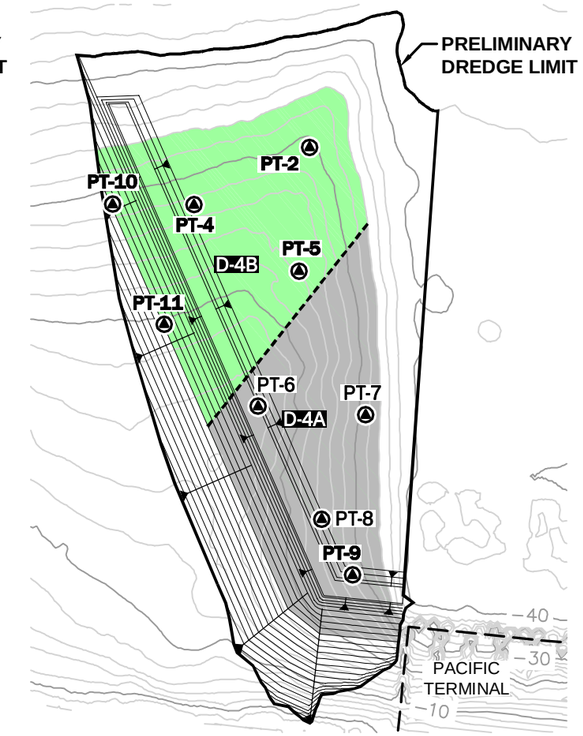
Figure 17

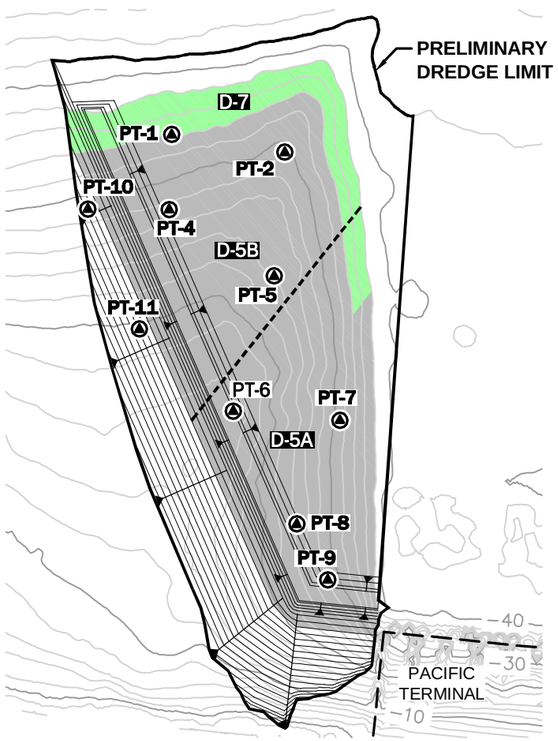
P:\0\0676020\03\CAD\DREDGE MATERIAL CHARACTERIZATION REPORT\FIGS 10 PLAN VIEW OF DMMU.DWG\TAB:AA CC MODIFIED BY TMICHAUD ON JUN 02, 2015 - 9:11

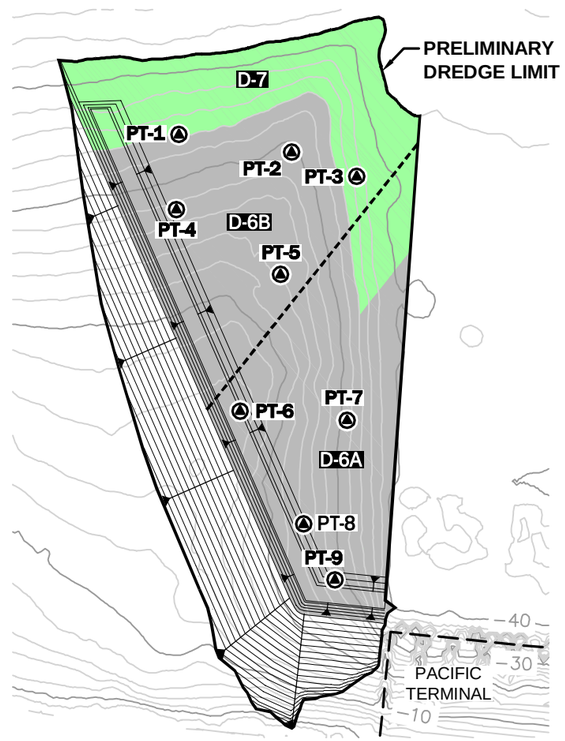










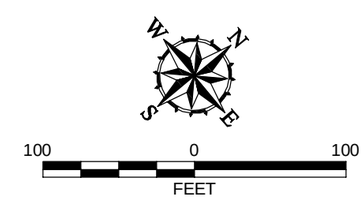


Legend

PT-1	Sediment Core Location
- - - - -	DMMU Vertical Boundary
D-1	DMMU Identification
	Bioassay testing results indicate overall failure relative to screening criteria.
	Bioassay testing results indicate pass relative to screening criteria.
	Bioassy testing not completed for DMMU.

DMMU Elevation Boundaries

D-1	Existing Grade to -22 feet MLLW
D-2	-22 to -26 feet MLLW
D-3A & D-3B	-26 to -30 feet MLLW
D-4A & D-4B	-30 to -34 feet MLLW
D-5A & D-5B	-34 to -38 feet MLLW
D-6A & D-6B	-38 to -43 feet MLLW
D-7	Surface DMMU -34 to -43 feet MLLW



Data Source: Bathymetry from Pacific Geomatic Services, Inc., Completed September 2014.

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Biological Testing Results - Plan View

Weyerhaeuser Mill A Former Site
Everett, Washington

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Figure 18

P:\0\0676020\03\CAD\Dredge Material Characterization Report\Figs II Biological Testing Results.dwg\TAB:AA CC modified by tmichaud on Jun 02, 2015 - 9:09