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Remedial Design Investigation Evaluation Report Willamette Cove Upland Facility Portland, Oregon

Prepared for:
Port of Portland

March 22, 2023
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Abbreviations/Acronyms

AEC	Anderson Environmental Contracting
Apex	Apex Companies, LLC
Apex Labs	Apex Laboratories, Inc.
APS	Applied Professional Services
BBL	Blasland, Bouck & Lee
bgs	below ground surface
BNSF	Burlington Northern Santa Fe
COC	chemical of concern
COI	contaminant of interest
cPAHs	carcinogenic polycyclic aromatic hydrocarbons
CRB	Columbia River basalt
CSM	conceptual site model
D/F	dioxins/furans
DEQ	Oregon Department of Environmental Quality
DU	Decision Unit
ECSI	Environmental Cleanup Site Information
EPA	U.S. Environmental Protection Agency
ER	exceedance ratio
Facility	Willamette Cove Upland Facility
FCR	Field Change Request
FS	feasibility study
GPS	global positioning device
GSI	GSI Water Solutions, Inc.
HPAHs	high molecular weight polycyclic aromatic hydrocarbons
ISM	incremental sampling methodology
McCormick & Baxter	McCormick & Baxter Creosoting Company Superfund Site
MDL	method detection limit
MFD	Missoula Flood Deposits
mg/kg	milligrams per kilogram
MHW	mean high water
MOU	Memorandum of Understanding
NAVD88	North American Vertical Datum 88
NF	NewFields
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
ODFW	Oregon Department of Fish and Wildlife
OLWL	ordinary low water line
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PHSS	Portland Harbor Superfund Site
Port	Port of Portland
PRG	preliminary remediation goal
RDI	Remedial Design Investigation
RI	remedial investigation
ROD	Record of Decision
RSD	relative standard deviation
SAIL	Multnomah County Survey and Assessment Image Locator
SCE	source control evaluation

sf	square feet
SLV	screening level value
SVOCs	semi-volatile organic compounds
TEQ	toxic equivalency
TOB	top of bank
TPH	total petroleum hydrocarbons
UPRR	Union Pacific Railroad
VCP	Voluntary Cleanup Program
VOCs	volatile organic compound
Work Plan	Willamette Cove Remedial Design Investigation Work Plan

1.0 Introduction

Apex Companies, LLC (Apex) has prepared this Remedial Design Investigation (RDI) report for the Willamette Cove Upland Facility (the Facility) as part of a Voluntary Cleanup Program (VCP) Agreement EC-NWR-00-26 between the Port of Portland (Port), Metro, and the Oregon Department of Environmental Quality (DEQ). The Facility is defined in the DEQ Environmental Cleanup Site Information (ECSI) database as ECSI No. 2066.

This RDI report describes the investigation approach and field sampling activities completed and summarizes the results of those activities, which were completed in accordance with the Willamette Cove RDI Work Plan (Work Plan; Apex, 2022) unless otherwise described in this report. The Work Plan was conditionally approved by DEQ in an email dated July 7, 2022, and final approval was issued in a letter dated August 16, 2022. For the purpose of the RDI, the Site consists of that portion of the upland Facility landward of the top of the riverbank. Investigation and cleanup of the riverbank, beach, and in-water contamination are being conducted separately under the Portland Harbor Superfund Site (PHSS) in-water actions, overseen by the U.S. Environmental Protection Agency (EPA).

1.1 Purpose and Objectives

The purpose of the RDI was to gather sufficient information to design the remedial action for the Facility. The specific objectives of the RDI include the following:

- Define the lateral and vertical extent of soil hot spots designated for excavation and off-site disposal;
- Define the lateral and vertical extent of soil posing excess risk to human and ecological receptors that will be excavated and disposed of off-site;[1]
- Define the lateral and vertical extent of soil with excess ecological receptor risk that will remain in place following excavation of soil described above; and
- Generate data to support residual risk assessment.

The previous data set and removal action efforts were evaluated to identify data gaps to be resolved to achieve the above objectives. The intent of the sampling completed at the Site was to provide data necessary to resolve the identified data gaps. Resolution of these data gaps is used to refine the conceptual site model (CSM) and support the remedial design process. The data gaps to be addressed by the RDI are as follows:

- Vertical delineation of chemicals of concern (COCs) exceeding hot spot levels and/or preliminary remediation goals (PRGs);
- Lateral delineation of COCs exceeding hot spot levels and/or PRGs; and

[1] The record of decision includes consolidation and on-site capping for a portion of the soil with excess risk. However, at this time, Metro has elected to forego on-site consolidation and dispose of the soil off-site.

- COC concentrations in soil beneath the concrete pad on the East Parcel.

1.2 Regulatory Framework

Since 1988, a succession of site-specific investigations and removal actions have been implemented at the Facility. The Facility is defined within the DEQ ECSI database as No. 2066. In November 2000, the Port and Metro entered into a voluntary agreement (ECVC-NWR-00-26) with DEQ to perform a remedial investigation/feasibility study (RI/FS) and implement any needed source control measures to prevent releases to Portland Harbor. In December 2000, the EPA identified the Portland Harbor area of the lower Willamette River as a Superfund Site (ID No. ORSFN1002155) and placed it on the National Priorities List (NPL) due to concerns of contamination in Willamette River sediments posing risks to human health and the environment. The EPA selected a final action for the Portland Harbor in the January 2017 Record of Decision (ROD).

In 2001, the EPA entered into a Memorandum of Understanding (MOU) with the DEQ, six federally recognized Native American Tribes, the National Oceanic and Atmospheric Administration (NOAA), the U.S. Department of the Interior, and the Oregon Department of Fish and Wildlife (ODFW). Under this MOU, the DEQ is the lead agency for addressing sources of contamination in the upland portions of the Superfund Site (i.e., source control) and the EPA is the support agency.

Willamette Cove is located within the Portland Harbor and subject to the EPA ROD. DEQ is the lead agency for assessment and cleanup of upland facilities that could pose a source of sediment contamination to the harbor, and correspondingly the Willamette Cove was identified by DEQ for upland assessment. Prior to 2000, environmental assessments were conducted at Willamette Cove related to property transfers.

The Port and Metro conducted the RI of the Facility between April 2001 and September 2002. The RI combined historical information (prior to 2001) and results of the investigation to develop a CSM and a list of contaminants of interest (COIs). Multiple subsequent investigations were conducted between 2002 and 2017 to further investigate areas identified in the RI and resolve data gaps. An FS and a source control evaluation were conducted in 2019 (Apex, 2019). The DEQ selected a final remedial action for the upland facility in the March 2021 ROD (DEQ, 2021). The remedial action objectives defined in the ROD include the following:

- Prevent exposure of human receptors (recreational/park user, transient trespasser, construction worker) to soil containing COCs at concentrations exceeding individual and cumulative acceptable risk levels;
- Prevent exposure of ecological receptors (mammals, birds, invertebrates, plants) to soil containing COCs at concentrations exceeding individual and cumulative acceptable risk levels;
- Remove or treat soil hot spots of contamination to the extent feasible and practicable; and
- Prevent further migration of contaminated upland soil to the river, to the extent practicable.

1.3 Report Organization

This document is organized in the following manner:

- Section 2 provides a description of the Site, previous investigations, and interim actions;
- Section 3 presents the investigation approach and field sampling activities completed at the Site and any deviations from the Work Plan;
- Section 4 summarizes the analytical results of the field sampling;
- Section 5 presents the general basis for remedial design;
- Section 6 presents a summary of remaining data gaps;
- Section 7 presents the conclusions of the investigation; and
- Section 8 lists the references cited in this Report.

Supporting information is provided in tables, figures, and appendices.

2.0 Site Description and Background

2.1 Site Description

The Facility is located along the northeast bank of the Willamette River in the St. Johns area of Portland, Oregon. Figure 1 shows the location of the Facility. It is situated between River Miles 6 and 7 on the Willamette River and is mostly in Section 12 of Township 1 North, Range 1 West, Willamette Meridian. The Facility has been owned by Metro since 1996. Figure 2 provides a current plan of the Facility, the Site, and the surrounding area. For the purposes of describing the Facility, it has been divided into West, Central, and East Parcels as shown on Figure 2.

2.1.1 Extent of Upland Facility

The upland portion of the Facility is approximately 3,000 feet long and varies from 110 to 700 feet in width. The edge of the cove is up to 800 feet from the main river channel; it was created primarily as a result of the placement of the embankment leading up to the Burlington Northern Santa Fe (BNSF) railroad bridge. The Facility as defined in the VCP Agreement covers approximately 24 acres of upland area that is inland from the ordinary low water line (OLWL). However, the scope of work for the VCP Agreement limits the work to areas inland from the mean high water (MHW) line (defined as 13.3 feet, North American vertical datum 88 [NAVD88] datum) to the property line with the Union Pacific Railroad (UPRR). DEQ and EPA have agreed that the riverbank at the Facility (defined as the area from the waterline to the top of bank [TOB]) will be addressed as part of in-water activity. Although the FS included the upper portion of the riverbank, the RDI work does not include any portion of the Facility below the TOB. The Site for this RDI, therefore, covers an

area of approximately 18.63 acres, divided as follows: West Parcel (4.28 acres); Central Parcel (7.76 acres); and East Parcel (6.59 acres).

2.1.2 Structures and Improvements

There are no structures on the Site. Indications of previous structures include a large concrete slab foundation and a paved roadway in the eastern portion of the Site, as well as several smaller concrete slabs or foundations.

2.1.3 Topography

The Site is situated on a terrace created by historical filling. Overall, the topography of this terrace is flat, with an elevation ranging between 30 and 45 feet (all elevations in the report refer to NAVD88 unless otherwise noted). The southern portion of the West Parcel is slightly higher, at elevation 50 to 55 feet. Berms and hummocks are occasionally present.

Adjacent to the Site, the riverbank is generally a steep slope down to the river. The BNSF railroad embankment along the southeast perimeter of the cove rises steeply approximately 50 feet above the cove. North of the Site, across the UPRR tracks, is a naturally formed 120- to 150-foot-high bluff. This bluff rises at approximately 5H:4V adjacent to the East and Central Parcels. Near the West Parcel, the slope is approximately 10H:3V.

2.1.4 Vegetation

A development planning document (Alta Planning and Design, 2010) summarizes results from a natural resource assessment of the Facility completed in 1999. Native species found on Site include: Oregon white oak (Quercus garryana), madrone (*Arbutus meziesii*), bigleaf maple (*Acer macrophyllum*) and black cottonwood (*Populus trichocarpa*).

2.1.5 Surrounding Properties

The Site is bordered on the northeast by the UPRR tracks. Farther to the northeast is a vegetated bluff. A residential area is present on top of the bluff and farther inland. Bordering the northwest side of the Site is a vacated portion of North Richmond Avenue with industrial property beyond. To the southeast is an embankment for the BNSF railroad bridge over the Willamette River. On the opposite side of this embankment is the former McCormick & Baxter Creosoting Company, a federal Superfund Site (McCormick & Baxter). Toward the river, the Site is bordered by the riverbank and the surface water of the cove and Willamette River.

2.1.6 Cultural Resources

A cultural resource survey of the Facility was conducted in 2003 (Archaeological Investigations Northwest, Inc., 2003) with the conclusion that there are no significant archaeological or historical resources identified. However, it is possible that significant resources may be encountered if future activity were to disturb the original floodplain surface and underlying native soils north and east of the 1910 shoreline. In addition, during part of the 2016 excavation activities, an archaeologist was on site to observe the debris encountered in one area of the Central Parcel. The conclusion of the archaeologist was that the brick and other debris encountered should not be recorded as an archaeological site.

2.1.7 Geology

The geology beneath the Facility consists of fill and the presence of alluvial and Columbia River basalt (CRB) materials. Early maps of the area indicate the current upland portion of the facility consisted of a strip of lowland adjacent to the current UPRR railroad tracks. Based on historical maps and photographs, fill was placed on this lowland and outward into the Willamette River prior to and concurrent with development. The thickness of the fill across the Facility likely varies from about 20 to 30 feet; however, in places, it could be up to 60 feet (such as in a former log pond on the West Parcel filled in the early 1970s). During recent geotechnical explorations at the Site conducted as part of the pre-design investigation (GSI Water Solutions, Inc. [GSI], 2021), fill materials were encountered from the ground surface to depths ranging between 21.0 and 30.5 feet below ground surface (bgs) in four upland soil borings. Alluvium underlying the fill unit consists of Missoula Flood Deposits (MFD) and recent alluvium defined as downstream sands and gravels, cove elastic silts, and cove sands. MFD are typically fine-grained and coarse-grained units. The alluvium was encountered in the GSI upland borings from the bottom of the fill to depths ranging from 40 feet to greater than 75 feet (the termination depths of the borings). The Troutdale Formation was encountered at a boring located on the West Parcel at a depth of approximately 75 feet bgs (GSI, 2021). The Troutdale formation consists of a very dense conglomerate with a silty matrix. CRB underlies the alluvium and Troutdale deposits. Offshore, the CRB was encountered at relatively shallow depths, but was not identified in any upland borings.

2.1.8 Existing Conditions and Site Use

The Facility is currently vacant, covered with invasive and native vegetation, and it provides habitat for opportunistic use by wildlife. The site is not managed for any human use and is posted to prohibit trespassing. However, trespassers do come on the site (e.g., homeless persons and joggers/walkers).

The Facility is currently zoned as an open space (OS) zone with “g” (River General) and “q” (River Water Quality) greenway overlay zones (City of Portland, 2023). The open space zone is intended to preserve and enhance public and private open, natural, and improved park and recreational areas. Greenway regulations are also intended to protect, conserve, enhance, and maintain the natural, scenic, historical, economic, and recreational qualities of lands along Portland’s rivers. Specifically, the “g” overlay is intended to allow public

use and enjoyment of the waterfront and for enhancement of the river's scenic and natural qualities. The "q" overlay is designed to protect the functional values of water quality resources by limiting or mitigating the impact of development in the 50- to 200-foot setback from the top of bank. Other nearby zoning includes commercial (EG2), residential (R2 and R5), open space (OS), and industrial (IH and IG2).

The Facility is included in a citywide inventory that identified scenic resources (City of Portland, 2012). The Facility is identified as a scenic viewpoint. The zoning map shows a public-use trail through the Facility (City of Portland, 2023). However, this trail is only proposed as part of the regional trail plan adopted by Metro (Alta Planning and Design, 2010).

2.2 Previous Environmental Work

2.2.1 Soil Sampling and Removal Actions

Numerous investigations, assessments, and environmental actions have been performed at the Facility since 1988, summarized as follows:

- Due diligence assessments, 1988 to 1995;
- Remedial investigation (Hart Crowser, 2003), 2001 to 2002;
- Upland soil removal for metals on the eastern portion of the Central Parcel (Ash Creek Associates and NewFields [Ash Creek/NF], 2008), June 2008;
- Riverbank soil sampling (Blasland, Bouck & Lee [BBL] and Ash Creek/NF, 2006; Ash Creek/NF, 2008; Ash Creek, 2011), 2005 to 2010;[2]
- Inner cove and wharf road beach sampling (Ash Creek, 2005; Ash Creek/NF, 2010), 2004 and 2007;
- Wharf road area sampling (Ash Creek, 2012), 2012;
- Upland dioxin/furan and metals sampling (Apex, 2014a; Apex, 2014b; Apex, 2014c; Apex, 2015a; Apex, 2016), 2014 to 2016;
- Hot spot removal action (Apex, 2015b, Apex, 2016), 2015 to 2016; and
- West Parcel soil sampling (Apex, 2017), 2016 to 2017.

Sample locations are shown on figures in Appendix A of the Work Plan, and historical soil data are presented in Appendix B of the Work Plan.

[2] Although the riverbank is not within the Site, data from the riverbank were included with Site data in identifying contaminants to include in the RDI analyses.

2.2.2 2019 Feasibility Study

An FS and source control evaluation (SCE) were prepared (Apex, 2019) to evaluate remedial options and recommend a remedial alternative to address unacceptable baseline risk at the Facility. Direct contact exposure pathways for upland ecological and human (park user and transient trespasser) receptors are complete. From a source control evaluation standpoint, complete migration pathways were determined to be erosion of riverbank soil and groundwater to surface water. COCs identified in the FS included metals, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and dioxins/furans for soil. Source control COCs also included total petroleum hydrocarbons (TPH). Dioxins/furans are the primary risk driver at the Facility.

Remedial action alternatives were developed to address upland soils, and each alternative was evaluated using balancing factors. The DEQ used the FS to prepare the ROD presenting the selected Site remedy.

2.3 Upland Selected Remedy

The selected remedy is an excavation-focused effort consisting of the following key elements:

- Excavation and off-site disposal of all soil exceeding hot spot levels for human health;
- Excavation and off-site disposal of soil exceeding non-dioxin/furan hot spot levels for ecological health;
- Consolidation and on-site capping of a) soil posing an excess risk to humans but below hot spot levels; and b) soil with higher risk levels relative to plants and animals, including hot spots;[3] and
- Following off-site disposal and on-site consolidation and capping, in-place covering of residual soil contamination posing a lower-level risk to plants and animals.

The remedy includes a contingency remedy to dispose of soil off-site rather than placing in an on-site consolidation cell (at Metro's discretion). To the extent that the final remedy includes engineering controls, the remedy will also include institutional controls and long-term monitoring and maintenance.

3.0 Activities Completed

This section describes the field activities conducted to collect the soil samples. Soil samples were collected in accordance with the RDI Work Plan except where modified based on field conditions. Deviations from the work plan are described in Section 3.4.

[3] As noted prior, as of this time, Metro has elected to dispose of this soil off-site rather than consolidate on the Site.

3.1 Pre-field Activities

Preparatory activities for soil characterization efforts included:

- Coordinating property access with Metro personnel and McCormick and Baxter (for access to the project staging area);
- Coordination of Site security for the project staging area (security services were provided by Arrakis Professional Services under subcontract to Apex);
- Clearing proposed sample locations for underground utility conflicts (private underground utility clearing was provided by Applied Professional Services (APS) under subcontract to Apex);
- Preparing health and safety documents;
- Procuring three temporary field team members through Aerotek;
- Procuring a temporary field office, storage container, and utility vehicle;
- Field testing sampling equipment with the Port and DEQ; and
- Project kickoff meeting with the Port, Metro and DEQ on July 13, 2022.

3.2 Boundary Survey Field Confirmation

Apex located Metro property boundaries in the field using existing survey documentation provided by Metro with confirmation using Portland Maps and the Multnomah County Survey and Assessment Image Locator (SAIL). The boundaries of the Decision Units (DUs) along the east edge of the East Parcel, the northern edge of all three parcels, and the west edge of the West Parcel are based on the survey documentation.

3.3 Soil Sampling

The Site was divided into a total of 44 DUs, consisting of 38 incremental sampling methodology (ISM, 30-increment) DUs and six five-point composite sample DUs (composite samples were collected from areas covered by concrete slabs). ISM probabilistic-based sampling methodology is described in detail in the RDI Work Plan (Apex, 2022). The 38 ISM DUs are approximately half-acre size (DU sizes range from 0.26 to 0.68 acres with an average of 0.46 acres). Of the six five-point composite sample DUs, DU-39 and DU-40 each comprise half of the large concrete slab in the East Parcel and are 0.5 and 0.49 acres in size, respectively. The remaining four five-point composite sample DUs are concrete slabs discovered after the RDI sampling began and range in size from 0.09 to 0.25 acres. In general, the DUs are configured to correspond to historical operational areas and Facility features such as the Facility boundaries to the west, north, and east, existing gravel roads, and the top of bank on the riverward boundary. The top of bank is defined as the point where the slope of the land surface changes from toward the river to towards the uplands and is defined on the figures as "Top of Bank Plus Areas of Potentially Erodible Soil." There are two small depressions on the top

of bank in the Central Parcel that are included in the DUs that would otherwise be excluded from sampling based on the "top of bank" definition.

The RDI sampling activities were initiated on July 18, 2022 and completed on December 1, 2022. The secure area of the adjacent McCormick and Baxter site was used as a staging area for sampling equipment, a field office, and staff vehicle parking. A utility all-terrain vehicle was used to mobilize sampling personnel and equipment to each sampling area. Field notes for the RDI sampling activities are included in Appendix A. Appendix B is a photograph log of the RDI sampling activities.

Team progress meetings (Port, DEQ, Metro, and Apex) were conducted on an approximately bi-weekly schedule throughout the duration of the RDI sampling program. In addition, weekly progress reports were submitted to DEQ. A field audit was conducted by Apex on August 3, 2022. The weekly reports and the field audit form are included in Appendix C.

The increment and composite sampling locations were located in the field using a global positioning device (GPS; Trimble© Geo7x™) with sub meter accuracy. If increment locations had to be relocated a significant distance (greater than 2 feet) due to obstructions or interferences (such as the fiber optics line that is present parallel to the UPRR tracks), a revised GPS coordinate was collected for that increment. Sampled increment locations are documented in Appendix D.

Sampling equipment decontamination was conducted as described in the Sampling and Analysis Plan (SAP; Appendix C of the Work Plan [Apex, 2022]).

3.3.1 ISM Sampling (DU-1 through DU-36, DU-38)

Each 1-foot ISM increment sample was collected using hand tools as described below. To access the 1-to-2- and 2-to-3-foot target sampling intervals at each ISM increment location, soil was excavated in two adjacent locations, one to a depth of 1 foot and one to a depth of 2 feet using a mini excavator. The mini excavator was equipped with an 18-inch-wide bucket and was operated by Anderson Environmental Contracting (AEC) under subcontract to Apex.

On May 6, 2022, prior to initiation of the RDI sampling program, field testing of various sampling tools was conducted to identify a sampling method that would yield a representative and repeatable sample volume of approximately 130 grams of soil. Based on the field testing, the method selected for the ISM sampling consisted of a 1 ¼-inch diameter concrete/masonry hammer drill bit advanced 1 foot into the ground surface. The drill bit was advanced through a hole in the bottom of a plastic bucket slightly larger than the bit, and the soil was carried up the drill flights into the bucket. The soil was transferred from the bucket to a paper container and weighed. If the weight of the soil was significantly greater than 130 grams (i.e., over 200 grams), the soil was thoroughly homogenized in the weigh boat and excess soil was removed until the weight was close to 130 grams.

Field replicates were collected from each depth interval in 20 percent of the ISM DUs. Two field replicates plus the primary incremental sample were collected from locations DU-5 (West Parcel), DU-11 (Central Parcel), DU-13 (Central Parcel), DU-18 (Central Parcel), DU-22 (Central Parcel), DU-26 (Central Parcel), DU-38 (East Parcel) and DU-41 (East Parcel) at each depth interval. Additionally, replicate samples were collected from the 0-to-1-foot interval from DU-16. Field replicates were collected from separate locations within the same ISM cell as described in the SAP (Appendix C of the Work Plan [Apex, 2022]).

3.3.2 Soil Berm ISM Sampling (DU-41)

Two soil berms approximately 4 feet high by 20 feet wide are present on the East Parcel parallel to the south side of the road that separates the Facility from the UPRR tracks. The western berm is approximately 310 feet long (460 cubic yards) and the eastern berm is approximately 80 feet long (120 cubic yards). The total volume of the berms is approximately 580 cubic yards, and, at DEQ's request, the berms were sampled as a separate DU (DU-41). Replicate samples were also collected in DU-41.

3.3.3 Concrete Slab Composite Sampling

The large concrete slab on the East Parcel was divided in half with the halves designated as DU-39 and DU-40. Four additional smaller concrete slabs were identified after the RDI sampling program began. In discussions with DEQ, the smaller concrete slabs were separated from the soil DUs into DU-42 (located within planned DU-16), DU-43 (located within planned DU-31), and DU-44 (located within planned DU-38). In addition, the DU-37 boundary was revised to encompass the concrete slab discovered in that area. The original DUs were reconfigured to exclude the concrete slab areas but maintain the 30-point ISM samples. In the new DUs encompassing the concrete slabs, five-point composite samples were collected from beneath the slabs (through holes mechanically cored through the concrete) in each DU at the depth intervals of 0 to 1, 1 to 2, and 2 to 3 feet bgs. The sample locations were determined using a systematic random sampling design, similar to the other DUs but with wider spacing of increments. The samples were collected using a two-inch diameter hand auger advanced to each depth interval in the five locations. Soil from each of the five points was transferred into a stainless steel bowl, homogenized, then weighed. The weight of the homogenized soil was adjusted to approximately 800 grams by removing excess soil. The five 800-gram aliquots were then placed into the sample jar. The composite samples were processed using ISM methodologies described above and in the SAP (Appendix C of the Work Plan [Apex, 2022]). No replicate samples were collected from the concrete slab DUs.

3.3.4 Sampling Demobilization

Sampling activities were completed on December 1, 2022. Temporary facilities were demobilized from the staging area on December 14, 2022.

On December 8, 2022, Metro and Apex conducted erosion control activities in areas with significant disturbed soil resulting from sampling activities. The erosion control consisted of spreading grass seed and straw in these areas.

3.4 Deviations from the Work Plan

3.4.1 ISM Sample Increment Location Modification

Several gravel roads transit the Site, primarily in the East and Central Parcels where fill material (gravel) was placed within the last 10 years. Some increment locations fell within the recent gravel fill material. Including that material in the ISM sample may have biased the results such that the sample would not be representative of the entire DU. Through discussions with DEQ, increment locations falling within the recent gravel fill were moved to the nearest location where surface soil material type matched the surrounding grade. The Port submitted Field Change Request No. 1 (FCR; August 10, 2022) to DEQ documenting this decision. The FCR No. 1 is included in Appendix E. Approval by DEQ for FCR No. 1 was received by the Port in an email dated August 10, 2022.

3.4.2 Laboratory Data Quality Packages

Typical data quality review includes a level 2A evaluation, which uses the standard lab report and analytical batch quality assurance samples to evaluate the usability of the data and is sufficient for the intended use of the RDI data. Based on our review of the RDI analytical reports, no issues arose that could not be resolved through the level 2A evaluation. The Port submitted FCR No. 2 on August 10, 2022 to use level 2A data packages for the RDI data instead of level 4 data packages as stated in Appendix C of the Work Plan. FCR No. 2 is included in Appendix E. Approval by DEQ for FCR No. 2 was received by the Port in an email dated August 10, 2022.

3.4.3 DU Configuration Modifications Due to Concrete and Pavement

As discussed in Section 3.3.2, several previously unknown concrete slabs were discovered after the RDI sampling was initiated in DU-16, DU-31, DU-36, and DU-37. A significant paved area was also identified in the area of DU- 20, DU-22, and DU-23. Through discussions with DEQ, the affected DUs were reconfigured to accommodate collection of samples in these areas. The DU reconfigurations are summarized below:

- DU-20, DU-22, and DU-23 were reconfigured so that the paved surface in this area is entirely within DU-20. The layout of the 30 increments in each of these DUs was realigned to match the new DU shapes, and ISM samples in DU-20 were collected beneath the pavement;
- New DU-42 (concrete area within planned DU-16), new DU-43 (concrete area within planned DU-31) and new DU-44 (concrete area within planned DU-36) are five-point composite samples accessed through holes cored through the concrete;

- The 30 increment locations in the remaining portions of DU-16, DU-31, and DU-36 were realigned;
- DU-37 was reconfigured to correspond to the concrete slab discovered in that area, and the sample consisted of a five-point composite accessed through holes cored through the concrete;
- The eastern portion of former DU-37 was added to DU-26, the western portion of DU-37 was added to DU-38, and the 30 increment locations in each of DU-26 and DU-38 were realigned;
- Replicate samples were eliminated from DU-16 due to uneven topography and presence of debris, and replicates were added to DU-26 as a replacement;
- Replicate samples were eliminated from DU-37 because it was converted to a five-point composite DU, and replicates were added to DU-41 as a replacement; and
- The southeastern portion of original DU-38 was identified to be below the top of bank, and that portion of the DU was eliminated.

These modifications were approved by DEQ via email dated October 25, 2022 and documented in FCR No. 3 submitted by the Port on February 17, 2023. FCR No. 3 is included in Appendix E and includes the reconfigured DU figures.

4.0 Chemical Analysis and Results

Table 1 and Figure 3 summarize the DU and composite locations sampled during the RDI. The soil samples were submitted under chain of custody to Apex Laboratories (Apex Labs) in Tigard, Oregon (EPA ID OR01039). Copies of the analytical laboratory reports are included in Appendix F along with a quality assurance/quality control (QA/QC) review of the data. The results of the quality review indicate that the data are of acceptable quality and are suitable for their intended purpose.

4.1 Analytical Testing Program

Soil samples were collected from a total of 44 DUs at three depth intervals. Field replicates were collected at 8 DUs at all three depth intervals and at 1 DU from one depth interval for a total of 182 samples analyzed. The location and number of samples collected within each decision unit is summarized in Table 1. The soil samples (primary and replicates from all target depths) were analyzed for the following:

- Metals (antimony, arsenic, chromium, copper, lead, mercury, nickel, selenium, and zinc) by EPA Method 6020B;
- Dioxins/furans by EPA Method 1613B;
- PAHs by EPA Method 8270E-SIM;
- Dibenzofuran by EPA Method 8270E-SIM; and
- PCBs Aroclors by EPA Method 8082A.

Analysis of metals, PAHs, dibenzofuran, and PCBs was performed by Apex Labs. Analysis of dioxin/furans was performed by Ceres Analytical Laboratory (Ceres) under subcontract to Apex Labs. Apex Labs processed all ISM samples prior to submitting to Ceres. The SAP in Appendix C of the Work Plan (Apex, 2022) includes a more detailed discussion of the analytical testing plan.

4.2 Field Replicates

Two field replicates plus the primary incremental sample were collected from locations DU-5 (West Parcel), DU-11 (Central Parcel), DU-13 (Central Parcel), DU-16 (Central Parcel; 0-1 foot bgs only), DU-18 (Central Parcel), DU-22 (Central Parcel), DU-26 (Central Parcel), DU-38 (East Parcel), and DU-41 (Soil Berms).

Data evaluation of field replicate results was conducted in accordance with the Interstate Technology and Regulatory Council (ITRC) Incremental Sampling Methodology Update (ITRC, 2020) and the interim final updates to the 2016 State of Hawaii Department of Health (HIDOH) Decision Unit and Multi Increment Sampling Methods (DU-MIS) Guidance for data quality evaluation (HIDOH, 2021).

The relative standard deviation (RSD) for each field replicate was calculated using the triplicate data. For results that were not detected above the method detection limit (MDL), the MDL was used in the RSD calculation. If the results were below the MDL in all three replicates, no RSD was calculated. The field replicate data and RSD results are presented in Tables I-1 through I-5 in Appendix I. The RSD reflects the precision of the total sampling method, including combined field and laboratory error. The lower the RSD, the more precise the sampling method used and the more reproducible and reliable the data. In aggregate, 93 percent of the replicate data showed good or very good reproducibility. In a few instances, there was poor or very poor reproducibility for specific COCs. The uncertainty associated with these poor or very poor results is discussed further in Section 4.4.

The RSD from a replicate sample location may be considered representative for adjacent DUs where replicate samples were not collected. The table below summarizes which DUs are considered adjacent to each representative replicate sample.

Representative Replicate DU	Adjacent DUs
DU-5	DU-1, DU-2, DU-3, DU-6, DU-7
DU-11	DU-4, DU-8, DU-9, DU-10
DU-13	DU-12, DU-14, DU-15
DU-16	None
DU-18	DU-16, DU-17, DU-19
DU-22	DU-20, DU-21
DU-26	DU-23, DU-24, DU-25, DU-27, DU-37

Representative Replicate DU	Adjacent DUs
DU-38	DU-28, DU-29, DU-30, DU-31, DU-32, DU-33, DU-34, DU-35, DU-36
DU-41	None

Soil from underneath concrete slabs was collected using composite sampling methods and is not informed by ISM replicates. Field replicates were only collected from 0 to 1 foot bgs for DU-16; therefore, it will not be used as a representative replicate sample. DU-41 was collected from the soil berms which are located above the ground surface and is therefore not compared to adjacent DUs.

For the data screening and evaluation in Tables 2 through 9, the arithmetic mean for the replicate samples was used. For results that were not detected above the MDL, the MDL was used in the arithmetic mean calculations. For samples where the results of all three field replicates were below the MDL, the largest MDL was used in place of the mean concentration.

4.3 Summary of Chemical Results

Soil sampling results are listed in Tables 2 through 5 and summarized on figures in Appendix G. Results are screened against the ecological and human health PRGs and hot spot concentrations adopted from the RI/FS (Apex, 2019). Tables 6 and 7 present summary statistics for each sampling area (West Parcel, Central Parcel, Central Parcel Concrete Slab, East Parcel, East Parcel Concrete Slabs, and East Parcel Soil Berms). These tables summarize exceedance frequencies for the MDL, the PRG, and hot spot concentrations as well as listing maximum exceedance ratios (ER; ratio of detected concentration to PRG) for both ecological and human health screening levels for all depths sampled. Table 8 summarizes the locations of PRG/hot spot exceedances, including depth, COCs, and whether excavation is recommended. Table 9 summarizes average concentrations by depth, and exceedances are graphically presented on Figures G1 through G63 in Appendix G. Table 10 summarizes cumulative ecological and human health PRG ERs for each sample depth interval for each DU and cumulative PRG ERs are graphically represented on Figures H1 through H6 in Appendix H. The results are discussed by sampling area in the sections below.

4.3.1 West Parcel

Decision units DU-1 through DU-9 are located within the West Parcel. These samples are all 30-point ISM samples that were collected at three depth intervals. A total of 27 sample results from nine DUs were obtained from the West Parcel sampling area. Ecological and human health screening level exceedances are present at all depth intervals in each of the 9 DUs. The analytes that contribute to ecological and human health risk in the West Parcel are summarized below from the data presented in Tables 6 and 7.

Analyte	West Parcel Screening Level Exceedances					
	Ecological			Human Health		
	PRG	Hot Spot	Max ER	PRG	Hot Spot	Max ER
Arsenic				X		2.0
Chromium	X	X	1.3			
Copper	X		4.6			
Lead	X		9.7			
Mercury	X	X	4.2			
Nickel	X		1.7			
Zinc	X		1.7			
Total D/F TEQ	X		4.3	X		1.8
Dibenzofuran	X		3.3			
Total HPAHs	X		2.1			
cPAHs				X		3.2
Total PCBs	X	X	28			3.7

Notes:
TEQ: toxic equivalency
D/F: dioxins/furans
HPAH: high molecular weight polycyclic aromatic hydrocarbons
cPAH: carcinogenic polycyclic aromatic hydrocarbons

The primary contributors to ecological risk on the West Parcel are PCBs, mercury, chromium, lead, copper, and total D/F TEQ with secondary contributions from dibenzofuran, HPAHs, and several additional metals. Primary contributors to human health risk on the West Parcel are PCBs, cPAHs, arsenic, and total D/F TEQ.

Graphical representation of the data in Table 9 are plotted on Figures G1 through G63 in Appendix G. For the West Parcel, these data do not show a consistent trend with depth. For approximately half of the COCs, the higher concentration was detected in the mid-range sample. This result is consistent with historical records indicating placement of fill (some of which may have been contaminated) after cessation of historical industrial activities.

For the West Parcel, the cumulative ecological PRG ERs exceeded 30 in one of the 27 samples (DU-1 in the 1-2 foot interval), was less than 30 in 16 samples and less than 10 in the remaining 10 samples. Cumulative human health PRG ERs were generally less than 4 with few exceptions and the highest exceedance was 8.2 (DU-1 in the 1-2 foot interval).

4.3.2 Central Parcel

Decision units DU-10 through DU-26 are located within the Central Parcel (sample DU-42 is discussed separately in Section 4.3.3). Samples DU-10 through DU-26 are 30-point ISM samples that were collected at three depth intervals. A total of 51 sample results from 17 locations were obtained from the Central Parcel

sampling area. Ecological and human health screening level exceedances are present at all depth intervals in each of the 17 DUs. The analytes that contribute to ecological and human health risk in the Central Parcel are summarized below from the data presented in Tables 6 and 7.

Analyte	Central Parcel Screening Level Exceedances					
	Ecological			Human Health		
	PRG	Hot Spot	Max ER	PRG	Hot Spot	Max ER
Antimony	X		2.7			
Arsenic				X		2.6
Chromium						
Copper	X		3.2			
Lead	X		9.3			
Mercury	X	X	52			
Nickel	X		1.3			
Selenium	X		1.04			
Zinc	X		2.8			
Total D/F TEQ	X	X	65	X		14
Dibenzofuran	X		5.2			
Total HPAHs	X		5.3			
cPAHs				X		9.4
Total PCBs	X		1.5			

The primary contributors to ecological risk on the Central Parcel are total D/F TEQ, mercury, and lead with secondary contributions from dibenzofuran, HPAHs, PCBs, and several additional metals. Primary contributors to human health risk on the Central Parcel are total D/F TEQ, cPAHs, and arsenic.

For the Central Parcel, these data show on average a consistent decreasing concentration trend with depth (see Figures G1 through G63 in Appendix G). This result is consistent with surface impacts from historical industrial activities.

For the Central Parcel, cumulative ecological PRG ERs generally decreased with depth. The cumulative ecological ER exceeded 30 in 17 of the 51 samples and generally only in the 0-1 and 1-2 foot intervals with the exception of DU-14 and DU-15. Cumulative human health PRG ERs decreased with depth in all Central Parcel DUs except DU-11 and, where the ER exceeded 10, it was primarily in the 0-1 foot interval with only one DU (DU-15) where the ER exceeded 10 in all three sampling depths.

4.3.3 Central Parcel Concrete Slab

Decision unit DU-42 is a 5-point composite sample collected from underneath a concrete slab within DU-16 discovered during sampling activities. Ecological screening level exceedances are present at all three depth intervals, while human health exceedances are limited to the first two intervals (0 to 1 and 1 to 2 feet bgs). The analytes that contribute to ecological and human health risk beneath the Central Parcel Concrete Slab are summarized below from the data presented in Tables 6 and 7.

Analyte	Central Parcel Concrete Slab Screening Level Exceedances					
	Ecological			Human Health		
	PRG	Hot Spot	Max ER	PRG	Hot Spot	Max ER
Lead	X		1.6			
Mercury	X	X	3.1			
Nickel	X		1.01			
Selenium	X		1.02			
Zinc	X		1.1			
Total D/F TEQ	X		10	X		4.1

The primary contributors to ecological risk in the Central Parcel Concrete Slab are total D/F TEQ and mercury with minor contributions from several metals. The primary contributor to human health risk at the Central Parcel Concrete Slab is total D/F TEQ.

Detected concentrations of COCs in the surrounding DU-16 were higher than the detected concentrations of COCs in DU-42. This suggests that the concrete slab at DU-42 was present prior to some, but not all, of the industrial operations, protecting this soil from the level of impacts seen in the surrounding soil.

The cumulative ERs for both ecological and human health PRGs decreased with depth beneath the concrete slab in DU-42 and was 10 or less for ecological PRG and less than 4 for human health PRG in the 1 to 2 and 2 to 3 foot intervals.

4.3.4 East Parcel

Decision units DU-27 through DU-36 and DU-38 are located within the East Parcel. Samples DU-37, DU-39, DU-40, DU-43, and DU-44 were collected beneath concrete slabs and are discussed separately in Section 4.3.5. Sample DU-41 was collected within the soil berms located on the East Parcel, and the results are discussed in Section 4.3.6. Samples DU-27 through DU-36 and DU-38 are 30-point ISM samples collected at three depth intervals. A total of 30 ISM sample results from 10 locations were obtained from the East Parcel sampling area. Ecological and human health screening level exceedances are present at all depth intervals in each of the 10 DUs. The analytes that contribute to ecological and human health risk in the East Parcel are summarized below from the data presented in Tables 6 and 7.

Analyte	East Parcel Screening Level Exceedances					
	Ecological			Human Health		
	PRG	Hot Spot	Max ER	PRG	Hot Spot	Max ER
Antimony	X		2.5			
Arsenic				X		3.6
Copper	X		4.7			
Lead	X		6.7			
Mercury	X	X	9.7			
Nickel	X		1.1			
Selenium	X		1.1			
Zinc	X		3.0			
Total D/F TEQ	X	X	17	X		6.9
Dibenzofuran	X		4.1			
cPAHs				X		1.03
Total PCBs	X		1.9			

The primary contributors to ecological risk on the East Parcel are total D/F TEQ, lead, copper, and dibenzofuran with secondary contributions from PCBs and several additional metals. Primary contributors to human health risk on the East Parcel are total D/F TEQ and arsenic with secondary contribution from cPAHs.

For the East Parcel, these data show on average a decreasing concentration trend with depth for most COCs (see Figures G1 through G63 in Appendix G). This result is consistent with surface impacts from historical industrial activities.

For the East Parcel, the cumulative ecological PRG ERs generally decrease with depth and exceeded 30 in only one of the 36 samples (DU-27 in the 0 to 1 foot interval), was less than 30 in 20 samples and less than 10 in the remaining 15 samples. Cumulative human health PRG ERs were generally less than 4 with few exceptions and exceeded 10 in only one sample (10.9 in the 0 to 1 foot interval in DU-27). Where the cumulative human health PRG ER exceeded 4, it was generally only in the 0 to 1 foot interval.

4.3.5 East Parcel Concrete Slabs

Decision units DU-37, DU-39, DU-40, DU-43, and DU-44 are five-point composite samples that were collected from beneath concrete slabs located within the East Parcel. In DU-37, lead, selenium, and dibenzofuran exceed ecological PRGs at exceedance ratios of up to 1.2. In the remaining DUs, the exceedances are limited to selenium (detected in only two samples at estimated concentrations below the detection limit and with a maximum ER of 1.2). There are no human health screening level exceedances at any depth interval.

Detected concentrations of COCs in the DUs surrounding the concrete slabs were higher than the detected concentrations of COCs beneath the concrete slabs. The lack of material exceedances of PRGs in soil beneath the concrete slabs suggests that these slabs have been in place throughout the period of industrial activity.

The cumulative ecological and human health PRG ERs for samples collected beneath the concrete slabs in the East Parcel ranged from 1.9 to 3.7 (ecological) and 0.7 to 0.9 (human health).

4.3.6 East Parcel Soil Berms

As the soil berms on the East Parcel are above grade compared to the surrounding DUs, the results are discussed separately. Samples from DU-41 are 30-point ISM samples collected from all three depth intervals. Ecological and human health screening level exceedances are present at all depth intervals within DU-41. The analytes that contribute to ecological and human health risk in the East Parcel Soil Berms are summarized below from the data presented in Tables 6 and 7.

Analyte	East Parcel Soil Berms Screening Level Exceedances					
	Ecological			Human Health		
	PRG	Hot Spot	Max ER	PRG	Hot Spot	Max ER
Arsenic	X		1.3	X		5.2
Lead	X		3.7			
Mercury	X		1.9			
Zinc	X		1.4			
Total D/F TEQ	X	X	36	X		15
Dibenzofuran	X		3.4			

The primary contributor to ecological risk at the East Parcel soil berms is total D/F TEQ with secondary contributions from lead, dibenzofuran, and several additional metals. Primary contributors to human health risk at the East Parcel soil berms are total D/F TEQ and arsenic.

Concentrations of COCs in the East Parcel soil berms do not correlate with depth. This suggests that the berm soil was contaminated prior to being placed at its current location.

The cumulative ecological and human health PRG ERs exceeded 30 (ecological with a range of 31.5 to 51.1) and 10 (human health with a range of 12.4 to 20.6) at all three sample depths.

4.4 Uncertainty Evaluation

In the forthcoming basis of design report, the replicate data will be used to assess uncertainty and refine estimated excavation depths. The variance in replicate data will be applied to the collected data to assess if

PRGs or hot spot levels could be exceeded if the data are increased by the amount of the variance. For example, replicate data from DU-5 would be representative of data collected in DU-1, -2, -3, -6, and -7. As shown in Appendix F, data reproducibility was poor for mercury in the depth range of 0 to 2 feet (RSD of 60 percent) and for PCBs in the depth range of 2 to 3 feet (RSD of 72 percent). Applying these variations to the data from these DUs, the estimated excavation depths would be unchanged except that the excavation depth in DU-7 would increase from 1 foot to 2 feet. This information will be used to refine the final design excavation depths. Regardless, final excavation depths will be supported by verification sampling during construction.

4.5 Chemical Analysis and Results Summary

The goal of the RDI investigation was to laterally and vertically delineate COCs exceeding relevant screening levels. The sampling results described above demonstrated the following.

- COCs exceeding PRGs in soil extend laterally throughout the entire Facility.
- In most DUs, COCs exceeding PRGs in soil extend at least to the depth of sampling during this investigation (3 feet bgs).
- Except for low detections in a few samples (maximum exceedance ratio of less than 1.2), COC concentrations in soil beneath the concrete slabs on the East Parcel are below PRGs.
- Primary ecological risk drivers are total D/F TEQ (Central and East Parcels), mercury (all parcels), PCBs (West Parcel), and lead (all parcels). Total D/F TEQ and mercury hot spots are present on the Central and East Parcels, and PCB, mercury, and chromium hot spots are present on the West Parcel.
- Human health risk drivers are total D/F TEQ (all parcels), arsenic (all parcels), cPAHs (West and Central Parcels), and PCBs (West Parcel).

5.0 Remedial Action Plan Overview

This section describes how the information from the RDI sampling will be used to support design of the upland remedy.

5.1 Preliminary Soil Excavation Depths and Volumes

As discussed in Section 2.3, the selected remedy consists of removal of soil exceeding hot spots or human health PRGs with a soil cover over remaining areas with residual ecological risk. Depending on the level of contamination, the removed soil was to be disposed of off-site (if it exceeded human health hot spots or non-dioxin/furan ecological hot spots) or consolidated on-site in a capped cell (if it exceeded human health PRGs). Because Metro has elected to implement the contingency remedy, soil that was designated for on-site consolidation will be disposed of off-site. Table 8 summarizes exceedances of PRGs or hot spot levels for each COC. Based on those exceedances, the preliminary depth of excavation was estimated for each

DU. Further, for each DU, the excavation thickness was determined for the corresponding disposal method (off-site disposal or contingency remedy off-site disposal). Table 8 includes the preliminary estimated excavation volumes for each DU, and these volumes are summarized below. Estimated excavation volumes will be refined in the future Basis of Design Report.[4]

Parcel	Excavation Volume in Cubic Yards		
	Off-Site Disposal	Contingency Remedy Off-Site Disposal	Total
West	7,800	11,200	19,000
Central	36,400	0	36,400
East	4,200	16,500	20,700
Total	48,400	27,700	76,100

The East Parcel soil berms would be removed until level with the surrounding ground surface. As there is no information on the concentrations beneath the soil berms, concentrations from adjacent DUs were used to estimate the depth of removal below the soil berms. The Dus adjacent to the soil berms are DU-27 through DU-30. Preliminary excavation depths for these Dus are 3 feet bgs, so the estimated excavation volumes assume excavation to 3 feet beneath the base of the soil berms.

For comparison, in the ROD (DEQ, 2021), the estimated volume exceeding human health PRGs or ecological hot spots was 42,000 cubic yards (ROD Table 17 shows the total volume requiring excavation), compared to the 76,100-cubic-yard volume shown above. The difference of 34,100 cubic yards is driven by two primary factors: elimination of the consolidation cell increased excavation by 4,000 cubic yards (soil that would not have been excavated because it would have been beneath the consolidation cell) and increased depth of impacted soil by approximately 1 foot across the Site (30,000 cubic yards). In addition, the ROD estimated the quantity of soil going to the consolidation cell was 22,700 cubic yards (ROD Table 20). This is 5,000 cubic yards less than the estimate in the table above – the increase was based primarily on the elimination of the consolidation cell.

5.2 Leave Surface Residual Risk Exceedance Ratios

As shown in Table 8, 31 of the DUs would be excavated to a depth of 3 feet. There are no current data on the COC concentrations in the depth range below 3 feet, so the residual risk for those DUs is unknown. At a minimum, verification sampling conducted during construction would provide data for the next depth range (that is, current depths of 3 to 4 feet) and would inform the soil cover thickness, if needed.

[4] The estimates provided here conservatively assume full excavation of any cell that exceeds the hot spot level or human health PRG. For some DUs, it is possible that the lowest impacted level would not require excavation over the full 1-foot thickness. Additionally, if risks in a DU are controlled by impacts to mobile receptors (e.g., humans, mammals, or birds), risks may be evaluated at a larger scale (e.g., over the full parcel area) and could be acceptable. These more detailed excavation evaluations will be conducted in the Basis of Design Report.

For the remaining 13 DUs, the estimated excavation depth is less than 3 feet, so soil residual risk data are available. The residual risk exceedance factors for these DUs are summarized as follows.

- For DU-40 and DU-44, there were no exceedances of PRGs. These DUs are concrete slabs on the East Parcel.
- For DU-39 and DU-43, only selenium exceeded the ecological PRG in one sample from each DU. The detections were estimated values below the method reporting limit, and the maximum exceedance factor was 1.2. Selenium was not detected at the other depths within the DU. When considering the data over the full 3-foot depth range, the ecological risk from selenium in these DUs is likely acceptable.
- For the remaining nine DUs, the leave surface after excavation would be the ground surface for one DU (DU-37), 1 foot for four DUs (DU-7, DU-20, DU-35, and DU-38), and 2 feet for four DUs (DU-17, DU-24, DU-25, and DU-42). For each of these DUs, two or three COCs exceeded ecological PRGs at the leave surface (two or three of the following COCs: lead, mercury, nickel, selenium, zinc, or total D/F TEQ). Exceedance factors ranged from 1.1 to 2.4.

5.3 Arsenic As a Risk-Driver for Soil Removal

The soil risk-based concentration for arsenic at the site (1.4 milligrams per kilogram [mg/kg] for the recreational trespasser/park user receptor) is less than the background concentration (DEQ default range of 4.4 to 8.8 mg/kg [DEQ, 2013]). The screening discussed above used the most conservative background concentration of 4.4 mg/kg, so it may overpredict the amount of excavation required. Table 8 includes calculation of the excavation volume where excavation was driven only by arsenic concentrations exceeding 4.4 mg/kg (that is, locations where no COCs exceeded hot spots or human health PRGs except arsenic). Over 9,400 cubic yards of the total excavation volume, or 12 percent of the total volume, are driven by arsenic exceedances alone. The arsenic concentration in this soil ranged from 4.7 to 7.1 mg/kg with an average concentration of 5.7 mg/kg. Factoring in residual cover soils that would be placed during construction and considering concentrations over the full 3-foot surface soil depth after construction, the residual risk of this soil if left in place would likely be acceptable.

6.0 Data Gaps

Based on the evaluation of the RDI data discussed above, the remaining data gaps include:

- Vertical delineation of COCs beyond 3 feet in areas proposed for 3 feet of excavation; and
- Vertical delineation of COCs beneath the soil berms on the East Parcel (DU-41).

7.0 Conclusions

Based on evaluation of the results of the RDI activities, the following conclusions are made:

- In 31 of the 44 DUs, the concentrations of COCs are above hot spots or human health PRGs in the deepest sample collected (2- to 3-foot depth range). There are no ISM data below a depth of 3 feet. This data gap will be addressed during construction through collection and analysis of confirmation soil samples from the leave surface.
- The preliminary estimate of the volume of soil to be excavated is 76,100 cubic yards (19,000 cubic yards, 36,000 cubic yards, and 21,000 cubic yards in the West, Central, and East Parcels, respectively). The preliminary removal depth is 3 feet in eight of nine DUs in the West Parcel, 13 of 18 DUs in the Central Parcel, and 11 of 17 DUs in the East Parcel. No removal is planned for soil beneath the five concrete slabs in the East Parcel. The total removal volume estimate of 76,100 cubic yards exceeds the estimate of 42,000 cubic yards in Table 17 of the ROD. Removal depth and volume estimates will be refined in the forthcoming Basis of Design Report and Residual Risk Evaluation considering both contaminant gradients with depth and larger exposure areas associated with birds, mammals, and human health.
- In some areas, the removal estimates are based solely on arsenic exceedances. The PRG for arsenic is based on DEQ default background concentrations that range from 4.4 to 8.8 mg/kg in the Willamette Basin. The lower value of 4.4 mg/kg was used for the PRG. Over 70 percent of the arsenic detections were less than 6 mg/kg and likely represent background concentrations.
- Based on the results of composite samples collected beneath the concrete slabs in the East Parcel (specifically DU-37, DU-39, DU-40, and DU-43), soil from this area may be suitable for use as borrow for cover soil.

8.0 References

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Table 1
Sampling Plan Summary
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Decision Unit Size (Acres)	Sample Type	Sample Depth (feet bgs)	Sample ID	Sampling Plan													
						Metals - EPA 6020 B									D/Fs	PAHs	Dibenzofuran	PCBs	Archive
						Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	EPA Method 1613B	EPA Method 8270E-SIM	EPA Method 8270E-SIM	EPA Method 8082A	
West Parcel	DU-1	0.50	ISM	0-1	DU-1 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-1 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-1 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-2	0.50	ISM	0-1	DU-2 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-2 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-2 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-3	0.43	ISM	0-1	DU-3 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-3 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-3 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-4	0.42	ISM	0-1	DU-4 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-4 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-4 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-5	0.53	ISM	0-1	DU-5 (0-1)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-5 (0-1)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-5 (0-1)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-5 (1-2)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-5 (1-2)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-5 (1-2)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-5 (2-3)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-5 (2-3)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-5 (2-3)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-6	0.53	ISM	0-1	DU-6 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-6 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-6 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-7	0.49	ISM	0-1	DU-7 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-7 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-7 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-8	0.44	ISM	0-1	DU-8 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-8 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-8 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-9	0.43	ISM	0-1	DU-9 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-9 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-9 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Central Parcel	DU-10	0.49	ISM	0-1	DU-10 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-10 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-10 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-11	0.54	ISM	0-1	DU-11 (0-1)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-11 (0-1)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-11 (0-1)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-11 (1-2)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-11 (1-2)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-11 (1-2)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-11 (2-3)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-11 (2-3)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-11 (2-3)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-12	0.44	ISM	0-1	DU-12 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-12 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-12 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Please see notes at end of table.

Table 1
Sampling Plan Summary
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Decision Unit Size (Acres)	Sample Type	Sample Depth (feet bgs)	Sample ID	Sampling Plan													
						Metals - EPA 6020 B									D/Fs	PAHs	Dibenzofuran	PCBs	Archive
						Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	EPA Method 1613B	EPA Method 8270E-SIM	EPA Method 8270E-SIM	EPA Method 8082A	
Central Parcel	DU-13	0.52	ISM	0-1	DU-13 (0-1)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-13 (0-1)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-13 (0-1)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-13 (1-2)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-13 (1-2)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-13 (1-2)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-13 (2-3)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-13 (2-3)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-13 (2-3)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-14	0.44	ISM	0-1	DU-14 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-14 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-14 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-15	0.49	ISM	0-1	DU-15 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-15 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-15 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-16	0.40	ISM	0-1	DU-16 (0-1)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-16 (0-1)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-16 (0-1)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-16 (1-2)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-16 (2-3)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-17	0.50	ISM	0-1	DU-17 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-17 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-17 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-18	0.41	ISM	0-1	DU-18 (0-1)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-18 (0-1)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-18 (0-1)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-18 (1-2)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-18 (1-2)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-18 (1-2)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-18 (2-3)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-18 (2-3)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-18 (2-3)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-19	0.51	ISM	0-1	DU-19 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-19 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-19 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-20	0.68	ISM	0-1	DU-20 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-20 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-20 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-21	0.39	ISM	0-1	DU-21 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-21 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-21 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Sample Location	Decision Unit	Decision Unit Size (Acres)	Sample Type	Sample Depth (feet bgs)	Sample ID	Sampling Plan													
						Metals - EPA 6020 B									D/Fs	PAHs	Dibenzofuran	PCBs	Archive
						Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	EPA Method 1613B	EPA Method 8270E-SIM	EPA Method 8270E-SIM	EPA Method 8082A	
Central Parcel	DU-22	0.62	ISM	0-1	DU-22 (0-1)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-22 (0-1)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-22 (0-1)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-22 (1-2)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-22 (1-2)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-22 (1-2)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-22 (2-3)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-22 (2-3)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-22 (2-3)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-23	0.62	ISM	0-1	DU-23 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-23 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-23 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-24	0.44	ISM	0-1	DU-24 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-24 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-24 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-25	0.45	ISM	0-1	DU-25 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-25 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-25 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-26	0.44	ISM	0-1	DU-26 (0-1)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-26 (0-1)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-26 (0-1)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-26 (1-2)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-26 (1-2)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-26 (1-2)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-26 (2-3)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-26 (2-3)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-26 (2-3)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Central Parcel Concrete Slab	DU-42 (Within DU-16)	0.09	Composite*	0-1	DU-42 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-42 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-42 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
East Parcel	DU-27	0.40	ISM	0-1	DU-27 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-27 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-27 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-28	0.43	ISM	0-1	DU-28 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-28 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-28 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-29	0.42	ISM	0-1	DU-29 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-29 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-29 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-30	0.42	ISM	0-1	DU-30 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-30 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-30 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-31	0.29	ISM	0-1	DU-31 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-31 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-31 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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						Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	EPA Method 1613B	EPA Method 8270E-SIM	EPA Method 8270E-SIM	EPA Method 8082A	
East Parcel	DU-32	0.46	ISM	0-1	DU-32 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-32 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-32 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-33	0.39	ISM	0-1	DU-33 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-33 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-33 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-34	0.40	ISM	0-1	DU-34 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-34 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-34 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-35	0.39	ISM	0-1	DU-35 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-35 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-35 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-36	0.26	ISM	0-1	DU-36 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-36 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-36 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-38	0.47	ISM	0-1	DU-38 (0-1)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-38 (0-1)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-38 (0-1)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-38 (1-2)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-38 (1-2)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-38 (1-2)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-38 (2-3)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-38 (2-3)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-38 (2-3)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
East Parcel Concrete Slabs	DU-37	0.25	Composite*	0-1	DU-37 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-37 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-37 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-39	0.50	Composite*	0-1	DU-39 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-39 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-39 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-40	0.49	Composite*	0-1	DU-40 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-40 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-40 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-43 (Within DU-31)	0.14	Composite*	0-1	DU-43 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-43 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-43 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	DU-44 (Within DU-36)	0.20	Composite*	0-1	DU-44 (0-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-44 (1-2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-44 (2-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Table 1
Sampling Plan Summary
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Decision Unit Size (Acres)	Sample Type	Sample Depth (feet bgs)	Sample ID	Sampling Plan													
						Metals - EPA 6020 B									D/Fs	PAHs	Dibenzofuran	PCBs	Archive
						Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	EPA Method 1613B	EPA Method 8270E-SIM	EPA Method 8270E-SIM	EPA Method 8082A	
East Parcel Soil Berms	DU-41	0.40	ISM	0-1	DU-41 (0-1)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-41 (0-1)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				0-1 FR	DU-41 (0-1)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2	DU-41 (1-2)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-41 (1-2)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				1-2 FR	DU-41 (1-2)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3	DU-41 (2-3)A	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-41 (2-3)B	X	X	X	X	X	X	X	X	X	X	X	X	X	X
				2-3 FR	DU-41 (2-3)C	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Notes:
ISM = Incremental Sampling Methodology.
bgs = Below ground surface.
D/Fs = Dioxins/furans
PAHs = Polycyclic aromatic hydrocarbons.
PCBs = Polychlorinated biphenyls.
Sampling units comprise of 30 individual increments selected by systematic random sampling.
EPA = United States Environmental Protection Agency.
FR = Field replicate. Field replicates were collected at different locations within the same ISM cell as the primary sample.
*Composite samples were processed using ISM protocols.

Table 2a
Soil Results - Metals - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B															
						Concentrations in mg/kg															
						Antimony		Arsenic		Chromium		Copper		Lead		Mercury		Nickel		Selenium		Zinc	
					Ecological ISM PRG	2.7		18		39		70		33		0.073		23		0.52		120	
					Ecological ISM Hot Spot	27		180		39		700		330		0.15		200		5.2		1,200	
West Parcel	DU-1	ISM	0-1	DU-1 (0-1)	07/20/2022	0.801	J	6.24		37.4		**180**		**74.8**		0.0696	J	**27.1**		0.514	U	**151**	
			1-2	DU-1 (1-2)	07/20/2022	0.712	J	5.41		**41.3**		64.6		**321**		**0.0863**		**30.9**		0.516	U	**140**	
			2-3	DU-1 (2-3)	07/20/2022	0.529	U	5.79		29.5		69.5		**57.5**		**0.0813**	J	**25.0**		*0.529*	U	**179**	
	DU-2	ISM	0-1	DU-2 (0-1)	08/01/2022	0.603	J	5.41		21.5		**119**		**96.2**		**0.0731**	J	18.9		0.505	U	99.4	
			1-2	DU-2 (1-2)	08/01/2022	0.515	U	5.36		22.0		**170**		**118**		**0.124**		16.4		0.515	U	88.8	
			2-3	DU-2 (2-3)	08/01/2022	0.495	U	5.21		15.5		41.9		24.4		0.0607	J	14.7		0.495	U	78.0	
	DU-3	ISM	0-1	DU-3 (0-1)	08/03/2022	0.547	U	6.87		16.2		26.8		20.1		0.0438	U	16.3		*0.547*	U	80.4	
			1-2	DU-3 (1-2)	08/03/2022	0.497	U	6.65		16.5		25.8		15.8		0.0455	J	17.1		0.497	U	72.2	
			2-3	DU-3 (2-3)	08/03/2022	0.536	U	6.65		15.7		21.6		13.5		0.0497	J	16.0		*0.536*	U	64.7	
	DU-4	ISM	0-1	DU-4 (0-1)	08/04/2022	0.565	U	6.57		16.3		29.1		23.7		**0.0746**	J	**23.9**		*0.565*	U	89.4	
			1-2	DU-4 (1-2)	08/04/2022	0.515	U	6.87		16.3		26.6		23.9		0.0596	J	**24.6**		0.515	U	79.4	
			2-3	DU-4 (2-3)	08/04/2022	0.502	U	7.63		18.4		34.0		**45.1**		**0.0760**	J	22.4		0.502	U	115	
	DU-5	ISM	0-1	DU-5 (0-1)A	07/22/2022	0.992	J-	8.89		**52.3**		**344**		**62.1**	J	**0.110**		**31.9**	J	0.369	J	**191**	
			0-1 FR	DU-5 (0-1)B	07/22/2022	0.853		8.98		**46.2**		**303**		**50.8**		**0.104**		**31.2**		0.341	J	**211**	
			0-1 FR	DU-5 (0-1)C	07/22/2022	0.944		8.43		**50.6**		**308**		**57.2**		**0.352**		**32.6**		0.316	J	**197**	
			1-2	DU-5 (1-2)A	07/25/2022	0.551		7.47		**41.4**		**237**		**70.5**		**0.111**		**27.6**		0.335	J	**157**	
			1-2 FR	DU-5 (1-2)B	07/25/2022	0.832		8.09		**41.2**		**223**		**51.8**		**0.131**		**29.5**		0.326	J	**179**	
			1-2 FR	DU-5 (1-2)C	07/25/2022	0.572		7.18		**42.9**		**220**		**53.7**		**0.369**		**58.9**		0.317	J	**167**	
			2-3	DU-5 (2-3)A	07/26/2022	0.426	J	6.73		38.4		**159**		**55.9**		**0.153**		**27.1**		0.309	J	**147**	
			2-3 FR	DU-5 (2-3)B	07/26/2022	0.596		6.29		36.8		**144**		**68.1**		**0.107**		**26.2**		0.300	J	**224**	
			2-3 FR	DU-5 (2-3)C	07/26/2022	0.479	J	6.56		**47.1**		**214**		**118**		**0.273**		**31.3**		0.304	J	**195**	
			0-1	DU-5 (0-1) M	--	0.930	J	8.77		**49.7**		**318**		**56.7**	J	**0.189**	J	**31.9**	J	0.342	J	**200**	
			1-2	DU-5 (1-2) M	--	0.652		7.58		**41.8**		**227**		**58.7**		**0.204**	J	**38.7**		0.326	J	**168**	
			2-3	DU-5 (2-3) M	--	0.500	J	6.53		**40.8**		**172**		**80.7**		**0.178**		**28.2**		0.304	J	**189**	
	DU-6	ISM	0-1	DU-6 (0-1)	07/28/2022	0.539	U	4.93		22.1		67.6		28.2		**0.128**		19.6		*0.539*	U	**135**	
			1-2	DU-6 (1-2)	07/28/2022	0.560	U	4.89		25.2		**91.6**		**40.0**		**0.156**		21.8		*0.560*	U	**124**	
			2-3	DU-6 (2-3)	07/28/2022	0.526	U	4.67		23.2		**100**		**37.8**		**0.141**		22.0		*0.526*	U	112	
	DU-7	ISM	0-1	DU-7 (0-1)	07/29/2022	0.537	U	4.37		19.2		36.0		23.3		**0.304**		19.3		*0.537*	U	**126**	
			1-2	DU-7 (1-2)	07/29/2022	0.547	U	3.98		18.6		30.1		18.7		**0.130**		19.7		*0.547*	U	92.7	
			2-3	DU-7 (2-3)	07/29/2022	0.536	U	3.07		16.2		24.2		14.9		**0.0927**		19.1		*0.536*	U	75.1	
	DU-8	ISM	0-1	DU-8 (0-1)	08/05/2022	0.560	U	4.33		21.7		32.5		**39.1**		**0.154**		19.6		*0.560*	U	**144**	
			1-2	DU-8 (1-2)	08/05/2022	0.501	U	4.13		24.6		32.9		31.4		**0.164**		19.7		0.501	U	**130**	
			2-3	DU-8 (2-3)	08/05/2022	0.545	U	4.13		21.9		32.0		31.0		**0.156**		20.7		*0.545*	U	**126**	
	DU-9	ISM	0-1	DU-9 (0-1)	08/08/2022	0.623	J	5.25		30.6		40.6		28.2		**0.160**		**26.5**		0.506	U	**154**	J-
			1-2	DU-9 (1-2)	08/08/2022	0.555	U	4.81		27.8		34.6		**40.7**		**0.141**		**24.4**		*0.555*	U	115	
			2-3	DU-9 (2-3)	08/08/2022	0.512	U	5.12		31.0		37.4		21.5		**0.141**		**26.2**		0.512	U	**122**	

Please see notes at end of table.

Table 2a
Soil Results - Metals - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B															
						Concentrations in mg/kg															
						Antimony		Arsenic		Chromium		Copper		Lead		Mercury		Nickel		Selenium		Zinc	
					Ecological ISM PRG	2.7		18		39		70		33		0.073		23		0.52		120	
					Ecological ISM Hot Spot	27		180		39		700		330		0.15		200		5.2		1,200	
Central Parcel	DU-10	ISM	0-1	DU-10 (0-1)	08/12/2022	0.541	U	4.50		14.8		33.3		**86.5**		**1.07**		**29.9**		*0.541*	U	106	
			1-2	DU-10 (1-2)	08/12/2022	0.531	J	5.56		15.3		33.6		**54.8**		**0.829**		**27.5**		0.513	U	94.9	
			2-3	DU-10 (2-3)	08/12/2022	0.514	J	5.16		14.5		32.2		**73.3**		**0.609**		22.6		0.491	U	117	
	DU-11	ISM	0-1	DU-11 (0-1)A	08/10/2022	0.545	U	4.60		23.6		38.5		**53.1**		**0.721**		**29.3**		*0.545*	U	116	
			0-1 FR	DU-11 (0-1)B	08/10/2022	0.520	U	3.98		19.9		35.0		**56.1**		**0.687**		**25.6**		*0.520*	U	104	
			0-1 FR	DU-11 (0-1)C	08/10/2022	0.541	U	4.14		22.2		36.7		**50.6**		**0.726**		**26.5**		*0.541*	U	110	
			1-2	DU-11 (1-2)A	08/10/2022	0.535	U	3.93		21.4		33.0		**42.8**		**0.504**		**27.0**		*0.535*	U	90.1	
			1-2 FR	DU-11 (1-2)B	08/10/2022	0.508	U	4.08		21.6		34.2		**44.4**		**0.563**		**27.3**		0.508	U	93.1	
			1-2 FR	DU-11 (1-2)C	08/10/2022	0.520	U	4.15		22.0		37.3		**49.0**		**0.633**		**28.2**		*0.520*	U	99.5	
			2-3	DU-11 (2-3)A	08/10/2022	0.526	U	4.23		22.0		32.2		**41.0**		**0.382**		**26.1**		*0.526*	U	95.0	
			2-3 FR	DU-11 (2-3)B	08/10/2022	0.522	U	4.19		21.0		35.2		**43.3**		**0.604**		**26.4**		*0.522*	U	95.0	
			2-3 FR	DU-11 (2-3)C	08/10/2022	0.497	U	3.90		20.2		35.1		**34.5**		**0.590**		**25.8**		0.497	U	86.5	
			0-1	DU-11 (0-1) M	--	0.545	U	4.24		21.9		36.7		**53.3**		**0.711**		**27.1**		*0.545*	U	110	
			1-2	DU-11 (1-2) M	--	0.535	U	4.05		21.7		34.8		**45.4**		**0.567**		**27.5**		*0.535*	U	94.2	
			2-3	DU-11 (2-3) M	--	0.526	U	4.11		21.1		34.2		**39.6**		**0.525**		**26.1**		*0.526*	U	92.2	
	DU-12	ISM	0-1	DU-12 (0-1)	08/16/2022	0.830	J	4.95		14.8		**78.9**		**165**		**0.292**		19.8		0.504	U	**166**	
			1-2	DU-12 (1-2)	08/16/2022	0.493	U	4.26		14.0		55.7		**131**		**0.275**		19.0		0.493	U	104	
			2-3	DU-12 (2-3)	08/16/2022	0.551	U	3.62		13.7		41		**70.8**		**0.207**		17.8		*0.551*	U	79.7	
	DU-13	ISM	0-1	DU-13 (0-1)A	08/29/2022	0.792	J	6.04		14.2		**94.3**		**241**		**1.15**		21.4		*0.563*	U	**204**	
			0-1 FR	DU-13 (0-1)B	08/29/2022	0.562	U	5.53		14.2		60.4		**180**		**0.895**		19.6		*0.562*	U	**155**	
			0-1 FR	DU-13 (0-1)C	08/29/2022	0.923	J	5.41		14.1		55.5		**199**		**0.848**		19.4		*0.541*	U	**155**	
			1-2	DU-13 (1-2)A	08/30/2022	0.513	U	4.79		13.8		53.0		**86.5**		**0.785**		18.6		0.513	U	109	
			1-2 FR	DU-13 (1-2)B	08/30/2022	0.520	U	4.61		13.7		43.7		**92.3**		**0.572**		18.4		*0.520*	U	103	
			1-2 FR	DU-13 (1-2)C	08/30/2022	0.540	U	4.72		13.8		44.7		**154**		**0.614**		18.1		*0.540*	U	**128**	
			2-3	DU-13 (2-3)A	08/31/2022	0.562	U	3.75		12.6		43.3		**175**		**0.745**		18.4		*0.562*	U	**127**	
			2-3 FR	DU-13 (2-3)B	08/31/2022	0.522	U	3.89		12.6		40.6		**92.4**		**0.698**		17.3		*0.522*	U	90.6	
			2-3 FR	DU-13 (2-3)C	08/31/2022	0.548	U	4.04		12.6		54.2		**94.6**		**0.769**		17.7		*0.548*	U	97.3	
			0-1	DU-13 (0-1) M	--	0.759	J	5.66		14.2		**70.1**		**207**		**0.964**		20.1		*0.563*	U	**171**	
			1-2	DU-13 (1-2) M	--	0.540	U	4.71		13.8		47.1		**111**		**0.657**		18.4		*0.540*	U	113	
			2-3	DU-13 (2-3) M	--	0.562	U	3.89		12.6		46.0		**121**		**0.737**		17.8		*0.562*	U	105	
	DU-14	ISM	0-1	DU-14 (0-1)	08/17/2022	**2.81**		6.14		22.9		**73.5**		**134**		**1.33**		**24.3**		0.514	U	**147**	
			1-2	DU-14 (1-2)	08/17/2022	**7.38**		6.87		21.6		**122**		**240**		**3.10**		**23.7**		0.519	U	**204**	
			2-3	DU-14 (2-3)	08/17/2022	**3.04**		5.66		20.6		**185**		**162**		**2.50**		**24.8**		0.493	U	**164**	
	DU-15	ISM	0-1	DU-15 (0-1)	08/19/2022	**2.81**		5.04		16.0		**95.4**		**131**		**0.750**		21.7		0.506	U	**131**	
			1-2	DU-15 (1-2)	08/19/2022	0.576	J	3.75		14.0		57.7		**68.6**		**1.28**		19.3		0.517	U	**120**	
			2-3	DU-15 (2-3)	08/19/2022	0.492	U	2.91		11.2		36.2		**63.6**		**0.563**		17.6		0.492	U	76.8	
	DU-16	ISM	0-1	DU-16 (0-1)A	09/12/2022	**4.29**		8.31		24.8		**93.4**	J+	**237**		**2.43**		**25.6**		*0.543*	U	**371**	
			0-1 FR	DU-16 (0-1)B	09/12/2022	2.31		7.56		26.6		**131**	J+	**265**		**5.12**		**28.1**		0.494	U	**355**	
			0-1 FR	DU-16 (0-1)C	09/12/2022	**3.04**		7.89		17.9		**127**	J+	**306**		**3.87**		**23.2**		*0.539*	U	**283**	
			0-1	DU-16 (0-1) M	--	**3.21**		7.92		23.1		**117**	J	**269**		**3.81**		**25.6**		*0.543*	U	**336**	
			1-2	DU-16 (1-2)	11/7/2022	2.29		6.92		13.6		**71.8**		**151**		**1.69**		18.5		*0.521*	U	**139**	
			2-3	DU-16 (2-3)	11/7/2022	0.499	U	3.72		12.9		29.1		**37.5**		**0.429**		16.8		**0.539**	J	71.3	

Please see notes at end of table.

Table 2a
Soil Results - Metals - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B															
						Concentrations in mg/kg															
						Antimony		Arsenic		Chromium		Copper		Lead		Mercury		Nickel		Selenium		Zinc	
					Ecological ISM PRG	2.7		18		39		70		33		0.073		23		0.52		120	
					Ecological ISM Hot Spot	27		180		39		700		330		0.15		200		5.2		1,200	
Central Parcel	DU-17	ISM	0-1	DU-17 (0-1)	09/02/2022	1.06		4.95		12.4		59.2		**81.4**		**0.575**		16.4		0.499	U	**156**	
			1-2	DU-17 (1-2)	09/02/2022	0.511	U	3.72		11.8		34.3		**62.5**		**0.356**		16.3		0.511	U	70.6	
			2-3	DU-17 (2-3)	09/02/2022	0.504	U	3.16		11.1		26.8		**35.1**		**0.121**		14.6		0.504	U	58.4	
	DU-18	ISM	0-1	DU-18 (0-1)A	09/29/2022	0.874	J	6.99		22.1		**71.0**		**198**		**0.965**		22.5		*0.531*	U	**146**	
			0-1 FR	DU-18 (0-1)B	09/29/2022	1.41		10.9		22.8		**111**		**198**		**1.72**		**23.5**		0.505	U	**173**	
			0-1 FR	DU-18 (0-1)C	09/29/2022	1.06		8.94		20.8		**87.7**		**280**		**1.20**		**23.3**		0.499	U	**204**	
			1-2	DU-18 (1-2)A	09/30/2022	0.491	U	5.38		14.0		58.2		**179**		**0.806**		18.3		0.491	U	**156**	
			1-2 FR	DU-18 (1-2)B	09/30/2022	0.495	U	5.98		15.3		**79.5**		**150**		**1.06**		21.8		0.495	U	**158**	
			1-2 FR	DU-18 (1-2)C	09/30/2022	0.490	U	6.22		14.3		**77.7**		**119**		**0.985**		18.3		0.490	U	**133**	
			2-3	DU-18 (2-3)A	10/03/2022	0.502	U	3.77		11.9		30.8		**55.4**		**0.296**		16.6		0.502	U	94.4	
			2-3 FR	DU-18 (2-3)B	10/03/2022	0.489	U	5.31		13.0		59.9		**92.3**		**0.681**		17.8		0.489	U	105	
			2-3 FR	DU-18 (2-3)C	10/03/2022	0.489	U	5.63		13.9		53.0		**75.2**		**0.679**		18.3		0.497	J	118	
			0-1	DU-18 (0-1) M	--	1.11	J	8.94		21.9		**89.9**		**225**		**1.30**		**23.1**		*0.531*	U	**174**	
			1-2	DU-18 (1-2) M	--	0.495	U	5.86		14.5		**71.8**		**149**		**0.950**		19.5		0.495	U	**149**	
			2-3	DU-18 (2-3) M	--	0.502	U	4.90		12.9		47.9		**74**		**0.552**		17.6		0.496	J	**106**	
	DU-19	ISM	0-1	DU-19 (0-1)	09/06/2022	1.39		7.67		13.2		**107**		**257**		**0.666**		16.5		*0.541*	U	**215**	
			1-2	DU-19 (1-2)	09/06/2022	0.957	J	11.2		12.0		**110**		**161**		**1.08**		15.5		*0.555*	U	**198**	
			2-3	DU-19 (2-3)	09/06/2022	0.926	J	5.68		11.2		44.9		**70.8**		**0.327**		15.5		*0.522*	U	113	
	DU-20	ISM	0-1	DU-20 (0-1)	10/18/2022	1.69		5.69		19.6		58.4		**76.2**		**0.314**		22.7		0.517	U	117	
			1-2	DU-20 (1-2)	10/18/2022	0.536	U	4.08		19.5		25.8		17.7		**0.136**		**28.4**		*0.536*	U	87.3	
			2-3	DU-20 (2-3)	10/18/2022	0.511	U	3.68		16.7		23.0		14.3		**0.101**		21.1		0.511	U	90.4	
	DU-21	ISM	0-1	DU-21 (0-1)	09/08/2022	**2.73**		10.5		14.8		**128**	J+	**295**		**0.776**		20.3		0.493	U	**242**	
			1-2	DU-21 (1-2)	09/08/2022	1.01		4.93		11.8		56.2	J+	**116**		**0.276**		17.7		0.500	U	**180**	
			2-3	DU-21 (2-3)	09/08/2022	0.497	U	4.48		11.6		45.9	J+	**89.7**		**0.154**		18.0		0.497	U	109	
	DU-22	ISM	0-1	DU-22 (0-1)A	10/13/2022	**2.89**		6.48		19.0		**82.3**		**129**		**0.592**		21.0		*0.530*	U	**167**	
			0-1 FR	DU-22 (0-1)B	10/13/2022	**2.79**		5.77		18.0		**86.7**		**148**		**0.602**		21.4		0.506	U	**169**	
			0-1 FR	DU-22 (0-1)C	10/13/2022	2.03		5.83		19.6		**96.6**		**190**		**0.430**		**23.2**		*0.538*	U	**178**	
			1-2	DU-22 (1-2)A	10/14/2022	0.922	J	4.41		17.4		31.7		**47.8**		**0.231**		21.1		0.494	U	**125**	J-
			1-2 FR	DU-22 (1-2)B	10/14/2022	2.63		4.33		16.1		47.4		**72.3**		**0.349**		20.8		0.512	U	109	
			1-2 FR	DU-22 (1-2)C	10/14/2022	2.04		4.53		18.8		44.8		**65.4**		**0.161**		22.6		0.497	U	**164**	
			2-3	DU-22 (2-3)A	10/14/2022	0.731	J	4.45		17.2		29.4		**51.9**		**0.190**		20.2		0.499	U	96.5	
			2-3 FR	DU-22 (2-3)B	10/14/2022	0.839	J	4.43		18.0		54.0		**57.5**		**0.376**		21.4		0.509	U	98.6	
			2-3 FR	DU-22 (2-3)C	10/14/2022	1.09	J	3.92		16.0		32.6		**43.4**		**0.355**		20.8		*0.557*	U	**123**	
			0-1	DU-22 (0-1) M	--	2.57		6.03		18.9		**88.5**		**156**		**0.541**		21.9		*0.538*	U	**171**	
			1-2	DU-22 (1-2) M	--	1.86	J	4.42		17.4		41.3		**61.8**		**0.247**		21.5		0.512	U	**133**	J
			2-3	DU-22 (2-3) M	--	0.887	J	4.27		17.1		38.7		**50.9**		**0.307**		20.8		*0.557*	U	106	
	DU-23	ISM	0-1	DU-23 (0-1)	10/12/2022	1.62		5.99		22.1		**150**		**276**		**1.02**		22.9		0.497	U	**184**	
			1-2	DU-23 (1-2)	10/12/2022	0.61	J	4.63		18.4		69.5		**70.9**		**0.545**		20.5		0.518	U	**127**	
			2-3	DU-23 (2-3)	10/12/2022	0.498	J	3.82		15.6		41.9		**82.2**		**0.426**		18.8		0.488	U	99	
	DU-24	ISM	0-1	DU-24 (0-1)	09/21/2022	0.546	U	4.16		15.5		39.9		**48.8**		**0.276**		19.2		*0.546*	U	117	
			1-2	DU-24 (1-2)	09/21/2022	0.496	U	3.56		15.0		31.1		23.2		**0.175**		20.6		0.496	U	124	
			2-3	DU-24 (2-3)	09/21/2022	0.501	U	2.84		10.9		17.6		13.8		**0.0928**		18.5		0.501	U	83.1	
	DU-25	ISM	0-1	DU-25 (0-1)	09/23/2022	0.822	J	5.24		20.2		**226**		**144**		**0.762**		21.3		0.491	U	**242**	
			1-2	DU-25 (1-2)	09/23/2022	0.493	U	3.29		14.5		48.5		**113**		**0.213**		19.6		0.493	U	**202**	
			2-3	DU-25 (2-3)	09/23/2022	0.496	U	3.17		12.6		30.0		**43.2**		**0.116**		18.7		0.496	U	**138**	

Please see notes at end of table.

Table 2a
Soil Results - Metals - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B															
						Concentrations in mg/kg															
						Antimony		Arsenic		Chromium		Copper		Lead		Mercury		Nickel		Selenium		Zinc	
					Ecological ISM PRG	2.7		18		39		70		33		0.073		23		0.52		120	
					Ecological ISM Hot Spot	27		180		39		700		330		0.15		200		5.2		1,200	
Central Parcel	DU-26	ISM	0-1	DU-26 (0-1)A	11/09/2022	**3.22**		9.50		18.8		**152**		**330**		**1.95**		20.7		**0.605**	J	**260**	
			0-1 FR	DU-26 (0-1)B	11/09/2022	**4.79**		9.01		17.1		**129**		**302**		**1.28**		19.4		0.502	J	**244**	
			0-1 FR	DU-26 (0-1)C	11/09/2022	**3.61**		6.81		19.1		**105**		**292**		**1.53**		20.4		0.522	J	**235**	
			1-2	DU-26 (1-2)A	11/10/2022	1.4		5.16		14.7		**80.7**		**151**		**0.944**		18.3		0.511	U	**206**	
			1-2 FR	DU-26 (1-2)B	11/10/2022	0.728	J	4.61		13.2		48.5		**121**		**0.397**		17.2		**0.558**	J	**182**	
			1-2 FR	DU-26 (1-2)C	11/10/2022	1.06		11.6		15.5		**79.8**		**143**		**1.25**		19.9		*0.532*	U	**186**	
			2-3	DU-26 (2-3)A	11/11/2022	0.491	U	3.92		14.6		36.1		**65.2**		**0.258**		18.1		0.491	U	112	
			2-3 FR	DU-26 (2-3)B	11/11/2022	0.521	U	4.33		12.4		41.6		**59.8**		**0.820**		18.3		*0.521*	U	108	
			2-3 FR	DU-26 (2-3)C	11/11/2022	0.529	J	4.75		13.3		39.6		**76.1**		**0.537**		17.5		0.512	U	**138**	
			0-1	DU-26 (0-1) M	--	**3.87**		8.44		18.3		**129**		**308**		**1.59**		20.2		**0.543**	J	**246**	
			1-2	DU-26 (1-2) M	--	1.06	J	7.12		14.5		69.7		**138**		**0.864**		18.5		**0.534**	J	**191**	
			2-3	DU-26 (2-3) M	--	0.514	J	4.33		13.4		39.1		**67.0**		**0.538**		18.0		*0.521*	U	119	
Central Parcel Concrete Slab	DU-42 (Within DU-16)	Composite	0-1	DU-42 (0-1)	11/30/2022	0.512	U	4.38		17.8		36.3		**53.3**		**0.226**		**23.3**		**0.531**	J	**126**	
			1-2	DU-42 (1-2)	11/30/2022	0.667	J	4.11		18.4		25.4		30.3		**0.186**		22.6		*0.549*	U	109	
			2-3	DU-42 (2-3)	11/30/2022	0.531	U	3.76		17.4		21.1		20.1		**0.125**		20.7		*0.531*	U	87.0	
East Parcel	DU-27	ISM	0-1	DU-27 (0-1)	10/05/2022	1.3		14.5		19.8		**204**		**46.1**		**0.184**		21.1		**0.583**	J	**173**	
			1-2	DU-27 (1-2)	10/05/2022	0.488	U	8.72		16.9		**81.2**		**39.1**		0.0555	J	21.3		0.488	U	**130**	
			2-3	DU-27 (2-3)	10/05/2022	1.15		15.8		15.5		45.6		**55.4**		0.0643	J	18.4		0.512	U	**139**	
	DU-28	ISM	0-1	DU-28 (0-1)	09/14/2022	2.32		10.5		16.4		**184**		**78.1**		**0.649**		17.9		0.513	U	**267**	
			1-2	DU-28 (1-2)	09/14/2022	**2.87**		13.3		17.3		**327**		**74.1**		**0.706**		17.2		0.493	U	**231**	
			2-3	DU-28 (2-3)	09/14/2022	**4.79**		7.40		16.9		**229**		**113**		**0.207**		19.6		*0.522*	U	**275**	
	DU-29	ISM	0-1	DU-29 (0-1)	09/15/2022	1.08		6.95		12.1		69.3	J	**103**		0.0595	J	18.1		0.518	U	**164**	
			1-2	DU-29 (1-2)	09/15/2022	1.02	J	5.08		10.4		44.3		**41.1**		0.0436	U	15.3		*0.545*	U	100	
			2-3	DU-29 (2-3)	09/15/2022	0.511	U	3.60		10.0		27.8		**45.7**		0.0409	U	15.2		0.511	U	92.7	
	DU-30	ISM	0-1	DU-30 (0-1)	09/16/2022	1.66		4.22		14.5		63.4		**131**		**0.0829**		18.3		0.500	U	**179**	
			1-2	DU-30 (1-2)	09/16/2022	2.09		3.72		13.9		**79.8**		**202**		0.05	J	17.7		0.512	U	**228**	
			2-3	DU-30 (2-3)	09/16/2022	**6.81**		4.14		11.6		**86.6**		**220**		**0.159**		15.7		0.501	U	**152**	
	DU-31	ISM	0-1	DU-31 (0-1)	11/03/2022	1.85		6.09		14.5		35.4		**44.8**		0.0479	J	16.5		0.491	U	116	
			1-2	DU-31 (1-2)	11/03/2022	0.743	J	4.98		12.6		49.2		**34.1**		0.067	J	17.0		0.516	U	**140**	
			2-3	DU-31 (2-3)	11/03/2022	0.735	J	5.96		12.9		68.2		25		0.0415	U	16.7		0.519	U	109	

Please see notes at end of table.

Table 2a
Soil Results - Metals - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B															
						Concentrations in mg/kg															
						Antimony		Arsenic	Chromium	Copper		Lead		Mercury		Nickel		Selenium		Zinc	
					Ecological ISM PRG	2.7		18	39	70		33		0.073		23		0.52		120	
					Ecological ISM Hot Spot	27		180	39	700		330		0.15		200		5.2		1,200	
East Parcel	DU-32	ISM	0-1	DU-32 (0-1)	09/22/2022	0.879	J	8.99	12.4	31.6		28.9		0.0428	U	15.7		*0.535*	U	118	
			1-2	DU-32 (1-2)	09/22/2022	0.535	U	7.10	11.1	23.4		20.9		0.0428	U	15.3		*0.535*	U	104	
			2-3	DU-32 (2-3)	09/22/2022	0.492	U	3.56	9.91	20.1		**34.1**		0.0394	U	14.2		0.492	U	90.2	
	DU-33	ISM	0-1	DU-33 (0-1)	09/20/2022	2.31		6.62	9.85	**79.8**		**88.8**		0.0435	J	14.9		0.491	U	**290**	
			1-2	DU-33 (1-2)	09/20/2022	1.84		9.60	12.3	**96.6**		**66.2**		0.0413	U	17.8		0.516	U	**354**	
			2-3	DU-33 (2-3)	09/20/2022	0.666	J	5.35	10.3	52.6		**42.8**		0.0423	U	16.4		*0.529*	U	**234**	
	DU-34	ISM	0-1	DU-34 (0-1)	09/27/2022	1.05		5.13	14.0	32.6		**41.4**		0.044	J	22.0		*0.523*	U	**182**	
			1-2	DU-34 (1-2)	09/27/2022	0.557	J	4.95	14.6	33.2		31.9		0.0447	J	**24.3**		0.498	U	**177**	
			2-3	DU-34 (2-3)	09/27/2022	0.537	U	3.69	12.1	33.1		25.9		0.043	U	20.1		*0.537*	U	**222**	
	DU-35	ISM	0-1	DU-35 (0-1)	10/07/2022	0.512	U	4.40	14.5	52.9		22.6		0.0415	J	17.8		0.512	U	**174**	
			1-2	DU-35 (1-2)	10/07/2022	0.531	U	3.81	12.3	29.1		19.0		0.0425	U	15.3		*0.531*	U	**168**	
			2-3	DU-35 (2-3)	10/07/2022	0.524	U	3.37	9.45	27.8		12.4		0.042	U	14.2		*0.524*	U	**141**	
	DU-36	ISM	0-1	DU-36 (0-1)	11/01/2022	**3.77**	J+	5.03	20.1	57.9		**73.2**		0.0398	U	22.6		0.498	U	**266**	
			1-2	DU-36 (1-2)	11/01/2022	**3.44**		4.23	17.3	56.7		**130**		0.0606	J	19.0		*0.520*	U	**222**	
			2-3	DU-36 (2-3)	11/01/2022	**3.62**		4.12	14.4	46.3		**63.3**		0.0449	J	18.3		*0.526*	U	**190**	
	DU-38	ISM	0-1	DU-38 (0-1)A	11/14/2022	1.31		3.69	13.1	27.7		30.5		0.039	J	16.5		0.486	U	109	
			0-1 FR	DU-38 (0-1)B	11/14/2022	0.959	J	3.71	11.9	22.8		25.8		0.0454	J	15.0		*0.534*	U	107	
			0-1 FR	DU-38 (0-1)C	11/14/2022	0.629	J	3.66	12.4	23.2		27.1		0.0431	J	16.3		*0.536*	U	110	
			1-2	DU-38 (1-2)A	11/16/2022	0.661	J	3.20	10.7	18.3		19.3		0.0415	U	13.7		0.519	U	84.4	
			1-2 FR	DU-38 (1-2)B	11/16/2022	**4.88**		3.76	10.9	56.0		**76.7**		0.0407	U	15.3		0.508	U	102	
			1-2 FR	DU-38 (1-2)C	11/16/2022	1.84		3.35	12.3	23.0		31.4		0.0411	U	16.0		0.514	U	94.6	
			2-3	DU-38 (2-3)A	11/17/2022	0.998		3.58	13.5	30.3		19.9		0.0396	U	17.1		0.495	U	83.3	
			2-3 FR	DU-38 (2-3)B	11/17/2022	**3.71**		3.63	12.7	51.4		**51.3**		0.039	U	16.5		0.487	U	108	
			2-3 FR	DU-38 (2-3)C	11/17/2022	0.921	J	4.06	13.6	26.0		22.1		0.0421	U	16.8		*0.527*	U	107	
			0-1	DU-38 (0-1) M	--	0.966	J	3.69	12.5	24.6		27.8		0.043	J	15.9		*0.536*	U	109	
			1-2	DU-38 (1-2) M	--	2.46	J	3.44	11.3	32.4	J	**42.5**	J	0.042	U	15.0		0.519	U	93.7	
			2-3	DU-38 (2-3) M	--	1.88	J	3.76	13.3	35.9		31.1		0.042	U	16.8		*0.527*	U	99.4	
East Parcel Concrete Slab	DU-37	Composite	0-1	DU-37 (0-1)	11/28/2022	0.495	U	3.72	17.4	26.1		**39.3**		0.0396	U	18.6		**0.572**	J	74.4	
			1-2	DU-37 (1-2)	11/28/2022	0.495	U	3.00	14.9	21.4		12.6		0.043	J	18.8		**0.537**	J	61.5	
			2-3	DU-37 (2-3)	11/28/2022	0.513	U	2.85	13.4	16.9		8.96		0.0411	U	17.1		0.513	U	52.2	
	DU-39	Composite	0-1	DU-39 (0-1)	11/29/2022	0.534	U	2.69	13.4	21.3		6.09		0.0427	U	16.0		*0.534*	U	62.8	
			1-2	DU-39 (1-2)	11/29/2022	0.56	U	3.24	15.1	17.9		5.11		0.0448	U	18.3		**0.615**	J	57.4	
			2-3	DU-39 (2-3)	11/29/2022	0.525	U	3.44	16	18.4		6.88		0.042	U	19.2		*0.525*	U	54.3	
	DU-40	Composite	0-1	DU-40 (0-1)	11/18/2022	0.509	U	2.88	12.9	16.2		3.75		0.0407	U	16.3		0.509	U	44.3	
			1-2	DU-40 (1-2)	11/18/2022	0.513	U	3.40	13.4	15.4		3.47		0.0411	U	17.7		0.513	U	44.7	
			2-3	DU-40 (2-3)	11/18/2022	0.525	U	3.13	13.7	16.6		3.1		0.042	U	18.2		*0.525*	U	45.1	
	DU-43 (Within DU-31)	Composite	0-1	DU-43 (0-1)	11/21/2022	0.503	U	2.92	13.8	18.8		5.42	J	0.0402	U	16.9		**0.522**	J	53.9	
			1-2	DU-43 (1-2)	11/21/2022	0.536	U	2.89	14.0	18.7		9.65	J	0.0429	U	18.5		*0.536*	U	56.4	
			2-3	DU-43 (2-3)	11/21/2022	0.523	U	3.06	13.8	16.3		4.35	J	0.0418	U	18.4		*0.523*	U	46.0	
	DU-44 (Within DU-36)	Composite	0-1	DU-44 (0-1)	12/01/2022	0.619	J	3.12	14.0	17.9		13.0		0.039	U	17.7		0.492	U	83.7	
			1-2	DU-44 (1-2)	12/01/2022	0.486	U	3.24	14.3	15.7		6.23		0.039	U	17.2		0.486	U	51.3	
			2-3	DU-44 (2-3)	12/01/2022	0.505	U	3.06	13.2	15.0		5.94		0.040	U	16.0		0.505	U	45.9	

Please see notes at end of table.

Table 2a
Soil Results - Metals - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B								
						Concentrations in mg/kg								
						Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc
					Ecological ISM PRG	2.7	18	39	70	33	0.073	23	0.52	120
					Ecological ISM Hot Spot	27	180	39	700	330	0.15	200	5.2	1,200
East Parcel Soil Berms	DU-41	ISM	0-1	DU-41 (0-1)A	10/24/2022	0.695 J	5.65	16.9	52.5	**83.8**	0.0558 J	16.0	0.492 U	104
			0-1 FR	DU-41 (0-1)B	10/24/2022	1.68	12.2	16.8	67.5	**78.4**	**0.0934**	15.9	*0.531* U	**138**
			0-1 FR	DU-41 (0-1)C	10/24/2022	**2.81**	**50.1**	16.3	**78.6**	**75.4**	**0.262**	16.5	0.491 U	**139**
			1-2	DU-41 (1-2)A	10/26/2022	2.39	10.6	20.7	62.0	**129**	**0.108**	18.4	0.509 U	**147**
			1-2 FR	DU-41 (1-2)B	10/26/2022	1.4	11.1	18.1	52.4	**112**	**0.105**	17.7	0.501 U	**165**
			1-2 FR	DU-41 (1-2)C	10/26/2022	1.88	14.1	18.5	71.1	**126**	**0.0878**	18.3	0.514 U	**157**
			2-3	DU-41 (2-3)A	10/28/2022	1.49	19.6	21.7	43.6	**107**	**0.0732** J	21.1	0.505 U	**161**
			2-3 FR	DU-41 (2-3)B	10/28/2022	1.29	10.7	20.1	42.0	**47.5**	0.0523 J	21.3	0.505 U	**160**
			2-3 FR	DU-41 (2-3)C	10/28/2022	1.69	11.6	21.4	45.2	**109**	0.0528 J	21.7	0.511 U	**182**
			0-1	DU-41 (0-1) M	--	1.73 J	**22.7** J	16.7	66.2	**79.2**	**0.137** J	16.1	*0.531* U	**127**
			1-2	DU-41 (1-2) M	--	1.89	11.9	19.1	61.8	**122**	**0.100**	18.1	0.514 U	**156**
			2-3	DU-41 (2-3) M	--	1.49	14.0	21.1	43.6	**87.8**	0.059 J	21.4	0.511 U	**168**

Notes:
ISM = Incremental Sampling Methodology.
bgs = Below ground surface.
EPA = United States Environmental Protection Agency.
M = Mean. These results are the mean of the field replicates collected at this decision unit.
mg/kg = Milligrams per kilogram (parts per million).
Bolded values exceed the Preliminary Remediation Goal (PRG).
Shaded values exceed the hot spot level.
Italicized values represent a method detection limit that is above one or more applicable screening levels.
U = Analyte was not detected.
J = Result is estimated.
J- = Result is estimated and may be biased low.
J+ = Result is estimated and may be biased high.

PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

Table 2b
Soil Results - Metals - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B															
						Concentrations in mg/kg															
						Antimony		Arsenic		Chromium	Copper	Lead		Mercury		Nickel		Selenium		Zinc	
					Human Health ISM PRG	24.3		4.4		--	11,000	400		--		--		--		--	
					Human Health ISM Hot Spot	243		140		--	110,000	4,000		--		--		--		--	
West Parcel	DU-1	ISM	0-1	DU-1 (0-1)	07/20/2022	0.801	J	**6.24**		37.4	180	74.8		0.0696	J	27.1		0.514	U	151	
			1-2	DU-1 (1-2)	07/20/2022	0.712	J	**5.41**		41.3	64.6	321		0.0863		30.9		0.516	U	140	
			2-3	DU-1 (2-3)	07/20/2022	0.529	U	**5.79**		29.5	69.5	57.5		0.0813	J	25.0		0.529	U	179	
	DU-2	ISM	0-1	DU-2 (0-1)	08/01/2022	0.603	J	**5.41**		21.5	119	96.2		0.0731	J	18.9		0.505	U	99.4	
			1-2	DU-2 (1-2)	08/01/2022	0.515	U	**5.36**		22.0	170	118		0.124		16.4		0.515	U	88.8	
			2-3	DU-2 (2-3)	08/01/2022	0.495	U	**5.21**		15.5	41.9	24.4		0.0607	J	14.7		0.495	U	78.0	
	DU-3	ISM	0-1	DU-3 (0-1)	08/03/2022	0.547	U	**6.87**		16.2	26.8	20.1		0.0438	U	16.3		0.547	U	80.4	
			1-2	DU-3 (1-2)	08/03/2022	0.497	U	**6.65**		16.5	25.8	15.8		0.0455	J	17.1		0.497	U	72.2	
			2-3	DU-3 (2-3)	08/03/2022	0.536	U	**6.65**		15.7	21.6	13.5		0.0497	J	16.0		0.536	U	64.7	
	DU-4	ISM	0-1	DU-4 (0-1)	08/04/2022	0.565	U	**6.57**		16.3	29.1	23.7		0.0746	J	23.9		0.565	U	89.4	
			1-2	DU-4 (1-2)	08/04/2022	0.515	U	**6.87**		16.3	26.6	23.9		0.0596	J	24.6		0.515	U	79.4	
			2-3	DU-4 (2-3)	08/04/2022	0.502	U	**7.63**		18.4	34.0	45.1		0.0760	J	22.4		0.502	U	115	
	DU-5	ISM	0-1	DU-5 (0-1)A	07/22/2022	0.992	J-	**8.89**		52.3	344	62.1	J	0.110		31.9	J	0.369	J	191	
			0-1 FR	DU-5 (0-1)B	07/22/2022	0.853		**8.98**		46.2	303	50.8		0.104		31.2		0.341	J	211	
			0-1 FR	DU-5 (0-1)C	07/22/2022	0.944		**8.43**		50.6	308	57.2		0.352		32.6		0.316	J	197	
			1-2	DU-5 (1-2)A	07/25/2022	0.551		**7.47**		41.4	237	70.5		0.111		27.6		0.335	J	157	
			1-2 FR	DU-5 (1-2)B	07/25/2022	0.832		**8.09**		41.2	223	51.8		0.131		29.5		0.326	J	179	
			1-2 FR	DU-5 (1-2)C	07/25/2022	0.572		**7.18**		42.9	220	53.7		0.369		58.9		0.317	J	167	
			2-3	DU-5 (2-3)A	07/26/2022	0.426	J	**6.73**		38.4	159	55.9		0.153		27.1		0.309	J	147	
			2-3 FR	DU-5 (2-3)B	07/26/2022	0.596		**6.29**		36.8	144	68.1		0.107		26.2		0.300	J	224	
			2-3 FR	DU-5 (2-3)C	07/26/2022	0.479	J	**6.56**		47.1	214	118		0.273		31.3		0.304	J	195	
			0-1	DU-5 (0-1) M	--	0.930	J	**8.77**		49.7	318	56.7	J	0.189	J	31.9	J	0.342	J	200	
			1-2	DU-5 (1-2) M	--	0.652		**7.58**		41.8	227	58.7		0.204	J	38.7		0.326	J	168	
			2-3	DU-5 (2-3) M	--	0.500	J	**6.53**		40.8	172	80.7		0.178		28.2		0.304	J	189	
	DU-6	ISM	0-1	DU-6 (0-1)	07/28/2022	0.539	U	**4.93**		22.1	67.6	28.2		0.128		19.6		0.539	U	135	
			1-2	DU-6 (1-2)	07/28/2022	0.560	U	**4.89**		25.2	91.6	40.0		0.156		21.8		0.560	U	124	
			2-3	DU-6 (2-3)	07/28/2022	0.526	U	**4.67**		23.2	100	37.8		0.141		22.0		0.526	U	112	
	DU-7	ISM	0-1	DU-7 (0-1)	07/29/2022	0.537	U	4.37		19.2	36.0	23.3		0.304		19.3		0.537	U	126	
			1-2	DU-7 (1-2)	07/29/2022	0.547	U	3.98		18.6	30.1	18.7		0.130		19.7		0.547	U	92.7	
			2-3	DU-7 (2-3)	07/29/2022	0.536	U	3.07		16.2	24.2	14.9		0.0927		19.1		0.536	U	75.1	
	DU-8	ISM	0-1	DU-8 (0-1)	08/05/2022	0.560	U	4.33		21.7	32.5	39.1		0.154		19.6		0.560	U	144	
			1-2	DU-8 (1-2)	08/05/2022	0.501	U	4.13		24.6	32.9	31.4		0.164		19.7		0.501	U	130	
			2-3	DU-8 (2-3)	08/05/2022	0.545	U	4.13		21.9	32.0	31.0		0.156		20.7		0.545	U	126	
	DU-9	ISM	0-1	DU-9 (0-1)	08/08/2022	0.623	J	**5.25**		30.6	40.6	28.2		0.160		26.5		0.506	U	154	J-
			1-2	DU-9 (1-2)	08/08/2022	0.555	U	**4.81**		27.8	34.6	40.7		0.141		24.4		0.555	U	115	
			2-3	DU-9 (2-3)	08/08/2022	0.512	U	**5.12**		31.0	37.4	21.5		0.141		26.2		0.512	U	122	

Please see notes at end of table.

Table 2b
Soil Results - Metals - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B													
						Concentrations in mg/kg													
						Antimony		Arsenic	Chromium	Copper		Lead	Mercury	Nickel	Selenium		Zinc		
					Human Health ISM PRG	24.3		4.4	--	11,000		400	--	--	--		--		
					Human Health ISM Hot Spot	243		140	--	110,000		4,000	--	--	--		--		
Central Parcel	DU-10	ISM	0-1	DU-10 (0-1)	08/12/2022	0.541	U	**4.50**	14.8	33.3		86.5	1.07	29.9	0.541	U	106		
			1-2	DU-10 (1-2)	08/12/2022	0.531	J	**5.56**	15.3	33.6		54.8	0.829	27.5	0.513	U	94.9		
			2-3	DU-10 (2-3)	08/12/2022	0.514	J	**5.16**	14.5	32.2		73.3	0.609	22.6	0.491	U	117		
	DU-11	ISM	0-1	DU-11 (0-1)A	08/10/2022	0.545	U	**4.60**	23.6	38.5		53.1	0.721	29.3	0.545	U	116		
			0-1 FR	DU-11 (0-1)B	08/10/2022	0.520	U	3.98	19.9	35.0		56.1	0.687	25.6	0.520	U	104		
			0-1 FR	DU-11 (0-1)C	08/10/2022	0.541	U	4.14	22.2	36.7		50.6	0.726	26.5	0.541	U	110		
			1-2	DU-11 (1-2)A	08/10/2022	0.535	U	3.93	21.4	33.0		42.8	0.504	27.0	0.535	U	90.1		
			1-2 FR	DU-11 (1-2)B	08/10/2022	0.508	U	4.08	21.6	34.2		44.4	0.563	27.3	0.508	U	93.1		
			1-2 FR	DU-11 (1-2)C	08/10/2022	0.520	U	4.15	22.0	37.3		49.0	0.633	28.2	0.520	U	99.5		
			2-3	DU-11 (2-3)A	08/10/2022	0.526	U	4.23	22.0	32.2		41.0	0.382	26.1	0.526	U	95.0		
			2-3 FR	DU-11 (2-3)B	08/10/2022	0.522	U	4.19	21.0	35.2		43.3	0.604	26.4	0.522	U	95.0		
			2-3 FR	DU-11 (2-3)C	08/10/2022	0.497	U	3.90	20.2	35.1		34.5	0.590	25.8	0.497	U	86.5		
			0-1	DU-11 (0-1) M	--	0.545	U	4.24	21.9	36.7		53.3	0.711	27.1	0.545	U	110		
			1-2	DU-11 (1-2) M	--	0.535	U	4.05	21.7	34.8		45.4	0.567	27.5	0.535	U	94.2		
			2-3	DU-11 (2-3) M	--	0.526	U	4.11	21.1	34.2		39.6	0.525	26.1	0.526	U	92.2		
	DU-12	ISM	0-1	DU-12 (0-1)	08/16/2022	0.830	J	**4.95**	14.8	78.9		165	0.292	19.8	0.504	U	166		
			1-2	DU-12 (1-2)	08/16/2022	0.493	U	4.26	14.0	55.7		131	0.275	19.0	0.493	U	104		
			2-3	DU-12 (2-3)	08/16/2022	0.551	U	3.62	13.7	41		70.8	0.207	17.8	0.551	U	79.7		
	DU-13	ISM	0-1	DU-13 (0-1)A	08/29/2022	0.792	J	**6.04**	14.2	94.3		241	1.15	21.4	0.563	U	204		
			0-1 FR	DU-13 (0-1)B	08/29/2022	0.562	U	**5.53**	14.2	60.4		180	0.895	19.6	0.562	U	155		
			0-1 FR	DU-13 (0-1)C	08/29/2022	0.923	J	**5.41**	14.1	55.5		199	0.848	19.4	0.541	U	155		
			1-2	DU-13 (1-2)A	08/30/2022	0.513	U	**4.79**	13.8	53.0		86.5	0.785	18.6	0.513	U	109		
			1-2 FR	DU-13 (1-2)B	08/30/2022	0.520	U	**4.61**	13.7	43.7		92.3	0.572	18.4	0.520	U	103		
			1-2 FR	DU-13 (1-2)C	08/30/2022	0.540	U	**4.72**	13.8	44.7		154	0.614	18.1	0.540	U	128		
			2-3	DU-13 (2-3)A	08/31/2022	0.562	U	3.75	12.6	43.3		175	0.745	18.4	0.562	U	127		
			2-3 FR	DU-13 (2-3)B	08/31/2022	0.522	U	3.89	12.6	40.6		92.4	0.698	17.3	0.522	U	90.6		
			2-3 FR	DU-13 (2-3)C	08/31/2022	0.548	U	4.04	12.6	54.2		94.6	0.769	17.7	0.548	U	97.3		
			0-1	DU-13 (0-1) M	--	0.759	J	**5.66**	14.2	70.1		207	0.964	20.1	0.563	U	171		
			1-2	DU-13 (1-2) M	--	0.540	U	**4.71**	13.8	47.1		111	0.657	18.4	0.540	U	113		
			2-3	DU-13 (2-3) M	--	0.562	U	3.89	12.6	46.0		121	0.737	17.8	0.562	U	105		
	DU-14	ISM	0-1	DU-14 (0-1)	08/17/2022	2.81		**6.14**	22.9	73.5		134	1.33	24.3	0.514	U	147		
			1-2	DU-14 (1-2)	08/17/2022	7.38		**6.87**	21.6	122		240	3.10	23.7	0.519	U	204		
			2-3	DU-14 (2-3)	08/17/2022	3.04		**5.66**	20.6	185		162	2.50	24.8	0.493	U	164		
	DU-15	ISM	0-1	DU-15 (0-1)	08/19/2022	2.81		**5.04**	16.0	95.4		131	0.750	21.7	0.506	U	131		
			1-2	DU-15 (1-2)	08/19/2022	0.576	J	3.75	14.0	57.7		68.6	1.28	19.3	0.517	U	120		
			2-3	DU-15 (2-3)	08/19/2022	0.492	U	2.91	11.2	36.2		63.6	0.563	17.6	0.492	U	76.8		
	DU-16	ISM	0-1	DU-16 (0-1)A	09/12/2022	4.29		**8.31**	24.8	93.4	J+	237	2.43	25.6	0.543	U	371		
			0-1 FR	DU-16 (0-1)B	09/12/2022	2.31		**7.56**	26.6	131	J+	265	5.12	28.1	0.494	U	355		
			0-1 FR	DU-16 (0-1)C	09/12/2022	3.04		**7.89**	17.9	127	J+	306	3.87	23.2	0.539	U	283		
			0-1	DU-16 (0-1) M	--	3.21		**7.92**	23.1	117	J	269	3.81	25.6	0.543	U	336		
			1-2	DU-16 (1-2)	11/7/2022	2.29		**6.92**	13.6	71.8		151	1.69	18.5	0.521	U	139		
			2-3	DU-16 (2-3)	11/7/2022	0.499	U	3.72	12.9	29.1		37.5	0.429	16.8	0.539	J	71.3		

Please see notes at end of table.

Table 2b
Soil Results - Metals - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B													
						Concentrations in mg/kg													
						Antimony		Arsenic	Chromium	Copper		Lead	Mercury	Nickel	Selenium		Zinc		
					Human Health ISM PRG	24.3		4.4	--	11,000		400	--	--	--		--		
					Human Health ISM Hot Spot	243		140	--	110,000		4,000	--	--	--		--		
Central Parcel	DU-17	ISM	0-1	DU-17 (0-1)	09/02/2022	1.06		**4.95**	12.4	59.2		81.4	0.575	16.4	0.499	U	156		
			1-2	DU-17 (1-2)	09/02/2022	0.511	U	3.72	11.8	34.3		62.5	0.356	16.3	0.511	U	70.6		
			2-3	DU-17 (2-3)	09/02/2022	0.504	U	3.16	11.1	26.8		35.1	0.121	14.6	0.504	U	58.4		
	DU-18	ISM	0-1	DU-18 (0-1)A	09/29/2022	0.874	J	**6.99**	22.1	71.0		198	0.965	22.5	0.531	U	146		
			0-1 FR	DU-18 (0-1)B	09/29/2022	1.41		**10.9**	22.8	111		198	1.72	23.5	0.505	U	173		
			0-1 FR	DU-18 (0-1)C	09/29/2022	1.06		**8.94**	20.8	87.7		280	1.20	23.3	0.499	U	204		
			1-2	DU-18 (1-2)A	09/30/2022	0.491	U	**5.38**	14.0	58.2		179	0.806	18.3	0.491	U	156		
			1-2 FR	DU-18 (1-2)B	09/30/2022	0.495	U	**5.98**	15.3	79.5		150	1.06	21.8	0.495	U	158		
			1-2 FR	DU-18 (1-2)C	09/30/2022	0.490	U	**6.22**	14.3	77.7		119	0.985	18.3	0.490	U	133		
			2-3	DU-18 (2-3)A	10/03/2022	0.502	U	3.77	11.9	30.8		55.4	0.296	16.6	0.502	U	94.4		
			2-3 FR	DU-18 (2-3)B	10/03/2022	0.489	U	**5.31**	13.0	59.9		92.3	0.681	17.8	0.489	U	105		
			2-3 FR	DU-18 (2-3)C	10/03/2022	0.489	U	**5.63**	13.9	53.0		75.2	0.679	18.3	0.497	J	118		
			0-1	DU-18 (0-1) M	--	1.11	J	**8.94**	21.9	89.9		225	1.30	23.1	0.531	U	174		
			1-2	DU-18 (1-2) M	--	0.495	U	**5.86**	14.5	71.8		149	0.950	19.5	0.495	U	149		
			2-3	DU-18 (2-3) M	--	0.502	U	**4.90**	12.9	47.9		74	0.552	17.6	0.496	J	106		
	DU-19	ISM	0-1	DU-19 (0-1)	09/06/2022	1.39		**7.67**	13.2	107		257	0.666	16.5	0.541	U	215		
			1-2	DU-19 (1-2)	09/06/2022	0.957	J	**11.2**	12.0	110		161	1.08	15.5	0.555	U	198		
			2-3	DU-19 (2-3)	09/06/2022	0.926	J	**5.68**	11.2	44.9		70.8	0.327	15.5	0.522	U	113		
	DU-20	ISM	0-1	DU-20 (0-1)	10/18/2022	1.69		**5.69**	19.6	58.4		76.2	0.314	22.7	0.517	U	117		
			1-2	DU-20 (1-2)	10/18/2022	0.536	U	4.08	19.5	25.8		17.7	0.136	28.4	0.536	U	87.3		
			2-3	DU-20 (2-3)	10/18/2022	0.511	U	3.68	16.7	23.0		14.3	0.101	21.1	0.511	U	90.4		
	DU-21	ISM	0-1	DU-21 (0-1)	09/08/2022	2.73		**10.5**	14.8	128	J+	295	0.776	20.3	0.493	U	242		
			1-2	DU-21 (1-2)	09/08/2022	1.01		**4.93**	11.8	56.2	J+	116	0.276	17.7	0.500	U	180		
			2-3	DU-21 (2-3)	09/08/2022	0.497	U	**4.48**	11.6	45.9	J+	89.7	0.154	18.0	0.497	U	109		
	DU-22	ISM	0-1	DU-22 (0-1)A	10/13/2022	2.89		**6.48**	19.0	82.3		129	0.592	21.0	0.530	U	167		
			0-1 FR	DU-22 (0-1)B	10/13/2022	2.79		**5.77**	18.0	86.7		148	0.602	21.4	0.506	U	169		
			0-1 FR	DU-22 (0-1)C	10/13/2022	2.03		**5.83**	19.6	96.6		190	0.430	23.2	0.538	U	178		
			1-2	DU-22 (1-2)A	10/14/2022	0.922	J	**4.41**	17.4	31.7		47.8	0.231	21.1	0.494	U	125	J-	
			1-2 FR	DU-22 (1-2)B	10/14/2022	2.63		4.33	16.1	47.4		72.3	0.349	20.8	0.512	U	109		
			1-2 FR	DU-22 (1-2)C	10/14/2022	2.04		**4.53**	18.8	44.8		65.4	0.161	22.6	0.497	U	164		
			2-3	DU-22 (2-3)A	10/14/2022	0.731	J	**4.45**	17.2	29.4		51.9	0.190	20.2	0.499	U	96.5		
			2-3 FR	DU-22 (2-3)B	10/14/2022	0.839	J	**4.43**	18.0	54.0		57.5	0.376	21.4	0.509	U	98.6		
			2-3 FR	DU-22 (2-3)C	10/14/2022	1.09	J	3.92	16.0	32.6		43.4	0.355	20.8	0.557	U	123		
			0-1	DU-22 (0-1) M	--	2.57		**6.03**	18.9	88.5		156	0.541	21.9	0.538	U	171		
			1-2	DU-22 (1-2) M	--	1.86	J	**4.42**	17.4	41.3		61.8	0.247	21.5	0.512	U	133	J	
			2-3	DU-22 (2-3) M	--	0.887	J	4.27	17.1	38.7		50.9	0.307	20.8	0.557	U	106		
	DU-23	ISM	0-1	DU-23 (0-1)	10/12/2022	1.62		**5.99**	22.1	150		276	1.02	22.9	0.497	U	184		
			1-2	DU-23 (1-2)	10/12/2022	0.61	J	**4.63**	18.4	69.5		70.9	0.545	20.5	0.518	U	127		
			2-3	DU-23 (2-3)	10/12/2022	0.498	J	3.82	15.6	41.9		82.2	0.426	18.8	0.488	U	99		
	DU-24	ISM	0-1	DU-24 (0-1)	09/21/2022	0.546	U	4.16	15.5	39.9		48.8	0.276	19.2	0.546	U	117		
			1-2	DU-24 (1-2)	09/21/2022	0.496	U	3.56	15.0	31.1		23.2	0.175	20.6	0.496	U	124		
			2-3	DU-24 (2-3)	09/21/2022	0.501	U	2.84	10.9	17.6		13.8	0.0928	18.5	0.501	U	83.1		
	DU-25	ISM	0-1	DU-25 (0-1)	09/23/2022	0.822	J	**5.24**	20.2	226		144	0.762	21.3	0.491	U	242		
			1-2	DU-25 (1-2)	09/23/2022	0.493	U	3.29	14.5	48.5		113	0.213	19.6	0.493	U	202		
			2-3	DU-25 (2-3)	09/23/2022	0.496	U	3.17	12.6	30.0		43.2	0.116	18.7	0.496	U	138		

Please see notes at end of table.

Table 2b
Soil Results - Metals - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B															
						Concentrations in mg/kg															
						Antimony		Arsenic		Chromium	Copper		Lead	Mercury		Nickel		Selenium		Zinc	
					Human Health ISM PRG	24.3		4.4		--	11,000		400	--		--		--		--	
					Human Health ISM Hot Spot	243		140		--	110,000		4,000	--		--		--		--	
Central Parcel	DU-26	ISM	0-1	DU-26 (0-1)A	11/09/2022	3.22		**9.50**		18.8	152		330	1.95		20.7		0.605	J	260	
			0-1 FR	DU-26 (0-1)B	11/09/2022	4.79		**9.01**		17.1	129		302	1.28		19.4		0.502	J	244	
			0-1 FR	DU-26 (0-1)C	11/09/2022	3.61		**6.81**		19.1	105		292	1.53		20.4		0.522	J	235	
			1-2	DU-26 (1-2)A	11/10/2022	1.4		**5.16**		14.7	80.7		151	0.944		18.3		0.511	U	206	
			1-2 FR	DU-26 (1-2)B	11/10/2022	0.728	J	**4.61**		13.2	48.5		121	0.397		17.2		0.558	J	182	
			1-2 FR	DU-26 (1-2)C	11/10/2022	1.06		**11.6**		15.5	79.8		143	1.25		19.9		0.532	U	186	
			2-3	DU-26 (2-3)A	11/11/2022	0.491	U	3.92		14.6	36.1		65.2	0.258		18.1		0.491	U	112	
			2-3 FR	DU-26 (2-3)B	11/11/2022	0.521	U	4.33		12.4	41.6		59.8	0.820		18.3		0.521	U	108	
			2-3 FR	DU-26 (2-3)C	11/11/2022	0.529	J	**4.75**		13.3	39.6		76.1	0.537		17.5		0.512	U	138	
			0-1	DU-26 (0-1) M	--	3.87		**8.44**		18.3	129		308	1.59		20.2		0.543	J	246	
			1-2	DU-26 (1-2) M	--	1.06	J	**7.12**		14.5	69.7		138	0.864		18.5		0.534	J	191	
			2-3	DU-26 (2-3) M	--	0.514	J	4.33		13.4	39.1		67.0	0.538		18.0		0.521	U	119	
Central Parcel Concrete Slab	DU-42 (Within DU-16)	Composite	0-1	DU-42 (0-1)	11/30/2022	0.512	U	4.38		17.8	36.3		53.3	0.226		23.3		0.531	J	126	
			1-2	DU-42 (1-2)	11/30/2022	0.667	J	4.11		18.4	25.4		30.3	0.186		22.6		0.549	U	109	
			2-3	DU-42 (2-3)	11/30/2022	0.531	U	3.76		17.4	21.1		20.1	0.125		20.7		0.531	U	87.0	
East Parcel	DU-27	ISM	0-1	DU-27 (0-1)	10/05/2022	1.3		**14.5**		19.8	204		46.1	0.184		21.1		0.583	J	173	
			1-2	DU-27 (1-2)	10/05/2022	0.488	U	**8.72**		16.9	81.2		39.1	0.0555	J	21.3		0.488	U	130	
			2-3	DU-27 (2-3)	10/05/2022	1.15		**15.8**		15.5	45.6		55.4	0.0643	J	18.4		0.512	U	139	
	DU-28	ISM	0-1	DU-28 (0-1)	09/14/2022	2.32		**10.5**		16.4	184		78.1	0.649		17.9		0.513	U	267	
			1-2	DU-28 (1-2)	09/14/2022	2.87		**13.3**		17.3	327		74.1	0.706		17.2		0.493	U	231	
			2-3	DU-28 (2-3)	09/14/2022	4.79		**7.40**		16.9	229		113	0.207		19.6		0.522	U	275	
	DU-29	ISM	0-1	DU-29 (0-1)	09/15/2022	1.08		**6.95**		12.1	69.3	J	103	0.0595	J	18.1		0.518	U	164	
			1-2	DU-29 (1-2)	09/15/2022	1.02	J	**5.08**		10.4	44.3		41.1	0.0436	U	15.3		0.545	U	100	
			2-3	DU-29 (2-3)	09/15/2022	0.511	U	3.60		10.0	27.8		45.7	0.0409	U	15.2		0.511	U	92.7	
	DU-30	ISM	0-1	DU-30 (0-1)	09/16/2022	1.66		4.22		14.5	63.4		131	0.0829		18.3		0.500	U	179	
			1-2	DU-30 (1-2)	09/16/2022	2.09		3.72		13.9	79.8		202	0.05	J	17.7		0.512	U	228	
			2-3	DU-30 (2-3)	09/16/2022	6.81		4.14		11.6	86.6		220	0.159		15.7		0.501	U	152	
	DU-31	ISM	0-1	DU-31 (0-1)	11/03/2022	1.85		**6.09**		14.5	35.4		44.8	0.0479	J	16.5		0.491	U	116	
			1-2	DU-31 (1-2)	11/03/2022	0.743	J	**4.98**		12.6	49.2		34.1	0.067	J	17.0		0.516	U	140	
			2-3	DU-31 (2-3)	11/03/2022	0.735	J	**5.96**		12.9	68.2		25	0.0415	U	16.7		0.519	U	109	

Please see notes at end of table.

Table 2b
Soil Results - Metals - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B															
						Concentrations in mg/kg															
						Antimony		Arsenic		Chromium	Copper		Lead		Mercury		Nickel		Selenium		Zinc
					Human Health ISM PRG	24.3		4.4		--	11,000		400		--		--		--		--
					Human Health ISM Hot Spot	243		140		--	110,000		4,000		--		--		--		--
East Parcel	DU-32	ISM	0-1	DU-32 (0-1)	09/22/2022	0.879	J	**8.99**		12.4	31.6		28.9		0.0428	U	15.7		0.535	U	118
			1-2	DU-32 (1-2)	09/22/2022	0.535	U	**7.10**		11.1	23.4		20.9		0.0428	U	15.3		0.535	U	104
			2-3	DU-32 (2-3)	09/22/2022	0.492	U	3.56		9.91	20.1		34.1		0.0394	U	14.2		0.492	U	90.2
	DU-33	ISM	0-1	DU-33 (0-1)	09/20/2022	2.31		**6.62**		9.85	79.8		88.8		0.0435	J	14.9		0.491	U	290
			1-2	DU-33 (1-2)	09/20/2022	1.84		**9.60**		12.3	96.6		66.2		0.0413	U	17.8		0.516	U	354
			2-3	DU-33 (2-3)	09/20/2022	0.666	J	**5.35**		10.3	52.6		42.8		0.0423	U	16.4		0.529	U	234
	DU-34	ISM	0-1	DU-34 (0-1)	09/27/2022	1.05		**5.13**		14.0	32.6		41.4		0.044	J	22.0		0.523	U	182
			1-2	DU-34 (1-2)	09/27/2022	0.557	J	**4.95**		14.6	33.2		31.9		0.0447	J	24.3		0.498	U	177
			2-3	DU-34 (2-3)	09/27/2022	0.537	U	3.69		12.1	33.1		25.9		0.043	U	20.1		0.537	U	222
	DU-35	ISM	0-1	DU-35 (0-1)	10/07/2022	0.512	U	**4.40**		14.5	52.9		22.6		0.0415	J	17.8		0.512	U	174
			1-2	DU-35 (1-2)	10/07/2022	0.531	U	3.81		12.3	29.1		19.0		0.0425	U	15.3		0.531	U	168
			2-3	DU-35 (2-3)	10/07/2022	0.524	U	3.37		9.45	27.8		12.4		0.042	U	14.2		0.524	U	141
	DU-36	ISM	0-1	DU-36 (0-1)	11/01/2022	3.77	J+	**5.03**		20.1	57.9		73.2		0.0398	U	22.6		0.498	U	266
			1-2	DU-36 (1-2)	11/01/2022	3.44		4.23		17.3	56.7		130		0.0606	J	19.0		0.52	U	222
			2-3	DU-36 (2-3)	11/01/2022	3.62		4.12		14.4	46.3		63.3		0.0449	J	18.3		0.526	U	190
	DU-38	ISM	0-1	DU-38 (0-1)A	11/14/2022	1.31		3.69		13.1	27.7		30.5		0.039	J	16.5		0.486	U	109
			0-1 FR	DU-38 (0-1)B	11/14/2022	0.959	J	3.71		11.9	22.8		25.8		0.0454	J	15.0		0.534	U	107
			0-1 FR	DU-38 (0-1)C	11/14/2022	0.629	J	3.66		12.4	23.2		27.1		0.0431	J	16.3		0.536	U	110
			1-2	DU-38 (1-2)A	11/16/2022	0.661	J	3.20		10.7	18.3		19.3		0.0415	U	13.7		0.519	U	84.4
			1-2 FR	DU-38 (1-2)B	11/16/2022	4.88		3.76		10.9	56.0		76.7		0.0407	U	15.3		0.508	U	102
			1-2 FR	DU-38 (1-2)C	11/16/2022	1.84		3.35		12.3	23.0		31.4		0.0411	U	16.0		0.514	U	94.6
			2-3	DU-38 (2-3)A	11/17/2022	0.998		3.58		13.5	30.3		19.9		0.0396	U	17.1		0.495	U	83.3
			2-3 FR	DU-38 (2-3)B	11/17/2022	3.71		3.63		12.7	51.4		51.3		0.039	U	16.5		0.487	U	108
			2-3 FR	DU-38 (2-3)C	11/17/2022	0.921	J	4.06		13.6	26.0		22.1		0.0421	U	16.8		0.527	U	107
			0-1	DU-38 (0-1) M	--	0.966	J	3.69		12.5	24.6		27.8		0.043	J	15.9		0.536	U	109
			1-2	DU-38 (1-2) M	--	2.46	J	3.44		11.3	32.4	J	42.5	J	0.042	U	15.0		0.519	U	93.7
			2-3	DU-38 (2-3) M	--	1.88	J	3.76		13.3	35.9		31.1		0.042	U	16.8		0.527	U	99.4
East Parcel Concrete Slabs	DU-37	Composite	0-1	DU-37 (0-1)	11/28/2022	0.495	U	3.72		17.4	26.1		39.3		0.0396	U	18.6		0.572	J	74.4
			1-2	DU-37 (1-2)	11/28/2022	0.495	U	3.00		14.9	21.4		12.6		0.043	J	18.8		0.537	J	61.5
			2-3	DU-37 (2-3)	11/28/2022	0.513	U	2.85		13.4	16.9		8.96		0.0411	U	17.1		0.513	U	52.2
	DU-39	Composite	0-1	DU-39 (0-1)	11/29/2022	0.534	U	2.69		13.4	21.3		6.09		0.0427	U	16.0		0.534	U	62.8
			1-2	DU-39 (1-2)	11/29/2022	0.56	U	3.24		15.1	17.9		5.11		0.0448	U	18.3		0.615	J	57.4
			2-3	DU-39 (2-3)	11/29/2022	0.525	U	3.44		16	18.4		6.88		0.042	U	19.2		0.525	U	54.3
	DU-40	Composite	0-1	DU-40 (0-1)	11/18/2022	0.509	U	2.88		12.9	16.2		3.75		0.0407	U	16.3		0.509	U	44.3
			1-2	DU-40 (1-2)	11/18/2022	0.513	U	3.40		13.4	15.4		3.47		0.0411	U	17.7		0.513	U	44.7
			2-3	DU-40 (2-3)	11/18/2022	0.525	U	3.13		13.7	16.6		3.1		0.042	U	18.2		0.525	U	45.1
	DU-43 (Within DU-31)	Composite	0-1	DU-43 (0-1)	11/21/2022	0.503	U	2.92		13.8	18.8		5.42	J	0.0402	U	16.9		0.522	J	53.9
			1-2	DU-43 (1-2)	11/21/2022	0.536	U	2.89		14.0	18.7		9.65	J	0.0429	U	18.5		0.536	U	56.4
			2-3	DU-43 (2-3)	11/21/2022	0.523	U	3.06		13.8	16.3		4.35	J	0.0418	U	18.4		0.523	U	46.0
	DU-44 (Within DU-36)	Composite	0-1	DU-44 (0-1)	12/01/2022	0.619	J	3.12		14.0	17.9		13.0		0.039	U	17.7		0.492	U	83.7
			1-2	DU-44 (1-2)	12/01/2022	0.486	U	3.24		14.3	15.7		6.23		0.039	U	17.2		0.486	U	51.3
			2-3	DU-44 (2-3)	12/01/2022	0.505	U	3.06		13.2	15.0		5.94		0.040	U	16.0		0.505	U	45.9

Please see notes at end of table.

Table 2b
Soil Results - Metals - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Metals by EPA Method 6020B								
						Concentrations in mg/kg								
						Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc
					Human Health ISM PRG	24.3	4.4	--	11,000	400	--	--	--	--
					Human Health ISM Hot Spot	243	140	--	110,000	4,000	--	--	--	--
East Parcel Soil Berms	DU-41	ISM	0-1	DU-41 (0-1)A	10/24/2022	0.695 J	**5.65**	16.9	52.5	83.8	0.0558 J	16.0	0.492 U	104
			0-1 FR	DU-41 (0-1)B	10/24/2022	1.68	**12.2**	16.8	67.5	78.4	0.0934	15.9	0.531 U	138
			0-1 FR	DU-41 (0-1)C	10/24/2022	2.81	**50.1**	16.3	78.6	75.4	0.262	16.5	0.491 U	139
			1-2	DU-41 (1-2)A	10/26/2022	2.39	**10.6**	20.7	62.0	129	0.108	18.4	0.509 U	147
			1-2 FR	DU-41 (1-2)B	10/26/2022	1.4	**11.1**	18.1	52.4	112	0.105	17.7	0.501 U	165
			1-2 FR	DU-41 (1-2)C	10/26/2022	1.88	**14.1**	18.5	71.1	126	0.0878	18.3	0.514 U	157
			2-3	DU-41 (2-3)A	10/28/2022	1.49	**19.6**	21.7	43.6	107	0.0732 J	21.1	0.505 U	161
			2-3 FR	DU-41 (2-3)B	10/28/2022	1.29	**10.7**	20.1	42.0	47.5	0.0523 J	21.3	0.505 U	160
			2-3 FR	DU-41 (2-3)C	10/28/2022	1.69	**11.6**	21.4	45.2	109	0.0528 J	21.7	0.511 U	182
			0-1	DU-41 (0-1) M	--	1.73 J	**22.7** J	16.7	66.2	79.2	0.137 J	16.1	0.531 U	127
			1-2	DU-41 (1-2) M	--	1.89	**11.9**	19.1	61.8	122	0.100	18.1	0.514 U	156
			2-3	DU-41 (2-3) M	--	1.49	**14.0**	21.1	43.6	87.8	0.059 J	21.4	0.511 U	168

Notes:
ISM = Incremental Sampling Methodology.
bgs = Below ground surface.
EPA = United States Environmental Protection Agency.
M = Mean. These results are the mean of the field replicates collected at this decision unit.
mg/kg = Milligrams per kilogram (parts per million).
Bolded values exceed the Preliminary Remediation Goal (PRG).
Shaded values exceed the hot spot level.
Italicized values represent a method detection limit that is above one or more applicable screening levels.
PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
U = Analyte was not detected.
J = Result is estimated.
J- = Result is estimated and may be biased low.
J+ = Result is estimated and may be biased high.

Table 3a
Soil Results - Dioxins/Furans - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Dioxins/Furans by EPA Method 1613B Concentrations in pg/g 2,3,7,8-TCDD	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	Total D/F TEQ (Mammal)
					Ecological ISM PRG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.1
					Ecological ISM Hot Spot	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	61
West Parcel	DU-1	ISM	0-1	DU-1 (0-1)	07/20/2022	0.833	4.53	3.96	31.3	17.9	407	3,690	1.36	2.77	7.95	8.16	5.85	8.48	2.13 U	118	4.69	340	9.14 JN	30.4 JN	218	985	72.5 JN	88.3 JN	171	393	**22.1**
			1-2	DU-1 (1-2)	07/20/2022	0.826	2.27 J	4.64	27.8	9.16	644	6,310 J	1.38	4.05	8.17	14.4	8.37	8.87	3.83	337	11.2	924	8.79 JN	21.1 JN	155	1,150	48.3 JN	65.7	333	1,090	**25.6** J
			2-3	DU-1 (2-3)	07/20/2022	0.439	0.941 U	2.06 J	12.1	4.35	305	3,060	1.14	1.18 J	3.5	5.57	2.75	3.62	1.56 J	126	6.31	458	3.52	2.77	66.1	543	21.1 JN	30.1 JN	125 JN	423	**10.7** J
	DU-2	ISM	0-1	DU-2 (0-1)	08/01/2022	0.424 U	1.50 J	1.49 U	9.03	4.55	157	1,310	1.14	1.97 J	2.45 J	3.45	1.65 J	0.795 U	0.822 U	30.4	1.96 J	78.9	3.03	11.0	62.0	325	27.6 JN	28.7 JN	36.4	90.2	**6.95** J
			1-2	DU-2 (1-2)	08/01/2022	0.338 U	0.698 U	1.21 U	6.62	1.10 U	73.5	700	0.895	1.22 U	1.76 J	2.09 J	1.06 U	1.29 U	1.27 U	15.4	1.13 U	58.7	1.15	0.698 U	17.5	118	17.4 JN	15.7 JN	16.6	48.6	3.44 J
			2-3	DU-2 (2-3)	08/01/2022	0.352 U	0.67 U	1.63 U	2.63	1.52 U	46.7	384	0.605	1.13 J	1.21 J	1.26 U	1.26 U	1.53 U	1.52 U	15.1	1.02 U	40.8	0.667	0.670 U	16.1	80.3	17.7 JN	14.9 JN	13.5	42.1	2.42 J
	DU-3	ISM	0-1	DU-3 (0-1)	08/03/2022	0.673	6.12	5.17	38.7	13.0	805	5,360 J	0.752	2.27 U	4.8	5.94	2.72	6.33	2.03 U	87.5	3.75	290	3.00	25.0	220	1,380	13.2	61.0	136	260	**26.3** J
			1-2	DU-3 (1-2)	08/03/2022	0.354 U	1.16 U	2.00 U	11.4	4.92	327	2,780	0.322 U	0.807 U	1.62 J	1.09 U	0.991 U	1.22 U	1.29 U	40.4	2.06 U	221	1.06	4.02	66.8	526	6.38	24.9	38.7	144	**7.82** J
			2-3	DU-3 (2-3)	08/03/2022	0.227 U	1.53 U	1.77 U	5.71	1.94 J	163	1,520	0.298 U	1.07 U	1.02 U	0.928 U	0.86 U	1.05 U	1.45 U	30.2	2.11 U	151	0.227 U	1.53 U	41.4	270	3.01	7.87	23.8	129	4.57 J
	DU-4	ISM	0-1	DU-4 (0-1)	08/04/2022	0.565	4.67	3.89	44.0	19.4	458	3,340	0.734	2.18 U	3.08	3.73	2.55	3.52	2.44 U	102	5.06	447	3.99	30.4	252	925	12.3 JN	40.1	94.7	354	**20.9**
			1-2	DU-4 (1-2)	08/04/2022	0.486 J	3.44	2.15 J	30.3	8.41	405	3,280	0.784	1.17 J	3.75	5.27	3.03	3.92	1.21 U	97.7	3.95	5.14	2.24	17.6	149	700	19.3 JN	50.3	101	374	**16.6** J
			2-3	DU-4 (2-3)	08/04/2022	0.469 J	1.87 J	0.887 U	18.1	5.97	458	4,160 J	0.694	1.96 U	4.02	4.98	3.34	3.98	0.831 U	120	5.94	689	3.27	8.66	105	808	27.8 JN	63.5	126	489	**14.7** J
	DU-5	ISM	0-1	DU-5 (0-1)A	07/22/2022	0.561	1.75 J	1.55 U	9.28	3.95	209	1,910	4.10	7.53	5.27	13.8	4.99	3.01	3.02	60.6	4.63	127	4.02	12.2	58.8	402	38.5 JN	54.5 JN	84.1	164	**11.8** J
			0-1 FR	DU-5 (0-1)B	07/22/2022	0.746	2.02 J	1.17 U	8.24	4.35	258	2,360	6.93	14.9	8.86	24.3	8.24	4.53	3.49	76.9	6.57	153	7.49	10.4	73.8	517	58.0 JN	80.3 JN	107	202	**16.1** J
			0-1 FR	DU-5 (0-1)C	07/22/2022	0.565	2.07 J	2.74	12.5	6.70	256	2,310	5.96	11.1	7.26	19.9	9.07	4.20	3.29	214	4.99	189	4.00	9.27	81.1	500	44.6 JN	72.2 JN	171	435	**17.1** J
			1-2	DU-5 (1-2)A	07/25/2022	0.508	0.652 U	1.94 J	7.31	1.99 J	207	2,060	5.26	10.2	7.54	17.6	6.59	4.78	2.16 J	76.0	5.78	154	3.89	2.89	48.4	377	72.7 JN	85.4 JN	101	202	**11.7** J
			1-2 FR	DU-5 (1-2)B	07/25/2022	0.422 J	0.726 U	2.23 U	7.99	3.89	264	2,630	7.10	10.8	9.02	16.6	6.21	4.50	4.38	67.1	6.59	187	3.33	5.41	55.2	515	82.9 JN	93.1 JN	99.7	214	**13.2** J
			1-2 FR	DU-5 (1-2)C	07/25/2022	0.427 U	1.26 J	1.97 J	8.63	3.01	255	2,460	5.28	8.81	7.08	16.5	11.0	5.14	2.84	255	6.43	240	2.82	7.02	55.4	465	50.3 JN	73.7 JN	197	525	**15.3** J
			2-3	DU-5 (2-3)A	07/26/2022	1.28	1.57 J	1.38 J	7.87	3.99	260	2,560	5.58	9.36	9.89	16.2	6.36	4.88	2.83	89.7	7.69	192	5.54	7.35	57.8	464	74.4 JN	104 JN	112	241	**15.4** J
			2-3 FR	DU-5 (2-3)B	07/26/2022	0.511	1.59 U	1.91 J	6.43	3.28	246	2,360	4.85	8.14	8.47	14.1	5.85	4.63	2.95	57.5	5.83	151	4.18	7.54	58.3	581	89.7 JN	92.4 JN	90.1	179	**12.3** J
			2-3 FR	DU-5 (2-3)C	07/26/2022	0.535	1.49 J	1.83 J	11.5	3.90	295	3,160	5.77	11.4	7.90	25.2	21.2	7.95	6.06	610	9.63	408	4.02	4.76	67.1	519	49.6 JN	89.0	392	1,130	**23.3** J
			0-1	DU-5 (0-1) M	--	0.624	1.95 J	1.82	10.0	5.00	241	2,193	5.66	11.2	7.13	19.3	7.43	3.91	3.27	117 J	5.40	156	5.17	10.6	71.2	473	47.0 JN	69.0 JN	121	267	**15.0** J
			1-2	DU-5 (1-2) M	--	0.452 J	0.879 J	2.05 J	7.98	2.96 J	242	2,383	5.88	9.94	7.88	16.9	7.93	4.81	3.13 J	133 J	6.27	194	3.35	5.11	53.0	452	68.6 JN	84.1 JN	133	314	**13.4** J
			2-3	DU-5 (2-3) M	--	0.775	1.55 J	1.71 J	8.60	3.72	267	2,693	5.40	9.63	8.75	18.5	11.1 J	5.82	3.95	252 J	7.72	250	4.58	6.55	61.1	521	71.2 JN	95.1 J	198 J	517 J	**17.0** J
	DU-6	ISM	0-1	DU-6 (0-1)	07/28/2022	0.376 U	0.895 U	1.60 U	8.53	3.65	2.12 J	2,130	7.64	13.7	7.52	22.1	6.65	4.02	3.92	56.9	5.77	130	3.54	3.87	59.1	413	52.4 JN	70.4 JN	96.0	166	**10.4** J
			1-2	DU-6 (1-2)	07/28/2022	0.708	3.76	6.07	19.1	9.26	271	2,430	9.46	17.5	15.3	33.1	13.6	13.1	6.83	92.1	9.48	178	69.0	146	272	535	142 JN	172 JN	181	239	**25.1** J
			2-3	DU-6 (2-3)	07/28/2022	0.296	1.21 J	1.53 U	7.57	3.28	224	2,290	4.88	9.40	5.86	15.8	5.84	3.25	2.23 J	52.0	5.29	126	3.60	8.87	52.2	438	48.2 JN	62.0 JN	83.1	146	**11.4** J
	DU-7	ISM	0-1	DU-7 (0-1)	07/29/2022	0.605	1.30 J	2.57	11.8	4.39	236	2,410	9.02	17.3	10.5	30.6	11.4	4.81	4.67	72.7	8.50	139	4.69	9.39	72.7	458	103 JN	125 JN	134	201	**17.4** J
			1-2	DU-7 (1-2)	07/29/2022	0.377 J	0.835 U	1.23 J	7.72	2.98	187	1,980	6.63	11.9	7.26	22.6	7.80	4.24	4.57	72.1	4.80	130	2.97	2.63	45.7	371	78.0 JN	85.2 JN	100	184	**12.4** J
			2-3	DU-7 (2-3)	07/29/2022	0.315 U	1.35 U	2.04 U	4.24	2.17 J	122	1,430	4.48	8.45	4.15	15.3	5.43	3.38	2.41 U	38.8	5.24	92.0	1.48	1.35 U	36.0	249	40.1 JN	45.1 JN	66.3	115	**8.17** J
	DU-8	ISM	0-1	DU-8 (0-1)	08/05/2022	1.03	2.98	2.34 J	16.6	8.25	371	3,990	8.93	15.8	10.5	38.2	13.3	7.21	4.80	88.6	10.2	277	7.68	19.3	111	6.87	44.5 JN	97.3	176	282	**23.6** J
			1-2	DU-8 (1-2)	08/05/2022	0.847	2.47 J	4.20	16.1	8.08	389	4,190 J	10.6	19.9	11.8	41.1	12.5	8.05	6.10	109	13.1	288	6.99	16.3	120	762	48.4 JN	111	194	328	**24.6** J
			2-3	DU-8 (2-3)	08/05/2022	1.15	1.79 J	2.12 J	12.3	5.33	406	4,530 J	10.1	19.7	11.9	41.2	12.8	6.52	5.66	103	12.6	310	5.88	14.4	105	7.68	43.5 JN	108	194	313	**23.4** J
	DU-9	ISM	0-1	DU-9 (0-1)	08/08/2022	0.685	2.33 J	1.58 U	13.8	5.91	344	3,170	7.00	12.0	8.32	23.8	7.20	3.50	3.50	87.7	8.23	177	7.96	19.1	104	642	35.3	71.4	120	247	**17.8** J
			1-2	DU-9 (1-2)	08/08/2022	0.532	1.46 U	2.21 U	8.01	2.51	233	2,550	5.32	10.7	6.81	20.3	7.44	4.87	2.75	71.5	7.04	193	3.76	3.17	71.9	470	32.8 JN	66.6	110	216	**12.8** J
			2-3	DU-9 (2-3)	08/08/2022	0.569	1.20 U	1.47 U	6.77	2.34 J	228	2,520	5.97	10.5	6.80	21.9	7.34	2.94	2.16 J	65.2	6.61	157	3.07	3.04	58.2	460	30.9 JN	62.2	104	178	**12.3** J
Central Parcel	DU-10	ISM	0-1	DU-10 (0-1)	08/12/2022	0.533	5.87	0.599 U	34.0	19.2	308	1,830	0.767	0.939 U	2.22 J	1.79 J	1.47 J	0.321 U	0.387 U	74.6	0.943 U	276	6.56	32.8	219	584	28.5 JN	29.1	55.7	264	**17.3** J
			1-2	DU-10 (1-2)	08/12/2022	0.135 U	0.551 U	0.822 U	9.79	3.71	217	1,700	0.170 U	0.976 U	1.50 J	0.407 U	0.403 U	0.472 U	0.501 U	42.7	0.749 U	160	2.56	8.13	68.6	394	18.9 JN	21.4	31.9	145	5.46 J
			2-3	DU-10 (2-3)	08/12/2022	0.243 U	0.826 U	1.03 U	6.37	3.01	143	1,120	0.270 U	1.22 U	2.01 J	0.468 U	0.424 U	0.523 U	0.564 U	43.9	1.42 U	180	4.20	7.50	46.3	253	28.6 JN	34.9	34.0	162	4.52 J
	DU-11	ISM	0-1	DU-11 (0-1)A	08/10/2022	0.154 U	2.95	0.824 U	15.7	7.83	164	1,310	2.06	3.69	3.15	8.08	4.43	2.64	1.19 U	48.0	2.73	79.3	2.03	16.2	117	340	18.3 JN	30.5	61.6	118	**10.8** J
			0-1 FR	DU-11 (0-1)B	08/10/2022	0.233 U	0.237 U	0.335 U	11.9	4.66	174	1,290	1.60	2.43 J	2.50	5.47	2.36 J	1.62 J	1.12 U	41.1	2.69	65.4	2.64	3.50	97.7	347	16.4 JN	27.8	51.2	103	**6.48** J
			0-1 FR	DU-11 (0-1)C	08/10/2022	0.210 U	2.70	0.800 U	19.0	8.96	301	2,150	2.03	3.04	2.42 J	5.64	2.32 J	0.839 U	1.08 U	48.1	1.16 U	85.8	1.90	6.89	150	534	16.5 JN	31.4	59.9	121	**11.7** J
			1-2	DU-11 (1-2)A	08/10/2022	0.147 U	0.509 U	0.571 U	7.54	0.487 U	140	1,600	1.96	3.02	2.45 J	6.30	0.672 U	0.979 U	1.28 U	36.1	1.53 U	79.1	1.68	2.38	55.7	399	12.0 JN	22.2	40.6	101	5.21 J
			1-2 FR	DU-11 (1-2)B	08/10/2022	0.189 U	0.508 U	0.651 U	5.30	1.64 J	111	987	1.62	2.63	2.01 J	5.89	2.12 J	1.37 J	0.412 U	33.0	2.07 J	74.0	1.20	0.508 U	38.4	219	9.99	21.6	36.7	91.6	4.66 J
			1-2 FR	DU-11 (1-2)C	08/10/2022	0.172 U	0.856 U	1.11 U	5.78	0.882 U	106	941	1.25	2.47 J	2.32 J	5.05	0.511 U	0.715 U	1.01 U	29.1	1.34 U	53.3	1.34	0.856 U	41.4	207	8.29	21.5	35.3	71.7	4.36 J
			2-3	DU-11 (2-3)A	08/10/2022	0.249 U	0.727 U	0.978 U	4.94	0.796 U	99.3	894	1.48	2.93	1.76 J	5.90	2.18 J	0.616 U	0.806 U	29.1	1.33 U	59.7	1.56	0.727 U	39.9	204	9.83	18.8	34.1	78.0	4.29 J
			2-3 FR	DU-11 (2-3)B	08/10/2022	0.238 U	0.602 U	0.919 U	5.67	0.717 U	162	1,830	2.17	3.80	2.39 J	7.60	2.89	0.768 U	0.910 U	43.2	1.79 U	108	1.19	0.602 U	55.7	453	12.4	23.6	47.4	124	5.89 J
			2-3 FR	DU-11 (2-3)C	08/10/2022	0.187 U	0.679 U	0.872 U	5.07	0.746 U	107	898	1.63	2.86	1.98 J	6.12	0.814 U	1.15 U	1.44 U	32.5	1.48 U	60.1	1.27	0.679 U	43.1	211	11.0	21.0	35.9	79.5	4.34 J
			0-1	DU-11 (0-1) M	--	0.233 U	1.96 J	0.824 U	15.5	7.15	213	1,583	1.90	3.05 J	2.69 J	6.40	3.04 J	1.70 J	1.19 U	45.7	2.19	76.8	2.19	8.86 J	122	407	17.1 JN	29.9	57.6	114	**9.67** J
			1-2	DU-11 (1-2) M	--	0.189 U	0.856 U	1.11 U	6.21	1.00 J	119	1,176	1.61	2.71 J	2.26 J	5.75	1.10 J	1.02 J	1.28 U	32.7	1.65 J	68.8	1.41	1.25 J	45.2	275	10.1 J	21.8	37.5	88.1	4.74 J
			2-3	DU-11 (2-3) M	--	0.249 U	0.727 U	0.978 U	5.23	0.796 U	123	1,207	1.76	3.20	2.04 J	6.54	1.96 J	1.15 U	1.44 U	34.9	1.79 U	75.9	1.34	0.73 U	46.2	289	11.1	21.1	39.1	93.8	4.84 J
	DU-12	ISM	0-1	DU-12 (0-1)	08/16/2022	0.410 U	10.6	1.02 U	60.7	31.4	218	884	0.310 U	0.214 U	4.57	3.08	2.63	3.06	0.817 U	52.1	0.851 U	50.0	11.6	62.0	396	487	61.8 JN	54.0	52.3	101	**25.4**
			1-2	DU-12 (1-2)	08/16/2022	0.471 U	0.945 U	1.04 U	12.7	6.79	74.5	426	0.330 U	1.46 U	1.35 U	0.877 U	0.858 U	1.11 U	1.14 U	17.6	0.758 U	28.0	4.55	4.46	99.3	157	6.56	9.69	15.6	38.5	4.21
			2-3	DU-12 (2-3)	08/16/2022	0.358 U	0.883 U	1.40 U	6.51	4.84	30.9	168	0.337 U	1.21 U	1.09 U	0.634 U	0.602 U	0.767 U	0.927 U	6.36	0.998 U	7.73	3.26	0.883 U	43.2	62.9	8.71	8.80	6.04	13.8	2.60
	DU-13	ISM	0-1	DU-13 (0-1)A	08/29/2022	3.88	117	42.2	795	434	1,500	1,840	2.40	4.35	12.2	10.9	12.0	15.1	5.22	501	6.93	342	68.6	702	4,920	2,850	151 JN	181 JN	239	839	**277** J
			0-1 FR	DU-13 (0-1)B	08/29/2022	2.77	66.7	23.7	470	265	1,020	1,940	1.73	2.83	11.1	7.31	7.57	10.5	2.13 J	3.20	5.19	284	42.8	411	3,060	1,920	165 JN	159 JN	184	568	**163** J
			0-1 FR	DU-13 (0-1)C	08/29/2022	3.15	79.3	31.7	566	310	1,120	1,620	1.99	3.63	11.3	8.77	9.64	12.7	4.37	360	5.59	287	52.5	503	3,550	2,120	125 JN	163 JN	211	623	**196** J
			1-2	DU-13 (1-2)A	08/30/2022	0.698	14.3	2.58	102	54.1	243	551	0.75	1.39 J	3.29	2.72	2.45 J	2.98	0.490 U	72.4	2.09 J	95.1	11.3	89.5	648	475	30.6 JN	44.9 JN	51.9	147	**36.2** J
			1-2 FR	DU-13 (1-2)B	08/30/2022	0.381 U	4.38	0.778 U	20.6	11.5	98.9	463	0.185 U	1.61 U	5.27	1.76 J	2.22 J	2.89	0.442 U	27.9	0.833 U	71.6	5.46	29.3	184	183	61.7 JN	77.2 JN	48.0	71.0	**11.6** J
			1-2 FR	DU-13 (1-2)C	08/30/2022	0.499	10.6	1.93 J	62.6	34.5	170	436	0.828	2.28 U	6.44	2.39 J	2.89	3.87	0.628 U	49.3	1.31 J	69.7	10.4	69.4	413	326	88.2 JN	97.0 JN	57.4	104	**26.4** J
			2-3	DU-13 (2-3)A	08/31/2022	0.208 U	10.9	4.23	78.9	39.3	171	467	0.106 U	1.42 U	2.09 J	0.47 U	0.437 U	2.50	0.659 U	54.1	0.616 U	74.9	6.38	67.3	519	328	20.8 JN	27.9	33.5	108	**26.6** J
			2-3 FR	DU-13 (2-3)B	08/31/2022	0.363 U	4.36	0.856 U	26.5	13.4	114	509	0.163 U	1.30 U	3.45	2.02 J	2.31 J	2.70	0.319 U	34.7	0.823 U	85.6	4.10	26.7	191	204	50.8 JN	55.3 JN	40.8	91.3	**12.0** J
			2-3 FR	DU-13 (2-3)C	08/31/2022	0.571	8.19	1.73 J	47.3	24.8	186	708	0.630	0.802 J	2.26 J	1.51 J	2.00 J	2.83	0.309 U	52.9	1.58 J	120	8.28	58.6	449	330	26.2 JN	36.9 JN	43.2	130	**20.2** J
			0-1	DU-13 (0-1) M	--	3.27	87.7	32.5	610.3	336.3	1,213	1,800	2.04	3.60	11.5	8.99	9.74	12.8	3.91 J	288 J	5.90	304	54.6	539	3,843	2,297	147 JN	168 J	211	677	**212** J
			1-2	DU-13 (1-2) M	--	0.526	9.76	1.76 J	61.7 J	33.4 J	171	483	0.588	1.76 J	5.00	2.29 J	2.52 J	3.25	0.628 U	49.9	1.41 J	78.8	9.05	62.7	415	328	60.2 JN	73.0 JN	52.4	107	**24.7** J
			2-3	DU-13 (2-3) M	--	0.381	7.82	2.27 J	50.9	25.8	157	561	0.300 J	1.17 J	2.60 J	1.33 J	1.58 J	2.68	0.659 U	47.2	1.01 J	93.5	6.25	50.9	386	287	32.6 JN	40.0 JN	39.2	110	**19.6** J
	DU-14	ISM	0-1	DU-14 (0-1)	08/17/2022	1.43	29.2	17.6	230	127	509	1,150	0.728	2.06 U	5.44	4.03	4.29	5.63	1.92 J	181	2.62	110	20.7	185	1,430	955	111 JN	102 JN	107	313	**78.7** J
			1-2	DU-14 (1-2)	08/17/2022	0.593	13.2	7.44	96.3	54.5	263	932	0.579	1.13 U	3.03	0.225 U	0.204 U	0.258 U	0.275 U	70.9	0.428 U	76.0	13.0	88.7	658	510	31.0 JN	37.1	35.1	129	**34.3** J
			2-3	DU-14 (2-3)	08/17/2022	0.172 U	6.12	0.537 U	36.7	22.0	100	298 J+	0.35	0.997 U	1.90 J	0.197 U	0.190 U	2.13 J	0.273 U	27.5	0.805 U	29.8	3.52	37.0	252	191	17.7 JN	26.3	24.7	56.5	**14.3** J
	DU-15	ISM	0-1	DU-15 (0-1)	08/19/2022	4.67	158	60.6	1,180	727	2,020 J	1,210	1.81	3.66	8.61	12.3	12.8	15.2	5.00	874	8.70	344	90.9	973	7,910	3,970	74.6 JN	128 JN	320	1,380	**396** J
			1-2	DU-15 (1-2)	08/19/2022	1.72	78.2	32.4	636	337	1,200	628	0.544	1.55 J	3.92	5.14	5.86	6.65	1.77 J	442	3.66	165	37.2	506	4,280	2,330	27.8 JN	55.9 JN	148	685	**200** J
			2-3	DU-15 (2-3)	08/19/2022	1.90	60.7	22.0	458	265	786	362	0.197 U	1.72 U	2.42 J	2.98	4.14	4.94	0.576 U	252	2.45 J	98.1	34.3	379	2,920	1,530	12.1 JN	33.2	92.5	392	**150** J
	DU-16	ISM	0-1	DU-16 (0-1)A	09/12/2022	3.21	64.3	25.4	358	192	1,420	7,200 J	1.32	2.60	9.07	9.34	10.4	14.5	2.99	383	17.0	575	40.5	367	2,360	2,500	52.0 JN	135 JN	297	946	**152** J
			0-1 FR	DU-16 (0-1)B	09/12/2022	3.62	101	29.8	635	302	1,440	4,810 J	1.09	2.09 J	9.00	8.27	9.25	12.9	2.92	440	10.0	391	48.4	574	3,720	2,680	50.4 JN	125	239	855	**228** J
			0-1 FR	DU-16 (0-1)C	09/12/2022	3.94	102	34.1	743	286	1,590	15,000 J	1.60	2.80	10.4	9.12	9.56	13.8	3.24	453	12.6	462	52.9	574	3,730	2,930	58.2 JN	141	263	943	**244** J
			0-1	DU-16 (0-1) M	--	3.59	89.1	29.8	579	260	1,483	9,003 J	1.34	2.50 J	9.49	8.91	9.74	13.7	3.05	425	13.2	476	47.3	505	3,270	2,703	53.5 JN	134 J	266	915	**208** J
			1-2	DU-16 (1-2)	11/07/2022	0.473	6.21	3.36	37.4	21.4	196	1,570	0.465 U	0.311 U	3.07	1.95	2.29	2.71	0.278 U	46	2.38	114	3.24	32.8	222	351	51.3	59.3	54.5	131	**17.5**
			2-3	DU-16 (2-3)	11/07/2022	0.380 U	2.96	1.93	16.6	8.81	83.5	991	0.267 U	0.228 U	0.926	0.255 U	0.243 U	0.265 U	0.283 U	22.3	1.4	50	0.38 U	15.5	99.8	141	5.52	12.1	15.9	65.7	**7.62**
	DU-17	ISM	0-1	DU-17 (0-1)	09/02/2022	0.808	14.9	5.38	106	54.3	294	939	0.156 U	2.05 U	9.58	2.19 J	3.39	6.17	0.610 U	75.9	2.08 J	81.0	10.2	96.9	670	553	87.2 JN	151 JN	100	150	**40.4** J
			1-2	DU-17 (1-2)	09/02/2022	0.171 U	0.400 U	0.453 U	3.38	1.77 J	92.1	1,010	0.110 U	0.833 U	3.32	0.365 U	0.324 U	1.40 J	0.476 U	14.4	0.591 U	83.5	0.171 U	0.400 U	28.0	180	29.5 JN	52.7 JN	30.1	57.3	3.43 J
			2-3	DU-17 (2-3)	09/02/2022	0.140 U	3.97	0.709 J	13.7	6.37	65.8	290 J+	0.164 U	0.488 U	1.96 J	0.271 U	0.238 U	1.56 J	0.370 U	13.8	0.636 U	19.2	0.140 U	15.1	105	120	8.24	22.9	18.4	32.6	**7.81** J

Please see notes at end of table.

Table 3a
Soil Results - Dioxins/Furans - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Dioxins/Furans by EPA Method 1613B Concentrations in pg/g																												
						2,3,7,8-TCDD	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	Total D/F TEQ (Mammal)
				Ecological ISM PRG		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.1
				Ecological ISM Hot Spot		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	61
Central Parcel	DU-18	ISM	0-1	DU-18 (0-1)A	09/29/2022	1.05	21.5	8.89	152	84.6	576	2,700	1.02	1.42 J	12.6	4.48	6.01	9.50	2.25 J	126	5.65	242	15.1	119	864	994	300 JN	273 JN	152	312	**61.2** J
			0-1 FR	DU-18 (0-1)B	09/29/2022	0.708	13.8	6.11	96.5	54.4	642	4,490 J	2.39	2.25 J	68.3	7.99	19.3	29.2	4.56	165	10.0	505	12.9	88.8	586	1,120	1,010 JN	1,300 JN	473	521	**66.8** J
			0-1 FR	DU-18 (0-1)C	09/29/2022	0.735	13.6	6.09	86.2	47.2	479	3,030	0.39 U	1.59 J	20.2	7.63	12.2	11.8	3.72	116	6.91	323	11.7	84.2	518	840	1,040	608	198	333	**45.0** J
			1-2	DU-18 (1-2)A	09/30/2022	0.399 J	6.49	3.34	41.0	22.7	250	1,530	0.854	0.918 J	9.37	3.18	4.37	5.33	1.31 J	59.6	2.38 J	178	7.07	39.0	254	445	164 JN	176 JN	99.5	175	**21.6** J
			1-2 FR	DU-18 (1-2)B	09/30/2022	0.453	3.03	1.69 J	18.0	8.82	170	1,270	2.04	1.20 J	21.6	2.19 J	5.17	8.27	1.54 J	44.8	3.12	179	2.99	19.7	116	290	329 JN	370 JN	130	158	**17.4** J
			1-2 FR	DU-18 (1-2)C	09/30/2022	0.250 U	3.03	0.337 U	15.8	10.0	177	1,280	0.264 U	1.59 U	5.61	1.80 J	2.61	3.68	0.509 U	41.5	2.39 J	167	1.54	18.2	112	310	102	98.6	56.7	139	**10.9** J
			2-3	DU-18 (2-3)A	10/03/2022	0.277 U	4.47	1.74 J	22.9	13.5	106	628	0.231 U	1.37 U	2.95	1.29 J	1.98 J	1.87 J	0.281 U	26.9	1.01 J	65.9	0.773	25.7	163	191	68.3 JN	57.5 JN	38.1	67.7	**11.4** J
			2-3 FR	DU-18 (2-3)B	10/03/2022	0.320	4.17	1.67 J	24.4	13.4	162	1,000	0.192 U	0.521 U	4.86	1.24 J	2.4 J	2.96	0.241 U	37.2	1.95 J	140	2.90	26.3	159	286	127 JN	103 JN	55.3	118	**12.9** J
			2-3 FR	DU-18 (2-3)C	10/03/2022	0.169 U	2.79	1.67 J	15.8	9.57	116	740	0.385	0.765 U	4.14	1.49 J	2.59	2.38 J	0.272 U	27.5	1.24 J	96.1	1.39	18.8	111	208	172 JN	110 JN	47.0	84.6	**9.23** J
			0-1	DU-18 (0-1) M	--	0.831	16.3	7.03	112	62.1	566	3,407 J	1.27	1.75 J	33.7	6.70	12.5	16.8	3.51 J	136	7.52	357	13.2	97.3	656	985	783 J	727 J	274	389	**57.7** J
			1-2	DU-18 (1-2) M	--	0.367 J	4.18	1.79 J	24.9	13.8	199	1,360	1.05	1.24 J	12.2	2.39 J	4.05	5.76	1.12 J	48.6	2.63 J	175	3.87	25.6	161	348	198 J	215 J	95.4	157	**16.6** J
			2-3	DU-18 (2-3) M	--	0.255	3.81	1.69 J	21.0	12.2	128	789	0.269	1.37 U	3.98	1.34 J	2.32 J	2.40 J	0.281 U	30.5	1.40 J	101	1.69	23.6	144	228	122 JN	90.2 JN	46.8	90.1	**11.2** J
	DU-19	ISM	0-1	DU-19 (0-1)	09/06/2022	1.15	20.5	10.4	169	76.1	659	3,680	5.57	5.76	201	26.4	47.3	77.9	14.6	145	9.88	254	27.5	166	891	1,160	2,280 JN	3,590 JN	1,190	376	**134**
			1-2	DU-19 (1-2)	09/06/2022	0.409 U	6.80	0.767 U	25.3	11.0	391	2,850	4.69	1.11 U	179	20.1	38.9	71.2	12.4	81.0	7.02	200	15.6	82.2	237	693	2,360 JN	3,500 JN	1,090	236	**84.8**
			2-3	DU-19 (2-3)	09/06/2022	0.742	5.52	3.18	13.6	5.27	103	616	3.36	3.00	95.1	15.2	19.2	34.6	7.12	33.0	3.82	44.3	12.5	60.8	133	191	1,460 JN	1,680 JN	512	85.2	**46.6**
	DU-20	ISM	0-1	DU-20 (0-1)	10/18/2022	0.841	8.89	7.08	53.9	28	543	3,150	1.25	2.01	19.7	5.83	7	12.8	3.95	78.3	3.3	125	12.7	58	329	949	266	344	217	198	**34.9**
			1-2	DU-20 (1-2)	10/18/2022	0.194 U	0.713 U	0.676 U	7.55	3.81	138	804	0.307 U	0.127 U	2.18	0.227 U	0.212 U	2.18	0.270 U	12.5	0.897 U	20.3	0.194 U	0.713 U	42.7	239	23.2	33.2	27.3	31.4	4.30	
			2-3	DU-20 (2-3)	10/18/2022	0.284 U	1	0.440 U	5.49	2.79	65.9	415	0.346 U	0.271 U	2.84	0.340 U	0.304 U	1.76	0.418 U	8.77	0.759 U	14.9	0.424	4.07	36	118	41.8	47	25.4	21.1	3.97	
	DU-21	ISM	0-1	DU-21 (0-1)	09/08/2022	1.32	16.9	10.7	103	57.5	806	5,130 J	3.580	3.69	54.0	13.0	16.8	29.8	7.03	184	9.82	317	17.9	118	68.5	1,480	1,070	977	432	450	**70.3** J
			1-2	DU-21 (1-2)	09/08/2022	0.540	4.43	3.07	20.8	11.1	231	1,360	1.340	1.65	20.2	5.54	6.85	11.6	2.25	48.8	2.85	75.1	5.78	34.8	157	418	327	360	160	114	**20.6**
			2-3	DU-21 (2-3)	09/08/2022	0.107 U	2.08 J	0.314 U	13.3	5.30	118	769	0.781	0.648 U	9.70	3.70	3.01	5.35	1.32 J	26.7	1.61 J	52.7	2.79	16.8	88.8	210	133	154	85.3	65.7	**10.1** J
	DU-22	ISM	0-1	DU-22 (0-1)A	10/13/2022	0.846	9.71	5.58	63.1	31.5	438	2,810	1.26	1.88 J	12.5	4.09	3.68	8.59	2.24	79.1	3.27	209	6.11	59.0	390	776	164 J	201	141	223	**32.5** J
			0-1 FR	DU-22 (0-1)B	10/13/2022	0.464 J	4.68	3.91	42.0	17.3	543	3,940	0.999	1.72 J	12.3	4.57	5.28	8.08	2.24 J	77.3	3.66	213	4.83	28.8	213	915	177	203	153	232	**24.8** J
			0-1 FR	DU-22 (0-1)C	10/13/2022	0.525	9.02	4.89	44.6	22.8	482	3,150	1.76	2.54	14.2	5.09	5.96	10.5	2.23 J	79.5	3.44	174	7.22	42.7	285	929	188	235	156	202	**30.3** J
			1-2	DU-22 (1-2)A	10/14/2022	0.234 U	1.41	0.342 U	6.02	3.06	57.7	382	0.451 U	1.05 U	3.06	0.187 U	0.165 U	1.84	0.191 U	23.2	0.740 U	45.2	0.817	4.79	39.5	102	60.3	53.4	37.3	69.6	4.56	
			1-2 FR	DU-22 (1-2)B	10/14/2022	0.196 U	2.25	2.21	27.4	5.92	300	2,130	0.492	2.29 U	4.73	2.72	2.36	3.24	0.212 U	36.2	1.92	97	0.96	8.8	105	507	43	70.3	78.3	115	**12.3**	
			1-2 FR	DU-22 (1-2)C	10/14/2022	0.201 U	1.55	1.54	11	3.68	186	1,270	0.461	1.97 U	3.29	1.94	1.65	2.79	0.196 U	22.1	0.810 U	54.4	0.432	5.57	54.6	313	46.8	54	48.8	64.5	**7.47**	
			2-3	DU-22 (2-3)A	10/14/2022	0.217 U	1.31 U	0.367 U	9.52	3.99	77.4	475	0.494 U	0.339 U	2.83	0.571 U	0.496 U	1.75	0.705 U	14.4	1.51 U	37.5	0.217 U	1.95	55.8	132	38.5	47.3	25.5	37	4.35	
			2-3 FR	DU-22 (2-3)B	10/14/2022	0.247 U	1.07 U	0.527 U	8.95	3.56	228	1,900	0.422 U	0.389 U	6.26	1.53	2.46	4.04	0.886 U	31.7	2.42	164	0.247 U	1.48	48.1	403	73.1	98.1	70.1	124	**7.93**	
			2-3 FR	DU-22 (2-3)C	10/14/2022	0.266 U	1.19 U	0.411 U	7.44	3.75	102	727	0.445 U	0.273 U	3.47	0.489 U	1.72	2.22	0.582 U	15.3	1.02 U	44.9	0.266 U	1.19 U	44.5	177	61.8	68.6	36.1	49.1	4.79	
			0-1	DU-22 (0-1) M	--	0.612 J	7.80	4.79	49.9	23.9	488	3,300	1.34	2.05 J	13.0	4.58	4.97	9.06	2.24 J	78.6	3.46	199	6.05	43.5	296	873	176 J	213	150	219	**29.2** J	
			1-2	DU-22 (1-2) M	--	0.234 U	1.74	1.36 J	14.8 J	4.22	181 J	1,261 J	0.468	2.29 U	3.69	1.62 J	1.39 J	2.62	0.212 U	27.2	1.16	65.5	0.736	6.39	66.4	307 J	50.0	59.2	54.8	83.0	**8.11**	
			2-3	DU-22 (2-3) M	--	0.266 U	1.31 U	0.527 U	8.64	3.77	136	1,034 J	0.494 U	0.389 U	4.19	0.863 J	1.56 J	2.67	0.886 U	20.5	1.65	82.1 J	0.266 U	1.54	49.5	237	57.8	71.3	43.9	70.0 J	5.69	
	DU-23	ISM	0-1	DU-23 (0-1)	10/12/2022	1.05	8.20	7.23	44.2	23.5	570	3,570	2.15	3.52	34.6	9.20	14.1	20.2	3.80	96.8	6.09	230	15.6	61.1	299	1,040	558 JN	627 JN	323	255	**40.0**	
			1-2	DU-23 (1-2)	10/12/2022	0.219 U	1.75 J	1.84 J	9.33	4.96	123	799	0.932	0.576 U	12.5	2.67	4.05	6.65	1.12 J	24.2	1.33 J	60.8	2.92	9.43	66.0	223	139 JN	194 JN	103	65.6	**10.5** J	
			2-3	DU-23 (2-3)	10/12/2022	0.285 U	0.163 U	1.95 J	7.95	3.84	155	941	0.619	0.196 U	5.27	1.39 J	2.04 J	3.15	0.307 U	14.8	1.04 J	32.1	1.64	4.89	59.2	301	50.7 JN	72.8 JN	46.9	41.2	5.92 J	
	DU-24	ISM	0-1	DU-24 (0-1)	09/21/2022	0.434 J	6.29 J	4.27	55.6 J	29.7	376	2,020	0.826	1.48 J	4.50	3.19	2.43 J	4.29	1.92 J	54.8	2.14 J	77.9	5.22	37.4	320	656	30.7 JN	52.5	89.7	130	**23.3** J	
			1-2	DU-24 (1-2)	09/21/2022	0.132 U	1.98 J	0.975 J	11.6	7.10	135	760	0.194 U	0.687 J	1.84 J	0.327 U	0.304 U	0.375 U	0.38 U	18.4	0.424 U	38.0	0.952	11.7	87.2	243	9.98 JN	21.6	26.1	47.5	**6.44** J	
			2-3	DU-24 (2-3)	09/21/2022	0.161 U	4.10	0.647 U	23.9	12.4	67.4	173 J+	0.116 U	0.337 U	0.321 U	0.249 U	0.242 U	0.297 U	0.291 U	18.8	0.473 U	11.8	0.161 U	22.7	175	127	1.65	2.85	8.18	31.1	**8.88** J	
	DU-25	ISM	0-1	DU-25 (0-1)	09/23/2022	0.902	7.77	11.6	64.0	21.8	1300	8,430 J	3.16	4.23	20.5	12.1	11.2	15.5	8.05	156	7.87	284	26.0	52.7	349	2,230	198	282	355	438	**46.9** J	
			1-2	DU-25 (1-2)	09/23/2022	0.104 U	0.312 U	0.636 U	2.98	1.61 J	72.2	498	0.125 U	1.22 U	2.83	0.219 U	0.205 U	0.247 U	0.258 U	9.88	0.418 U	26.2	0.737	0.312 U	18.5	124	23.5	37.1	26.5	29.2	2.60 J	
			2-3	DU-25 (2-3)	09/23/2022	0.141 U	0.322 U	0.567 U	2.57	0.464 U	69.9	483	0.108 U	0.505 U	1.33 J	0.211 U	0.196 U	0.233 U	0.242 U	8.83	0.412 U	20.5	0.141 U	0.322 U	15.0	120	7.21	15.5	18.7	25.2	1.94 J	
	DU-26	ISM	0-1	DU-26 (0-1)A	11/09/2022	1.68	18.2	19.9	147	57.2	2,040 J	14,300 J	5.95	10.9	43.8	23.4	23.2	37	10.5	251	15.5	470	39.3	118	742	3,530	558	698	590	653	**93.3** J	
			0-1 FR	DU-26 (0-1)B	11/09/2022	1.79	16.7	17.8	89.9	44	1,200	7,390 J	6.73	12.7	43.4	33	31.6	45.4	13.1	232	19.9	321	42.9	149	596	2,170	593	710	512	511	**76.9** J	
			0-1 FR	DU-26 (0-1)C	11/09/2022	1.87	16.8	17.6	102	45.8	1,460	9,510 J	6.26	10.9	43.9	28.6	28.8	41.4	12.3	243	18.5	363	38.2	141	585	2,520	649	736	536	579	**80.6** J	
			1-2	DU-26 (1-2)A	11/10/2022	0.875	9.88	11.9	53.2	25.8	830	5,470 J	3.25	5.24	20.7	11.2	13.1	18.6	4.71	128	10.4	359	15.6	71.5	323	1,410	253	334	266	373	**42.7** J	
			1-2 FR	DU-26 (1-2)B	11/10/2022	0.742	5.38	6.98	30.7	13.5	451	2,970	2.83	5.22	15.3	16	13	17.2	6.14	108	10.3	162	16.3	56.6	202	806	160	224	208	245	**28.1**	
			1-2 FR	DU-26 (1-2)C	11/10/2022	0.764	5.06	6.12	30.2	15.3	446	3,160	1.89	3.31	12.5	8.86	8.85	13	3.48	85.1	6.42	207	12	45	196	824	172	205	160	228	**24.8**	
			2-3	DU-26 (2-3)A	11/11/2022	0.387	3.2	3.66	18.8	8.94	281	2,130	0.85	1.55 J	6.23	4.13	3.74	6.53	1.47 J	46.6	3.41	112	6.76	24.8	116	497	54.1	85.4	84.3	127	**14.3** J	
			2-3 FR	DU-26 (2-3)B	11/11/2022	0.402 J	2.87	4.42	30.9	10.1	646	4,850 J	0.998	3.86	10.6	14.6	5.93	8.12	6.24	89.8	7.63	116	3.12	19.6	132	1,050	74.9	122	204	2,160	**23.6** J	
			2-3 FR	DU-26 (2-3)C	11/11/2022	0.433 J	2.84	2.87	14.3	6.21	174	1,140	1.18	1.49 J	7.41	3.81	4.03	5.78	1.5 J	31	2.46	62.7	4.11	18.8	85.4	305	97	116	77.1	80.2	**11.9** J	
			0-1	DU-26 (0-1) M	--	1.78	17.2	18.4	113	49.0	1,567 J	10,400 J	6.31	11.5	43.7	28.3	27.9	41.3	12.0	242	18.0	385	40.1	136	641	2,740	600	715	546	581	**83.6** J	
			1-2	DU-26 (1-2) M	--	0.794	6.77	8.33	38.0	18.2	576	3,867 J	2.66	4.59	16.2	12.0	11.7	16.3	4.78	107	9.04	243	14.6	57.7	240	1,013	195	254	211	282	**31.9** J	
			2-3	DU-26 (2-3) M	--	0.407 J	2.97	3.65	21.3	8.42	367 J	2,707 J	1.01	2.30 J	8.08	7.51 J	4.57	6.81	3.07 J	55.8	4.50	96.9	4.66	21.1	111	617 J	75.3	108	122	789 J	**16.6** J	

Please see notes at end of table.

Table 3a
Soil Results - Dioxins/Furans - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Dioxins/Furans by EPA Method 1613B Concentrations in pg/g 2,3,7,8-TCDD	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	Total D/F TEQ (Mammal)
					Ecological ISM PRG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.1
					Ecological ISM Hot Spot	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	61
Central Parcel Concrete Slab	DU-42 (Within DU-16)	Composite	0-1	DU-42 (0-1)	11/30/2022	1.1	28.3	9.54	158	91.5	302	368	0.215 U	0.723 U	1.31 J	2.36 J	2.56	3.21	0.417 U	104	1.20 U	49.4	13.2	159	1,050	598	10.6	25.4	49.1	162	**60.7** J
			1-2	DU-42 (1-2)	11/30/2022	0.49 J	10.7	3.13	65.1	30.6	110	154 J+	0.148 U	0.374 U	0.357 U	0.243 U	0.217 U	0.259 U	0.309 U	36.4	0.856 U	20.5	2.62	58.1	364	216	3.05	7.21	13.5	57.3	**22.7** J
			2-3	DU-42 (2-3)	11/30/2022	0.267 U	3.93	0.51 U	22.3	11.7	47.9	81 J+	0.227 U	0.23 U	0.219 U	0.327 U	0.295 U	0.354 U	0.423 U	15.4	0.893 U	8.28	0.267 U	21.8	149	95.9	1.06	2.25	5.35	24.3	**8.27** J
East Parcel	DU-27	ISM	0-1	DU-27 (0-1)	10/05/2022	1.11	17.8	25.7	161	63.7	3,150 E	21,000 E	2.37	7.99	22.1	33.8	19.3	27.6	14.5	422	28.4	998	10.8	74.3	744	5,340	87.4	310	605	1,280	**103**
			1-2	DU-27 (1-2)	10/05/2022	0.833	7.86	14.6	95.0	33.8	2,250 J	18,100 J	1.91	5.41	20.1	29.3	17.7	22.6	10.8	389	30.6	1,100	7.66	45.0	417	3,850	139 JN	298 JN	494	1,190	**69.9** J
			2-3	DU-27 (2-3)	10/05/2022	0.414 J	2.70	4.19	28.9	9.80	652	5,280 J	1.64	2.70	13.1	11.9	6.05	10.2	4.43	90.2	7.35	221	3.18	17.4	141	1,130	94.6 JN	174 JN	181	287	**24.0** J
	DU-28	ISM	0-1	DU-28 (0-1)	09/14/2022	0.217 U	1.94 J	3.45	20.7	7.68	717	6,260 J	1.01	1.16 J	4.30	7.82	2.97	4.06	2.31 J	140	8.12	622	2.86	6.89	106	1,240	19.5	41.8	143	553	**19.1** J
			1-2	DU-28 (1-2)	09/14/2022	0.541	4.77	6.61	46.8	18.0	1,060	8,530	2.02	2.37	7.07	10.5	5.65	7.56	4.71	161	9.93	537	7.05	29.1	218	1,790	32.3	73.2	209	540	**32.7**
			2-3	DU-28 (2-3)	09/14/2022	0.513	2.64	4.37	14.8	6.06	468	3,910	1.14	1.08	3.41	6.70	1.97	2.89	2.16	72.9	5.63	283	11.7	34.1	127	871	12.9	27.9	99.2	271	**14.9**
	DU-29	ISM	0-1	DU-29 (0-1)	09/15/2022	0.731	8.83	10.7	115	40.9	1,110	7,610 J	1.62	3.27	8.89	12.0	7.25	11.3	5.91	343	5.42	221	17.0	72.3	577	1,960	56.7 JN	125 JN	383	672	**49.7** J
			1-2	DU-29 (1-2)	09/15/2022	0.176 U	1.63 J	4.00	24.7	6.77	473	3,380	0.697	1.58 U	4.59	4.77	2.43 J	4.21	2.01 J	139	2.72	98.7	2.17	4.00	106	820	28.9 JN	65.5	149	282	**15.3** J
			2-3	DU-29 (2-3)	09/15/2022	0.151 U	0.445 U	4.19	24.0	6.82	509	3,860	0.658	0.80 U	5.84	6.69	3.22	5.12	2.77	152	4.16	139	2.84	3.92	111	863	41.3 JN	84.0 JN	177	321	**15.3** J
	DU-30	ISM	0-1	DU-30 (0-1)	09/16/2022	1.210	8.87	11.5	78.5	27.1	1,460	10,100 J	1.97	3.63	14.3	11.1	9.87	13.9	7.99	201	9.86	238	12.0	43.4	418	2,960	139 JN	237 JN	366	502	**50.5** J
			1-2	DU-30 (1-2)	09/16/2022	0.463 U	3.22	5.00	40.4	10.4	676	4950 J	0.836	1.61 U	7.19	6.54	5.14	6.83	0.870 U	89.8	4.13	108	4.71	13.7	175	1200	72.2 JN	121 JN	176	210	**22.4** J
			2-3	DU-30 (2-3)	09/16/2022	0.135 U	2.46 J	3.67	23.6	8.49	448	3030	0.900	1.09 J	3.68	3.78	2.95	4.83	0.444 U	42.0	2.55	56.5	3.29	12.9	127	795	56.1 JN	95.7 JN	112	111	**14.4** J
	DU-31	ISM	0-1	DU-31 (0-1)	11/03/2022	0.638	9.32	12.5	104	34.2	1,840	12,000 J	2.5	4.88	12	14.6	12.1	16.2	9.35	192	11.8	281	7.06	43.5	404	2,920	46.8	147	382	540	**58.4** J
			1-2	DU-31 (1-2)	11/03/2022	0.318 U	3.03	3.52	27.1	8.14	624	4,430 J	1.04	2.21	4.31	5.27	4.77	6.36	3.09	84.3	5.55	182	3.35	10.6	125	994	25.1	57.5	134	243	**19.0** J
			2-3	DU-31 (2-3)	11/03/2022	0.288 U	1.67	2.36	16.3	4.87	357	2,580	0.642	0.985	2.3	3.19	2.73	3.37	2.34	42.7	2.67	105	3.4	6.7	76.1	570	16.2	28.5	74.2	122	**10.9**
	DU-32	ISM	0-1	DU-32 (0-1)	09/22/2022	0.16 U	5.43	6.79	55.1	15.6	1,130	8,240 J	2.92	3.28	8.65	9.74	6.97	10.2	7.18	123	8.53	204	4.79	25.2	240	1,800	32.9 JN	79.0	262	349	**34.8** J
			1-2	DU-32 (1-2)	09/22/2022	0.136 U	0.364 U	0.546 U	11.1	3.21	296	2,240	2.88	1.53 J	3.17	3.11	2.00 J	0.397 U	0.391 U	34.0	0.816 U	61.1	1.72	1.71	61.6	474	20.8	28.6	61.3	91.7	**7.54** J
			2-3	DU-32 (2-3)	09/22/2022	0.122 U	0.328 U	0.504 U	13.7	4.28	282	1,980	1.70	1.02 J	2.43 J	2.71	1.72 J	2.33 J	1.78 J	30.8	1.71 J	49.3	1.32	0.328 U	59.6	447	13.3	19.9	62.5	83.1	**7.59** J
	DU-33	ISM	0-1	DU-33 (0-1)	09/20/2022	0.670	5.6	8.21	54.0	20.6	876	6,150	7.25	4.50	18.0	11.4	14.1	11.9	6.38	101	6.90	149	18.8	48.3	296	1,490	328 JN	347 JN	259	266	**36.9**
			1-2	DU-33 (1-2)	09/20/2022	0.254	2.64	4.09	22.5	8.87	493	3,340	3.92	2.49 J	5.79	5.75	3.98	4.11	2.73	46.6	2.57	58.1	8.22	18.6	122	813	100 JN	87.2 JN	121	122	**16.7** J
			2-3	DU-33 (2-3)	09/20/2022	0.379	2.19 J	1.40 J	15.3	4.01	321	1,970	3.86	2.86	4.85	4.28	3.26	3.86	2.67	34.9	1.32 J	38.0	7.36	12.4	88.8	553	73.3 JN	70.6 JN	94.1	91.1	**12.1** J
	DU-34	ISM	0-1	DU-34 (0-1)	09/27/2022	0.637	9.19	14.6	105	31.2	1,910	12,200 J	2.70	6.22	14.3	17.6	12.6	16.3	10.8	195	10.7	194	21.0	55.0	467	3,010	75.1 JN	175 JN	439	515	**60.3** J
			1-2	DU-34 (1-2)	09/27/2022	0.459 J	4.31	6.86	48.9	16.9	873	5,940 J	2.06	2.44 J	6.56	7.33	5.12	7.38	4.20	95.0	5.02	120	9.02	22.3	201	1,370	62.0 JN	96.8 JN	211	248	**28.2** J
			2-3	DU-34 (2-3)	09/27/2022	0.16 U	1.10 J	2.43 J	18.5	5.31	342	2,160	0.882	1.21 J	2.49 J	3.39	2.61	3.48	201	36.0	0.388 U	43.7	5.2	10.5	78.6	538	29.0 JN	39.8 JN	78.5	91.4	**30.2** J
	DU-35	ISM	0-1	DU-35 (0-1)	10/07/2022	0.468	4.95	8.91	67.0	18.7	1,340	10,400 J	5.27	4.65	9.97	10.3	8.81	11.3	7.82	143	8.93	230	10.1	30.5	258	2,520	56.4	104	287	419	**40.5** J
			1-2	DU-35 (1-2)	10/07/2022	0.211 U	1.71 J	3.15	21.8	6.44	423	2,990	3.27	2.03 J	3.38	3.73	2.64	3.23	2.05 J	41.5	2.41 J	74.4	5.86	11.1	93.5	710	31.0 JN	37.8 JN	85.7	122	**13.1** J
			2-3	DU-35 (2-3)	10/07/2022	0.197 U	1.25 J	2.01 J	16.0	4.76	347	2,640	2.09	1.23 J	2.25 J	3.03	1.83 J	2.66	1.86 J	37.5	2.12 J	60.5	3.62	3.56	75.0	590	17.8 JN	25.7 JN	77.5	105	**10.2** J
	DU-36	ISM	0-1	DU-36 (0-1)	11/01/2022	0.738	7.39	8.54	59.9	24.2	1,210	8,990	7.12	5.53	11.3	10.1	13.1	11.1	5.74	146	11.9	323	16	47.3	276	1,990	117	166	269	420	**42.1**
			1-2	DU-36 (1-2)	11/01/2022	0.695	6.02	7.34	48.5	18.2	1,160	8,400	6.6	4.81	9.47	9.95	13.1	9.59	5.5	112	8.75	259	14	39.9	255	2,090	322	312	224	354	**37.0**
			2-3	DU-36 (2-3)	11/01/2022	1.15	5.8	6.67	33.5	13	661	4,640	11.2	6.08	9.55	7.25	7.18	8.45	3.56	80.3	5.81	144	24.3	48	169	1,090	126	118	154	222	**28.0**
	DU-38	ISM	0-1	DU-38 (0-1)A	11/14/2022	0.243 U	5.05	5.91	46.9	16.1	836	5,470 J	2.74	3.31	6.19	7.78	5.56	7.17	4.07	81.6	4.52	115	3.5	22.1	193	1,350	45.5	74.3	174	241	**27.6** J
			0-1 FR	DU-38 (0-1)B	11/14/2022	0.451 J	4.31	6.37	46.4	15.2	876	5,530 J	3.64	4.29	6.72	7.77	5.27	7.21	4.71	88.5	4.92	113	6.48	26.9	204	1,420	44.5	76.1	179	245	**27.9** J
			0-1 FR	DU-38 (0-1)C	11/14/2022	0.664	5.52	7.25	45.5	17.1	881	5,830 J	3.31	3.56	5.63	7.57	5.86	7.98	4.44	87.1	5.53	149	9.91	38.2	223	1,430	46.3	72.9	176	250	**29.4** J
			1-2	DU-38 (1-2)A	11/16/2022	0.259 U	2.87	3.78	24.7	7.88	488	3,210	2.41	2.02 J	3.56	4.45	3.28	3.97	2.78	51.1	3.45	71.1	1.84	16.5	116	797	44	49.3	99.5	140	**15.9** J
			1-2 FR	DU-38 (1-2)B	11/16/2022	0.300 U	1.65 J	2.47 J	13.3	4.59	252	1,700	7.39	2.63	3.38	2.91	1.99 J	2.66	1.35 J	26.9	1.87 J	41.5	2.38	10.3	66.9	411	59.9	37.6	53.2	72.6	**9.89** J
			1-2 FR	DU-38 (1-2)C	11/16/2022	0.421	3.52	4.66	27.7	8.85	557	3,650	3.08	2.48 J	4.85	6.29	3.85	4.82	3.21	58.8	3.31	88.4	6.31	16.6	128	906	39.9	55.3	118	162	**19.0** J
			2-3	DU-38 (2-3)A	11/17/2022	0.224 U	1.48 J	2.2 J	12.8	4.76	270	1,870	2.42	1.69 J	2.49	2.67	2.04 J	2.36 J	1.23 J	27.9	1.91 J	49.6	1.17	3.43	60.5	444	23.1	27.4	56.1	81.4	**9.01** J
			2-3 FR	DU-38 (2-3)B	11/17/2022	0.306 U	1.77 J	1.76 J	9.7	3.09	218	1,450	4.3	1.89 J	2.6	2.38 J	1.19 J	2.24 J	0.656 U	22.3	1.34 J	34.1	2.27	7.54	54.7	359	33.2	23.6	41.5	60.9	**8.12** J
			2-3 FR	DU-38 (2-3)C	11/17/2022	0.286 J	1.97 J	2.76	14.9	6.76	312	1,970	2.1	1.36 J	2.18 J	2.78	1.75 J	2.62	1.44 J	28.8	1.46 J	51.9	3.31	15.6	90.5	535	25.3	27	52.7	80.2	**10.5** J
			0-1	DU-38 (0-1) M	--	0.453 J	4.96	6.51	46.3	16.1	864	5,610 J	3.23	3.72	6.18	7.71	5.56	7.45	4.41	85.7	4.99	126	6.63	29.1	207	1,400	45.4	74.4	176	245	**28.3** J
			1-2	DU-38 (1-2) M	--	0.327	2.68 J	3.64 J	21.9	7.11	432	2,853	4.29 J	2.38 J	3.93	4.55	3.04 J	3.82	2.45 J	45.6	2.88 J	67.0	3.51 J	14.5	104	705	47.9	47.4	90.2	125	**14.9** J
			2-3	DU-38 (2-3) M	--	0.272 J	1.74 J	2.24 J	12.5	4.87	267	1,763	2.94	1.65 J	2.42 J	2.61 J	1.66 J	2.41 J	1.11 J	26.3	1.57 J	45.2	2.25	8.86 J	68.6	446	27.2	26.0	50.1	74.2	**9.21** J
East Parcel Concrete Slabs	DU-37	Composite	0-1	DU-37 (0-1)	11/28/2022	0.352 U	0.384 U	0.339 U	0.319 U	0.314 U	13.2	148 J+	0.222 U	0.171 U	0.144 U	0.138 U	0.124 U	0.139 U	0.155 U	1.83 J	0.429 U	4.64 J	0.352 U	0.384 U	5.66	24.8	0.393	1.84	2.64	5.34	0.678 J
			1-2	DU-37 (1-2)	11/28/2022	0.147 U	0.394 U	0.181 U	0.175 U	0.172 U	15.9	263 J+	0.149 U	0.143 U	0.122 U	0.180 U	0.157 U	0.186 U	0.208 U	2.75	0.673 U	7.75	0.147 U	0.394 U	5.57	28.8	0.149 U	1.16	2.23	7.31	0.632 J
			2-3	DU-37 (2-3)	11/28/2022	0.370 U	0.338 U	0.338 U	0.299 U	0.294 U	4.81	93.7 J+	0.161 U	0.274 U	0.237 U	0.191 U	0.160 U	0.187 U	0.242 U	0.488 U	0.511 U	0.949 U	0.370 U	0.338 U	0.338 U	9.08	0.161 U	0.274 U	0.242 U	0.511 U	0.569 J
	DU-39	Composite	0-1	DU-39 (0-1)	11/29/2022	0.331 U	0.744 U	0.479 U	6.77	3.11	124	778	0.231 U	0.184 U	0.942 J	0.538 U	0.471 U	1.66 J	0.627 U	9.55	1.38 J	10.9	0.443	0.744 U	30.1	206	0.231 U	6.6	17.1	24.2	3.68 J
			1-2	DU-39 (1-2)	11/29/2022	0.318 U	0.357 U	0.559 U	2.32 J	0.496 U	51.3	353	0.116 U	0.130 U	0.121 U	0.252 U	0.229 U	0.251 U	0.310 U	5.23	0.881 U	8.9	0.318 U	0.357 U	9.21	85.3	0.116 U	2.77	7.67	14.8	1.38 J
			2-3	DU-39 (2-3)	11/29/2022	0.278 U	0.376 U	0.461 U	2.36 J	0.441 U	51	326	0.222 U	0.178 U	0.166 U	0.211 U	0.186 U	0.205 U	0.231 U	6.05	0.646 U	12.3	0.278 U	0.376 U	9.94	84	0.222 U	2.72	8.52	17.9	1.36 J
	DU-40	Composite	0-1	DU-40 (0-1)	11/18/2022	0.271 U	0.351 U	0.343 U	0.322 U	0.317 U	19.1	118 J+	0.197 U	0.218 U	0.168 U	0.391 U	0.359 U	0.397 U	0.455 U	2.38 J	0.759 U	6.12	0.271 U	0.315 U	5.88	32.9	0.197 U	0.218 U	0.455 U	4.67	0.734 J
			1-2	DU-40 (1-2)	11/18/2022	0.243 U	0.225 U	0.291 U	0.265 U	0.261 U	13.5	83.9 J+	0.196 U	0.194 U	0.174 U	0.194 U	0.171 U	0.202 U	0.231 U	0.354 U	0.374 U	0.933 U	0.243 U	0.225 U	3.83	23.4	0.196 U	0.194 U	0.231 U	1.42	0.518 J
			2-3	DU-40 (2-3)	11/18/2022	0.280 U	0.353 U	0.325 U	0.321 U	0.316 U	8.4	58.3 J+	0.179 U	0.232 U	0.215 U	0.159 U	0.143 U	0.170 U	0.193 U	0.763 U	0.794 U	1.17 U	0.280 U	0.353 U	3.25 U	15.1	0.179 U	0.232 U	0.193 U	0.794 U	0.552 J
	DU-43 (Within DU-31)	Composite	0-1	DU-43 (0-1)	11/21/2022	0.269 U	0.420 U	0.481 U	5.73	1.84 J	115	826	0.240 U	0.176 U	0.83 J	0.567 U	0.495 U	0.550 U	0.666 U	9.36	0.98 U	6.34	0.269 U	0.42 U	25.7	191	0.240 U	6.02	15.3	21.6	3.00 J
			1-2	DU-43 (1-2)	11/21/2022	0.225 U	0.366 U	0.418 U	2.28 J	0.389 U	46.8	314 J+	0.230 U	0.163 U	0.139 U	0.298 U	0.282 U	0.299 U	0.344 U	3.1	0.548 U	2.59 J	0.225 U	0.366 U	9.19	78.2	0.230 U	2.33	5.86	7.51	1.26 J
			2-3	DU-43 (2-3)	11/21/2022	0.246 U	0.322 U	0.508 U	0.473 U	0.466 U	18.1	130 J+	0.241 U	0.176 U	0.149 U	0.168 U	0.150 U	0.175 U	0.198 U	1.14 J	0.639 U	1.00 U	0.246 U	0.322 U	0.508 U	30.8	0.241 U	0.176 U	0.198 U	2.66	0.663 J
	DU-44 (Within DU-36)	Composite	0-1	DU-44 (0-1)	12/01/2022	0.266 U	0.703 U	0.581 U	1.29 J	1.03 J	23	226 J+	0.234 U	0.286 U	0.255 U	1.20 U	1.12 U	1.21 U	1.47 U	2.84	0.814 U	6.71	1.47	0.703 U	8.10	40.1	0.234 U	0.286 U	1.99	6.52	1.38 J
			1-2	DU-44 (1-2)	12/01/2022	0.420 U	0.548 U	0.666 U	0.602 U	0.593 U	6.33	46 J+	0.245 U	0.277 U	0.249 U	0.587 U	0.538 U	0.62 U	0.693 U	0.713 U	0.737 U	1.02 U	0.525	0.548 U	0.666 U	11.5	0.245 U	0.277 U	0.693 U	0.737 U	0.837 J
			2-3	DU-44 (2-3)	12/01/2022	0.396 U	0.485 U	0.495 U	0.428 U	0.421 U	6.19	45.1 J+	0.281 U	0.226 U	0.217 U	0.386 U	0.357 U	0.433 U	0.495 U	0.769 U	0.883 U	1.47 U	0.396 U	0.485 U	0.495 U	10.7	0.281 U	0.226 U	0.495 U	0.883 U	0.725 J

Please see notes at end of table.

Table 3a
Soil Results - Dioxins/Furans - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Dioxins/Furans by EPA Method 1613B Concentrations in pg/g																										
						2,3,7,8-TCDD	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	Total D/F TEQ (Mammal)
Ecological ISM PRG						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.1
Ecological ISM Hot Spot						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	61
East Parcel Soil Berms	DU-41	ISM	0-1	DU-41 (0-1)A	10/24/2022	2.75	44.9	81.2	421	175	8,440 J	51100 J	4.13	16.8	43.8	59.1	40.9	59.6	23.8	642	39.1	858	23.1	169	2,080	15,200	190	732	1,250	1,830	**255** J
			0-1 FR	DU-41 (0-1)B	10/24/2022	2.36	33.4	56.8	315	123	6,450 J	40400 J	4.47	14.2	40.3	46.9	28.5	51.4	20.6	546	35.3	849	22.7	138	1,510	11,800	208	643	1,080	1,530	**196** J
			0-1 FR	DU-41 (0-1)C	10/24/2022	2.47	35.6	63.1	342	140	7,200	43900	3.79	14.9	35.3	50.2	33.4	54.6	21.3	573	35.3	828	22.8	146	1,690	13,200	195	618	1,190	1,640	**211**
			1-2	DU-41 (1-2)A	10/26/2022	2.09	39.2	71.2	390	161	7,780 J	43,600 J	3.44	14.6	50.4	53.7	40.1	58.2	20.4	627	39.1	946	21.1	162	1,790	13,100	417	942	1,390	1,730	**234** J
			1-2 FR	DU-41 (1-2)B	10/26/2022	1.73	33.2	59	316	125	6,570 J	37,900 J	3.55	13.4	44.7	43.6	32.7	49.9	19	569	33.6	849	20	127	1,570	11,600	374	860	1,210	1,580	**197** J
			1-2 FR	DU-41 (1-2)C	10/26/2022	2.66	42.5	72.1	413	166	7,870 J	43,500 J	3.94	15.9	49	53.5	36.7	59.2	24.2	630	34.4	770	23.9	164	1,900	13,100	334	833	1,350	1,670	**242** J
			2-3	DU-41 (2-3)A	10/28/2022	1.33	26.2	49.4	276	98.4	4,960 J	29,300 J	2.52	10.4	32.9	31.5	26.5	39.6	14.8	416	24.5	660	12	100	1,130	8,280	252	600	857	1,180	**155** J
			2-3 FR	DU-41 (2-3)B	10/28/2022	1.11	16.8	32.1	187	68.4	3,390 J	21,600 J	1.8	7.44	22.2	26.7	19	26.9	12.1	305	19.5	598	9.68	66.2	764	5,720	158	390	625	928	**106** J
			2-3 FR	DU-41 (2-3)C	10/28/2022	1.23	22.6	42	235	85	4,350 J	27,100 J	2.57	9.55	26.9	32.1	21.7	34.3	14.3	375	23.3	563	11.4	88.5	979	7,330	205	484	785	1,050	**135** J
			0-1	DU-41 (0-1) M	--	2.53	38.0	67.0	359	146	7,363 J	45,133 J	4.13	15.3	39.8	52.1	34.3	55.2	21.9	587	36.6	845	22.9	151	1,760	13,400	198	664	1,173	1,667	**221** J
			1-2	DU-41 (1-2) M	--	2.16	38.3	67.4	373	151	7,407 J	41,667 J	3.64	14.6	48.0	50.3	36.5	55.8	21.2	609	35.7	855	21.7	151	1,753	12,600	375	878	1,317	1,660	**224** J
			2-3	DU-41 (2-3) M	--	1.22	21.9	41.2	233	83.9	4,233 J	26,000 J	2.30	9.13	27.3	30.1	22.4	33.6	13.7	365.3	22.4	607	11.0	84.9	957.7	7,110	205	491	756	1,053	**132** J

Notes:
ISM = Incremental Sampling Methodology.
bgs = Below ground surface.
EPA = United States Environmental Protection Agency.
M = Mean. These results are the mean of the field replicates collected at this decision unit.
FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.
pg/g = Picograms per gram (parts per trillion).
Total D/F TEQ = Total 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalent
Bolded values exceed the Preliminary Remediation Goal (PRG).
Shaded values exceed the hot spot level.
Italicized values represent a method detection limit that is above one or more applicable screening levels.
U = Analyte was not detected.
J = Result is estimated.
JN = The analyte was tentatively identified and did not meet method criteria for confirmation. The reported result is an estimated maximum possible concentration (EMPC).
PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

Table 3b
Soil Results - Dioxins/Furans - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Dioxins/Furans by EPA Method 1613B; Concentrations in pg/g

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	2,3,7,8-TCDD	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF
					Human Health ISM PRG	--	--	--	--	--	--	--	--	--	--	--
					Human Health ISM Hot Spot	--	--	--	--	--	--	--	--	--	--	--
West Parcel	DU-1	ISM	0-1	DU-1 (0-1)	07/20/2022	0.833	4.53	3.96	31.3	17.9	407	3,690	1.36	2.77	7.95	8.16
			1-2	DU-1 (1-2)	07/20/2022	0.826	2.27 J	4.64	27.8	9.16	644	6,310 J	1.38	4.05	8.17	14.4
			2-3	DU-1 (2-3)	07/20/2022	0.439	0.941 U	2.06 J	12.1	4.35	305	3,060	1.14	1.18 J	3.5	5.57
	DU-2	ISM	0-1	DU-2 (0-1)	08/01/2022	0.424 U	1.50 J	1.49 U	9.03	4.55	157	1,310	1.14	1.97 J	2.45 J	3.45
			1-2	DU-2 (1-2)	08/01/2022	0.338 U	0.698 U	1.21 U	6.62	1.10 U	73.5	700	0.895	1.22 U	1.76 J	2.09 J
			2-3	DU-2 (2-3)	08/01/2022	0.352 U	0.67 U	1.63 U	2.63	1.52 U	46.7	384	0.605	1.13 J	1.21 J	1.26 U
	DU-3	ISM	0-1	DU-3 (0-1)	08/03/2022	0.673	6.12	5.17	38.7	13.0	805	5,360 J	0.752	2.27 U	4.8	5.94
			1-2	DU-3 (1-2)	08/03/2022	0.354 U	1.16 U	2.00 U	11.4	4.92	327	2,780	0.322 U	0.807 U	1.62 J	1.09 U
			2-3	DU-3 (2-3)	08/03/2022	0.227 U	1.53 U	1.77 U	5.71	1.94 J	163	1,520	0.298 U	1.07 U	1.02 U	0.928 U
	DU-4	ISM	0-1	DU-4 (0-1)	08/04/2022	0.565	4.67	3.89	44.0	19.4	458	3,340	0.734	2.18 U	3.08	3.73
			1-2	DU-4 (1-2)	08/04/2022	0.486 J	3.44	2.15 J	30.3	8.41	405	3,280	0.784	1.17 J	3.75	5.27
			2-3	DU-4 (2-3)	08/04/2022	0.469 J	1.87 J	0.887 U	18.1	5.97	458	4,160 J	0.694	1.96 U	4.02	4.98
	DU-5	ISM	0-1	DU-5 (0-1)A	07/22/2022	0.561	1.75 J	1.55 U	9.28	3.95	209	1,910	4.10	7.53	5.27	13.8
			0-1 FR	DU-5 (0-1)B	07/22/2022	0.746	2.02 J	1.17 U	8.24	4.35	258	2,360	6.93	14.9	8.86	24.3
			0-1 FR	DU-5 (0-1)C	07/22/2022	0.565	2.07 J	2.74	12.5	6.70	256	2,310	5.96	11.1	7.26	19.9
			1-2	DU-5 (1-2)A	07/25/2022	0.508	0.652 U	1.94 J	7.31	1.99 J	207	2,060	5.26	10.2	7.54	17.6
			1-2 FR	DU-5 (1-2)B	07/25/2022	0.422 J	0.726 U	2.23 U	7.99	3.89	264	2,630	7.10	10.8	9.02	16.6
			1-2 FR	DU-5 (1-2)C	07/25/2022	0.427 U	1.26 J	1.97 J	8.63	3.01	255	2,460	5.28	8.81	7.08	16.5
			2-3	DU-5 (2-3)A	07/26/2022	1.28	1.57 J	1.38 J	7.87	3.99	260	2,560	5.58	9.36	9.89	16.2
			2-3 FR	DU-5 (2-3)B	07/26/2022	0.511	1.59 U	1.91 J	6.43	3.28	246	2,360	4.85	8.14	8.47	14.1
			2-3 FR	DU-5 (2-3)C	07/26/2022	0.535	1.49 J	1.83 J	11.5	3.90	295	3,160	5.77	11.4	7.90	25.2
			0-1	DU-5 (0-1) M	--	0.624	1.95 J	1.82	10.0	5.00	241	2,193	5.66	11.2	7.13	19.3
			1-2	DU-5 (1-2) M	--	0.452 J	0.879 J	2.05 J	7.98	2.96 J	242	2,383	5.88	9.94	7.88	16.9
			2-3	DU-5 (2-3) M	--	0.775	1.55 J	1.71 J	8.60	3.72	267	2,693	5.40	9.63	8.75	18.5
	DU-6	ISM	0-1	DU-6 (0-1)	07/28/2022	0.376 U	0.895 U	1.60 U	8.53	3.65	2.12 J	2,130	7.64	13.7	7.52	22.1
			1-2	DU-6 (1-2)	07/28/2022	0.708	3.76	6.07	19.1	9.26	271	2,430	9.46	17.5	15.3	33.1
			2-3	DU-6 (2-3)	07/28/2022	0.296	1.21 J	1.53 U	7.57	3.28	224	2,290	4.88	9.40	5.86	15.8
	DU-7	ISM	0-1	DU-7 (0-1)	07/29/2022	0.605	1.30 J	2.57	11.8	4.39	236	2,410	9.02	17.3	10.5	30.6
			1-2	DU-7 (1-2)	07/29/2022	0.377 J	0.835 U	1.23 J	7.72	2.98	187	1,980	6.63	11.9	7.26	22.6
			2-3	DU-7 (2-3)	07/29/2022	0.315 U	1.35 U	2.04 U	4.24	2.17 J	122	1,430	4.48	8.45	4.15	15.3
	DU-8	ISM	0-1	DU-8 (0-1)	08/05/2022	1.03	2.98	2.34 J	16.6	8.25	371	3,990	8.93	15.8	10.5	38.2
			1-2	DU-8 (1-2)	08/05/2022	0.847	2.47 J	4.20	16.1	8.08	389	4,190 J	10.6	19.9	11.8	41.1
			2-3	DU-8 (2-3)	08/05/2022	1.15	1.79 J	2.12 J	12.3	5.33	406	4,530 J	10.1	19.7	11.9	41.2
	DU-9	ISM	0-1	DU-9 (0-1)	08/08/2022	0.685	2.33 J	1.58 U	13.8	5.91	344	3,170	7.00	12.0	8.32	23.8
			1-2	DU-9 (1-2)	08/08/2022	0.532	1.46 U	2.21 U	8.01	2.51	233	2,550	5.32	10.7	6.81	20.3
			2-3	DU-9 (2-3)	08/08/2022	0.569	1.20 U	1.47 U	6.77	2.34 J	228	2,520	5.97	10.5	6.80	21.9
Central Parcel	DU-10	ISM	0-1	DU-10 (0-1)	08/12/2022	0.533	5.87	0.599 U	34.0	19.2	308	1,830	0.767	0.939 U	2.22 J	1.79 J
			1-2	DU-10 (1-2)	08/12/2022	0.135 U	0.551 U	0.822 U	9.79	3.71	217	1,700	0.170 U	0.976 U	1.50 J	0.407 U
			2-3	DU-10 (2-3)	08/12/2022	0.243 U	0.826 U	1.03 U	6.37	3.01	143	1,120	0.270 U	1.22 U	2.01 J	0.468 U
	DU-11	ISM	0-1	DU-11 (0-1)A	08/10/2022	0.154 U	2.95	0.824 U	15.7	7.83	164	1,310	2.06	3.69	3.15	8.08
			0-1 FR	DU-11 (0-1)B	08/10/2022	0.233 U	0.237 U	0.335 U	11.9	4.66	174	1,290	1.60	2.43 J	2.50	5.47
			0-1 FR	DU-11 (0-1)C	08/10/2022	0.210 U	2.70	0.800 U	19.0	8.96	301	2,150	2.03	3.04	2.42 J	5.64
			1-2	DU-11 (1-2)A	08/10/2022	0.147 U	0.509 U	0.571 U	7.54	0.487 U	140	1,600	1.96	3.02	2.45 J	6.30
			1-2 FR	DU-11 (1-2)B	08/10/2022	0.189 U	0.508 U	0.651 U	5.30	1.64 J	111	987	1.62	2.63	2.01 J	5.89
			1-2 FR	DU-11 (1-2)C	08/10/2022	0.172 U	0.856 U	1.11 U	5.78	0.882 U	106	941	1.25	2.47 J	2.32 J	5.05
			2-3	DU-11 (2-3)A	08/10/2022	0.249 U	0.727 U	0.978 U	4.94	0.796 U	99.3	894	1.48	2.93	1.76 J	5.90
			2-3 FR	DU-11 (2-3)B	08/10/2022	0.238 U	0.602 U	0.919 U	5.67	0.717 U	162	1,830	2.17	3.80	2.39 J	7.60
			2-3 FR	DU-11 (2-3)C	08/10/2022	0.187 U	0.679 U	0.872 U	5.07	0.746 U	107	898	1.63	2.86	1.98 J	6.12
			0-1	DU-11 (0-1) M	--	0.233 U	1.96 J	0.824 U	15.5	7.15	213	1,583	1.90	3.05 J	2.69 J	6.40
			1-2	DU-11 (1-2) M	--	0.189 U	0.856 U	1.11 U	6.21	1.00 J	119	1,176	1.61	2.71 J	2.26 J	5.75
			2-3	DU-11 (2-3) M	--	0.249 U	0.727 U	0.978 U	5.23	0.796 U	123	1,207	1.76	3.20	2.04 J	6.54
	DU-12	ISM	0-1	DU-12 (0-1)	08/16/2022	0.410 U	10.6	1.02 U	60.7	31.4	218	884	0.310 U	0.214 U	4.57	3.08
			1-2	DU-12 (1-2)	08/16/2022	0.471 U	0.945 U	1.04 U	12.7	6.79	74.5	426	0.330 U	1.46 U	1.35 U	0.877 U
			2-3	DU-12 (2-3)	08/16/2022	0.358 U	0.883 U	1.40 U	6.51	4.84	30.9	168 J+	0.337 U	1.21 U	1.09 U	0.634 U
	DU-13	ISM	0-1	DU-13 (0-1)A	08/29/2022	3.88	117	42.2	795	434	1,500	1,840	2.40	4.35	12.2	10.9
			0-1 FR	DU-13 (0-1)B	08/29/2022	2.77	66.7	23.7	470	265	1,020	1,940	1.73	2.83	11.1	7.31
			0-1 FR	DU-13 (0-1)C	08/29/2022	3.15	79.3	31.7	566	310	1,120	1,620	1.99	3.63	11.3	8.77
			1-2	DU-13 (1-2)A	08/30/2022	0.698	14.3	2.58	102	54.1	243	551	0.75	1.39 J	3.29	2.72
			1-2 FR	DU-13 (1-2)B	08/30/2022	0.381 U	4.38	0.778 U	20.6	11.5	98.9	463	0.185 U	1.61 U	5.27	1.76 J
			1-2 FR	DU-13 (1-2)C	08/30/2022	0.499	10.6	1.93 J	62.6	34.5	170	436	0.828	2.28 U	6.44	2.39 J
			2-3	DU-13 (2-3)A	08/31/2022	0.208 U	10.9	4.23	78.9	39.3	171	467	0.106 U	1.42 U	2.09 J	0.47 U
			2-3 FR	DU-13 (2-3)B	08/31/2022	0.363 U	4.36	0.856 U	26.5	13.4	114	509	0.163 U	1.30 U	3.45	2.02 J
			2-3 FR	DU-13 (2-3)C	08/31/2022	0.571	8.19	1.73 J	47.3	24.8	186	708	0.630	0.802 J	2.26 J	1.51 J
			0-1	DU-13 (0-1) M	--	3.27	87.7	32.5	610.3	336.3	1,213	1,800	2.04	3.60	11.5	8.99
			1-2	DU-13 (1-2) M	--	0.526	9.76	1.76 J	61.7 J	33.4 J	171	483	0.588	1.76 J	5.00	2.29 J
			2-3	DU-13 (2-3) M	--	0.381	7.82	2.27 J	50.9	25.8	157	561	0.300 J	1.17 J	2.60 J	1.33 J
	DU-14	ISM	0-1	DU-14 (0-1)	08/17/2022	1.43	29.2	17.6	230	127	509	1,150	0.728	2.06 U	5.44	4.03
			1-2	DU-14 (1-2)	08/17/2022	0.593	13.2	7.44	96.3	54.5	263	932	0.579	1.13 U	3.03	0.225 U
			2-3	DU-14 (2-3)	08/17/2022	0.172 U	6.12	0.537 U	36.7	22.0	100	298 J+	0.35	0.997 U	1.90 J	0.197 U
	DU-15	ISM	0-1	DU-15 (0-1)	08/19/2022	4.67	158	60.6	1,180	727	2,020 J	1,210	1.81	3.66	8.61	12.3
			1-2	DU-15 (1-2)	08/19/2022	1.72	78.2	32.4	636	337	1,200	628	0.544	1.55 J	3.92	5.14
			2-3	DU-15 (2-3)	08/19/2022	1.90	60.7	22.0	458	265	786	362	0.197 U	1.72 U	2.42 J	2.98
	DU-16	ISM	0-1	DU-16 (0-1)A	09/12/2022	3.21	64.3	25.4	358	192	1,420	7,200 J	1.32	2.60	9.07	9.34
			0-1 FR	DU-16 (0-1)B	09/12/2022	3.62	101	29.8	635	302	1,440	4,810 J	1.09	2.09 J	9.00	8.27
			0-1 FR	DU-16 (0-1)C	09/12/2022	3.94	102	34.1	743	286	1,590	15,000 J	1.60	2.80	10.4	9.12
			0-1	DU-16 (0-1) M	--	3.59	89.1	29.8	579	260	1,483	9,003 J	1.34	2.50 J	9.49	8.91
			1-2	DU-16 (1-2)	11/07/2022	0.473	6.21	3.36	37.4	21.4	196	1,570	0.465 U	0.311 U	3.07	1.95
			2-3	DU-16 (2-3)	11/07/2022	0.380 U	2.96	1.93	16.6	8.81	83.5	991	0.267 U	0.228 U	0.926	0.255 U
	DU-17	ISM	0-1	DU-17 (0-1)	09/02/2022	0.808	14.9	5.38	106	54.3	294	939	0.156 U	2.05 U	9.58	2.19 J
			1-2	DU-17 (1-2)	09/02/2022	0.171 U	0.400 U	0.453 U	3.38	1.77 J	92.1	1,010	0.110 U	0.833 U	3.32	0.365 U
			2-3	DU-17 (2-3)	09/02/2022	0.140 U	3.97	0.709 J	13.7	6.37	65.8	290 J+	0.164 U	0.488 U	1.96 J	0.271 U

Sample ID	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,6,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	Total D/F TEQ (Mammal)
Human Health ISM PRG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15
Human Health ISM Hot Spot	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,500
DU-1 (0-1)	5.85	8.48	2.13 U	118	4.69	340	9.14 JN	30.4 JN	218	985	72.5 JN	88.3 JN	171	393	**22.1**
DU-1 (1-2)	8.37	8.87	3.83	337	11.2	924	8.79 JN	21.1 JN	155	1,150	48.3 JN	65.7	333	1,090	**25.6** J
DU-1 (2-3)	2.75	3.62	1.56 J	126	6.31	458	3.52	2.77	66.1	543	21.1 JN	30.1 JN	125 JN	423	10.7 J
DU-2 (0-1)	1.65 J	0.795 U	0.822 U	30.4	1.96 J	78.9	3.03	11.0	62.0	325	27.6 JN	28.7 JN	36.4	90.2	6.95 J
DU-2 (1-2)	1.06 U	1.29 U	1.27 U	15.4	1.13 U	58.7	1.15	0.698 U	17.5	118	17.4 JN	15.7 JN	16.6	48.6	3.44 J
DU-2 (2-3)	1.26 U	1.53 U	1.52 U	15.1	1.02 U	40.8	0.667	0.670 U	16.1	80.3	17.7 JN	14.9 JN	13.5	42.1	2.42 J
DU-3 (0-1)	2.72	6.33	2.03 U	87.5	3.75	290	3.00	25.0	220	1,380	13.2	61.0	136	260	**26.3** J
DU-3 (1-2)	0.991 U	1.22 U	1.29 U	40.4	2.06 U	221	1.06	4.02	66.8	526	6.38	24.9	38.7	144	7.82 J
DU-3 (2-3)	0.86 U	1.05 U	1.45 U	30.2	2.11 U	151	0.227 U	1.53 U	41.4	270	3.01	7.87	23.8	129	4.57 J
DU-4 (0-1)	2.55	3.52	2.44 U	102	5.06	447	3.99	30.4	252	925	12.3 JN	40.1	94.7	354	**20.9**
DU-4 (1-2)	3.03	3.92	1.21 U	97.7	3.95	5.14	2.24	17.6	149	700	19.3 JN	50.3	101	374	**16.6** J
DU-4 (2-3)	3.34	3.98	0.831 U	120	5.94	689	3.27	8.66	105	808	27.8 JN	63.5	126	489	14.7 J
DU-5 (0-1)A	4.99	3.01	3.02	60.6	4.63	127	4.02	12.2	58.8	402	38.5 JN	54.5 JN	84.1	164	11.8 J
DU-5 (0-1)B	8.24	4.53	3.49	76.9	6.57	153	7.49	10.4	73.8	517	58.0 JN	80.3 JN	107	202	**16.1** J
DU-5 (0-1)C	9.07	4.20	3.29	214	4.99	189	4.00	9.27	81.1	500	44.6 JN	72.2 JN	171	435	**17.1** J
DU-5 (1-2)A	6.59	4.78	2.16 J	76.0	5.78	154	3.89	2.89	48.4	377	72.7 JN	85.4 JN	101	202	11.7 J
DU-5 (1-2)B	6.21	4.50	4.38	67.1	6.59	187	3.33	5.41	55.2	515	82.9 JN	93.1 JN	99.7	214	13.2 J
DU-5 (1-2)C	11.0	5.14	2.84	255	6.43	240	2.82	7.02	55.4	465	50.3 JN	73.7 JN	197	525	**15.3** J
DU-5 (2-3)A	6.36	4.88	2.83	89.7	7.69	192	5.54	7.35	57.8	464	74.4 JN	104 JN	112	241	**15.4** J
DU-5 (2-3)B	5.85	4.63	2.95	57.5	5.83	151	4.18	7.54	58.3	581	89.7 JN	92.4 JN	90.1	179	12.3 J
DU-5 (2-3)C	21.2	7.95	6.06	610	9.63	408	4.02	4.76	67.1	519	49.6 JN	89.0	392	1,130	**23.3** J
DU-5 (0-1) M	7.43	3.91	3.27	117 J	5.40	156	5.17	10.6	71.2	473	47.0 JN	69.0 JN	121	267	14.98 J
DU-5 (1-2) M	7.93	4.81	3.13 J	133 J	6.27	194	3.35	5.11	53.0	452	68.6 JN	84.1 JN	133	314	13.4 J
DU-5 (2-3) M	11.1 J	5.82	3.95	252 J	7.72	250	4.58	6.55	61.1	521	71.2 JN	95.1 J	198 J	517 J	**17.0** J
DU-6 (0-1)	6.65	4.02	3.92	56.9	5.77	130	3.54	3.87	59.1	413	52.4 JN	70.4 JN	96.0	166	10.4 J
DU-6 (1-2)	13.6	13.1	6.83	92.1	9.48	178	69.0	146	272	535	142 JN	172 JN	181	239	**25.1** J
DU-6 (2-3)	5.84	3.25	2.23 J	52.0	5.29	126	3.60	8.87	52.2	438	48.2 JN	62.0 JN	83.1	146	11.4 J
DU-7 (0-1)	11.4	4.81	4.67	72.7	8.50	139	4.69	9.39	72.7	458	103 JN	125 JN	134	201	**17.4** J
DU-7 (1-2)	7.80	4.24	4.57	72.1	4.80	130	2.97	2.63	45.7	371	78.0 JN	85.2 JN	100	184	12.4 J
DU-7 (2-3)	5.43	3.38	2.41 U	38.8	5.24	92.0	1.48	1.35 U	36.0	249	40.1 JN	45.1 JN	66.3	115	8.17 J
DU-8 (0-1)	13.3	7.21	4.80	88.6	10.2	277	7.68	19.3	111	6.87	44.5 JN	97.3	176	282	**23.6** J
DU-8 (1-2)	12.5	8.05	6.10	109	13.1	288	6.99	16.3	120	762	48.4 JN	111	194	328	**24.6** J
DU-8 (2-3)	12.8	6.52	5.66	103	12.6	310	5.88	14.4	105	7.68	43.5 JN	108	194	313	**23.4** J
DU-9 (0-1)	7.20	3.50	3.50	87.7	8.23	177	7.96	19.1	104	642	35.3	71.4	120	247	**17.8** J
DU-9 (1-2)	7.44	4.87	2.75	71.5	7.04	193	3.76	3.17	71.9	470	32.8 JN	66.6	110	216	12.8 J
DU-9 (2-3)	7.34	2.94	2.16 J	65.2	6.61	157	3.07	3.04	58.2	460	30.9 JN	62.2	104	178	12.3 J
DU-10 (0-1)	1.47 J	0.321 U	0.387 U	74.6	0.943 U	276	6.56	32.8	219	584	28.5 JN	29.1	55.7	264	**17.3** J
DU-10 (1-2)	0.403 U	0.472 U	0.501 U	42.7	0.749 U	160	2.56	8.13	68.6	394	18.9 JN	21.4	31.9	145	5.46 J
DU-10 (2-3)	0.424 U	0.523 U	0.564 U	43.9	1.42 U	180	4.20	7.50	46.3	253	28.6 JN	34.9	34.0	162	4.52 J
DU-11 (0-1)A	4.43	2.64	1.19 U	48.0	2.73	79.3	2.03	16.2	117	340	18.3 JN	30.5	61.6	118	10.8 J
DU-11 (0-1)B	2.36 J	1.62 J	1.12 U	41.1	2.69	65.4	2.64	3.50	97.7	347	16.4 JN	27.8	51.2	103	6.48 J
DU-11 (0-1)C	2.32 J	0.839 U	1.08 U	48.1	1.16 U	85.8	1.90	6.89	150	534	16.5 JN	31.4	59.9	121	11.7 J
DU-11 (1-2)A	0.672 U	0.979 U	1.28 U	36.1	1.53 U	79.1	1.68	2.38	55.7	399	12.0 JN	22.2	40.6	101	5.21 J
DU-11 (1-2)B	2.12 J	1.37 J	0.412 U	33.0	2.07 J	74.0	1.20	0.508 U	38.4	219	9.99	21.6	36.7	91.6	4.66 J
DU-11 (1-2)C	0.511 U	0.715 U	1.01 U	29.1	1.34 U	53.3	1.34	0.856 U	41.4	207	8.29	21.5	35.3	71.7	4.36 J
DU-11 (2-3)A	2.18 J	0.616 U	0.806 U	29.1	1.33 U	59.7	1.56	0.727 U	39.9	204	9.83	18.8	34.1	78.0	4.29 J
DU-11 (2-3)B	2.89	0.768 U	0.910 U	43.2	1.79 U	108	1.19	0.602 U	55.7	453	12.4	23.6	47.4	124	5.89 J
DU-11 (2-3)C	0.814 U	1.15 U	1.44 U	32.5	1.48 U	60.1	1.27	0.679 U	43.1	211	11.0	21.0	35.9	79.5	4.34 J
DU-11 (0-1) M	3.04 J	1.70 J	1.19 U	45.7	2.19	76.8	2.19	8.86 J	122	407	17.1 JN	29.9	57.6	114	9.67 J
DU-11 (1-2) M	1.10 J	1.02 J	1.28 U	32.7	1.65 J	68.8	1.41	1.25 J	45.2	275	10.1 J	21.8	37.5	88.1	4.74 J
DU-11 (2-3) M	1.96 J	1.15 U	1.44 U	34.9	1.79 U	75.9	1.34	0.73 U	46.2	289	11.1	21.1	39.1	93.8	4.84 J
DU-12 (0-1)	2.63	3.06	0.817 U	52.1	0.851 U	50.0	11.6	62.0	396	487	61.8 JN	54.0	52.3	101	**25.4**
DU-12 (1-2)	0.858 U	1.11 U	1.14 U	17.6	0.758 U	28.0	4.55	4.46	99.3	157	6.56	9.69	15.6	38.5	4.21
DU-12 (2-3)	0.602 U	0.767 U	0.927 U	6.36	0.998 U	7.73	3.26	0.883 U	43.2	62.9	8.71	8.80	6.04	13.8	2.60 J
DU-13 (0-1)A	12.0	15.1	5.22	501	6.93	342	68.6	702	4,920	2,850	151 JN	181 JN	239	839	**277** J
DU-13 (0-1)B	7.57	10.5	2.13 J	3.20	5.19	284	42.8	411	3,060	1,920	165 JN	159 JN	184	568	**163** J
DU-13 (0-1)C	9.64	12.7	4.37	360	5.59	287	52.5	503	3,550	2,120	125 JN	163 JN	211	623	**196** J
DU-13 (1-2)A	2.45 J	2.98	0.490 U	72.4	2.09 J	95.1	11.3	89.5	648	475	30.6 JN	44.9 JN	51.9	147	**36.2** J
DU-13 (1-2)B	2.22 J	2.89	0.442 U	27.9	0.833 U	71.6	5.46	29.3	184	183	61.7 JN	77.2 JN	48.0	71.0	11.6 J
DU-13 (1-2)C	2.89	3.87	0.628 U	49.3	1.31 J	69.7	10.4	69.4	413	326	88.2 JN	97.0 JN	57.4	104	**26.4** J
DU-13 (2-3)A	0.437 U	2.50	0.659 U	54.1	0.616 U	74.9	6.38	67.3	519	328	20.8 JN	27.9	33.5	108	**26.6** J
DU-13 (2-3)B	2.31 J	2.70	0.319 U	34.7	0.823 U	85.6	4.10	26.7	191	204	50.8 JN	55.3 JN	40.8	91.3	12.0 J
DU-13 (2-3)C	2.00 J	2.83	0.309 U	52.9	1.58 J	120	8.28	58.6	449	330	26.2 JN	36.9 JN	43.2	130	**20.2** J
DU-13 (0-1) M	9.74	12.8	3.91 J	288 J	5.90	304	54.6	539	3,843	2,297	147 JN	168 JN	211	677	**212** J
DU-13 (1-2) M	2.52 J	3.25	0.628 U	49.9	1.41 J	78.8	9.05	62.7	415	328	60.2 JN	73.0 JN	52.4	107	**24.7** J
DU-13 (2-3) M	1.58 J	2.68	0.659 U	47.2	1.01 J	93.5	6.25	50.9	386	287	32.6 JN	40.0 J	39.2	110	**19.6** J
DU-14 (0-1)	4.29	5.63	1.92 J	181	2.62	110	20.7	185	1,430	955	111 JN	102 JN	107	313	**78.7** J
DU-14 (1-2)	0.204 U	0.258 U	0.275 U	70.9	0.428 U	76.0	13.0	88.7	658	510	31.0 JN	37.1	35.1	129	**34.3** J
DU-14 (2-3)	0.190 U	2.13 J	0.273 U	27.5	0.805 U	29.8	3.52	37.0	252	191	17.7 JN	26.3	24.7	56.5	14.3 J
DU-15 (0-1)	12.8	15.2	5.00	874	8.70	344	90.9	973	7,910	3,970	74.6 JN	128 JN	320	1,380	**396** J
DU-15 (1-2)	5.86	6.65	1.77 J	442	3.66	165	37.2	506	4,280	2,330	27.8 JN	55.9 JN	148	685	**200** J
DU-15 (2-3)	4.14	4.94	0.576 U	252	2.45 J	98.1	34.3	379	2,920	1,530	12.1 JN	33.2	92.5	392	**150** J
DU-16 (0-1)A	10.4	14.5	2.99	383	17.0	575	40.5	367	2,360	2,500	52.0 JN	135 JN	297	946	**152** J
DU-16 (0-1)B	9.25	12.9	2.92	440	10.0	391	48.4	574	3,720	2,680	50.4 JN	125	239	855	**228** J
DU-16 (0-1)C	9.56	13.8	3.24	453	12.6	462	52.9	574	3,730	2,930	58.2 JN	141	263	943	**244** J
DU-16 (0-1) M	9.74	13.7	3.05	425	13.2	476	47.3	505	3,270	2,703	53.5 JN	134 J	266	915	**208** J
DU-16 (1-2)	2.29	2.71	0.278 U	46	2.38	114	3.24	32.8	222	351	51.3	59.3	54.5	131	**17.5**
DU-16 (2-3)	0.243 U	0.265 U	0.283 U	22.3	1.4	50	0.38 U	15.5	99.8	141	5.52	12.1	15.9	65.7	7.62
DU-17 (0-1)	3.39	6.17	0.610 U	75.9	2.08 J	81.0	10.2	96.9	670	553	87.2 JN	151 JN	100	150	**40.4** J
DU-17 (1-2)	0.324 U	1.40 J	0.476 U	14.4	0.591 U	83.5	0.171 U	0.400 U	28.0	180	29.5 JN	52.7 JN	30.1	57.3	3.43 J
DU-17 (2-3)	0.238 U	1.56 J	0.370 U	13.8	0.636 U	19.2	0.140 U	15.1	105	120	8.24	22.9	18.4	32.6	7.81 J

Please see notes at end of table.

Table 3b
Soil Results - Dioxins/Furans - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Dioxins/Furans by EPA Method 1613B Concentrations in pg/g 2,3,7,8-TCDD	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	Total D/F TEQ (Mammal)
					Human Health ISM PRG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15
					Human Health ISM Hot Spot	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,500
Central Parcel	DU-18	ISM	0-1	DU-18 (0-1)A	09/29/2022	1.05	21.5	8.89	152	84.6	576	2,700	1.02	1.42 J	12.6	4.48	6.01	9.50	2.25 J	126	5.65	242	15.1	119	864	994	300 JN	273 JN	152	312	**61.2** J
			0-1 FR	DU-18 (0-1)B	09/29/2022	0.708	13.8	6.11	96.5	54.4	642	4,490 J	2.39	2.25 J	68.3	7.99	19.3	29.2	4.56	165	10.0	505	12.9	88.8	586	1,120	1,010 JN	1,300 JN	473	521	**66.8** J
			0-1 FR	DU-18 (0-1)C	09/29/2022	0.735	13.6	6.09	86.2	47.2	479	3,030	0.39 U	1.59 J	20.2	7.63	12.2	11.8	3.72	116	6.91	323	11.7	84.2	518	840	1,040	608	198	333	**45.0** J
			1-2	DU-18 (1-2)A	09/30/2022	0.399 J	6.49	3.34	41.0	22.7	250	1,530	0.854	0.918 J	9.37	3.18	4.37	5.33	1.31 J	59.6	2.38 J	178	7.07	39.0	254	445	164 JN	176 JN	99.5	175	**21.6** J
			1-2 FR	DU-18 (1-2)B	09/30/2022	0.453	3.03	1.69 J	18.0	8.82	170	1,270	2.04	1.20 J	21.6	2.19 J	5.17	8.27	1.54 J	44.8	3.12	179	2.99	19.7	116	290	329 JN	370 JN	130	158	**17.4** J
			1-2 FR	DU-18 (1-2)C	09/30/2022	0.250 U	3.03	0.337 U	15.8	10.0	177	1,280	0.264 U	1.59 U	5.61	1.80 J	2.61	3.68	0.509 U	41.5	2.39 J	167	1.54	18.2	112	310	102	98.6	56.7	139	10.9 J
			2-3	DU-18 (2-3)A	10/03/2022	0.277 U	4.47	1.74 J	22.9	13.5	106	628	0.231 U	1.37 U	2.95	1.29 J	1.98 J	1.87 J	0.281 U	26.9	1.01 J	65.9	0.773	25.7	163	191	68.3 JN	57.5 JN	38.1	67.7	11.4 J
			2-3 FR	DU-18 (2-3)B	10/03/2022	0.320	4.17	1.67 J	24.4	13.4	162	1,000	0.192 U	0.521 U	4.86	1.24 J	2.4 J	2.96	0.241 U	37.2	1.95 J	140	2.90	26.3	159	286	127 JN	103 JN	55.3	118	12.9 J
			2-3 FR	DU-18 (2-3)C	10/03/2022	0.169 U	2.79	1.67 J	15.8	9.57	116	740	0.385	0.765 U	4.14	1.49 J	2.59	2.38 J	0.272 U	27.5	1.24 J	96.1	1.39	18.8	111	208	172 JN	110 JN	47.0	84.6	9.23 J
			0-1	DU-18 (0-1) M	--	0.831	16.3	7.03	112	62.1	566	3,407 J	1.27 J	1.75 J	33.7 J	6.70	12.5	16.8 J	3.51 J	136	7.52	357	13.2	97.3	656	985	783 J	727 J	274 J	389	**57.7** J
			1-2	DU-18 (1-2) M	--	0.367 J	4.18	1.79 J	24.9	13.8	199	1,360	1.05 J	1.24 J	12.2 J	2.39 J	4.05	5.76	1.12 J	48.6	2.63 J	175	3.87 J	25.6	161	348	198 J	215 J	95.4	157	**16.6** J
			2-3	DU-18 (2-3) M	--	0.255	3.81	1.69 J	21.0	12.2	128	789	0.269	1.37 U	3.98	1.34 J	2.32 J	2.40 J	0.281 U	30.5	1.40 J	101	1.69 J	23.6	144	228	122 JN	90.2 JN	46.8	90.1	11.2 J
	DU-19	ISM	0-1	DU-19 (0-1)	09/06/2022	1.15	20.5	10.4	169	76.1	659	3,680	5.57	5.76	201	26.4	47.3	77.9	14.6	145	9.88	254	27.5	166	891	1,160	2,280 JN	3,590 JN	1,190	376	**134**
			1-2	DU-19 (1-2)	09/06/2022	0.409 U	6.80	0.767 U	25.3	11.0	391	2,850	4.69	1.11 U	179	20.1	38.9	71.2	12.4	81.0	7.02	200	15.6	82.2	237	693	2,360 JN	3,500 JN	1,090	236	**84.8**
			2-3	DU-19 (2-3)	09/06/2022	0.742	5.52	3.18	13.6	5.27	103	616	3.36	3.00	95.1	15.2	19.2	34.6	7.12	33.0	3.82	44.3	12.5	60.8	133	191	1,460 JN	1,680 JN	512	85.2	**46.6**
	DU-20	ISM	0-1	DU-20 (0-1)	10/18/2022	0.841	8.89	7.08	53.9	28	543	3,150	1.25	2.01	19.7	5.83	7	12.8	3.95	78.3	3.3	125	12.7	58	329	949	266	344	217	198	**34.9**
			1-2	DU-20 (1-2)	10/18/2022	0.194 U	0.713 U	0.676 U	7.55	3.81	138	804	0.307 U	0.127 U	2.18	0.227 U	0.212 U	2.18	0.270 U	12.5	0.897 U	20.3	0.194 U	0.713 U	42.7	239	23.2	33.2	27.3	31.4	4.30
			2-3	DU-20 (2-3)	10/18/2022	0.284 U	1	0.440 U	5.49	2.79	65.9	415	0.346 U	0.271 U	2.84	0.340 U	0.304 U	1.76	0.418 U	8.77	0.759 U	14.9	0.424	4.07	36	118	41.8	47	25.4	21.1	3.97
	DU-21	ISM	0-1	DU-21 (0-1)	09/08/2022	1.32	16.9	10.7	103	57.5	806	5,130 J	3.580	3.69	54.0	13.0	16.8	29.8	7.03	184	9.82	317	17.9	118	68.5	1,480	1,070	977	432	450	**70.3** J
			1-2	DU-21 (1-2)	09/08/2022	0.540	4.43	3.07	20.8	11.1	231	1,360	1.340	1.65	20.2	5.54	6.85	11.6	2.25	48.8	2.85	75.1	5.78	34.8	157	418	327	360	160	114	**20.6**
			2-3	DU-21 (2-3)	09/08/2022	0.107 U	2.08 J	0.314 U	13.3	5.30	118	769	0.781	0.648 U	9.70	3.70	3.01	5.35	1.32 J	26.7	1.61 J	52.7	2.79	16.8	88.8	210	133	154	85.3	65.7	10.1 J
	DU-22	ISM	0-1	DU-22 (0-1)A	10/13/2022	0.846	9.71	5.58	63.1	31.5	438	2,810	1.26	1.88 J	12.5	4.09	3.68	8.59	2.24	79.1	3.27	209	6.11	59.0	390	776	164 J	201	141	223	**32.5** J
			0-1 FR	DU-22 (0-1)B	10/13/2022	0.464 J	4.68	3.91	42.0	17.3	543	3,940	0.999	1.72 J	12.3	4.57	5.28	8.08	2.24 J	77.3	3.66	213	4.83	28.8	213	915	177	203	153	232	**24.8** J
			0-1 FR	DU-22 (0-1)C	10/13/2022	0.525	9.02	4.89	44.6	22.8	482	3,150	1.76	2.54	14.2	5.09	5.96	10.5	2.23 J	79.5	3.44	174	7.22	42.7	285	929	188	235	156	202	**30.3** J
			1-2	DU-22 (1-2)A	10/14/2022	0.234 U	1.41	0.342 U	6.02	3.06	57.7	382	0.451 U	1.05 U	3.06	0.187 U	0.165 U	1.84	0.191 U	23.2	0.740 U	45.2	0.817	4.79	39.5	102	60.3	53.4	37.3	69.6	4.56
			1-2 FR	DU-22 (1-2)B	10/14/2022	0.196 U	2.25	2.21	27.4	5.92	300	2,130	0.492	2.29 U	4.73	2.72	2.36	3.24	0.212 U	36.2	1.92	97	0.96	8.8	105	507	43	70.3	78.3	115	12.3
			1-2 FR	DU-22 (1-2)C	10/14/2022	0.201 U	1.55	1.54	11	3.68	186	1,270	0.461	1.97 U	3.29	1.94	1.65	2.79	0.196 U	22.1	0.810 U	54.4	0.432	5.57	54.6	313	46.8	54	48.8	64.5	7.47
			2-3	DU-22 (2-3)A	10/14/2022	0.217 U	1.31 U	0.367 U	9.52	3.99	77.4	475	0.494 U	0.339 U	2.83	0.571 U	0.496 U	1.75	0.705 U	14.4	1.51 U	37.5	0.217 U	1.95	55.8	132	38.5	47.3	25.5	37	4.35
			2-3 FR	DU-22 (2-3)B	10/14/2022	0.247 U	1.07 U	0.527 U	8.95	3.56	228	1,900	0.422 U	0.389 U	6.26	1.53	2.46	4.04	0.886 U	31.7	2.42	164	0.247 U	1.48	48.1	403	73.1	98.1	70.1	124	7.93
			2-3 FR	DU-22 (2-3)C	10/14/2022	0.266 U	1.19 U	0.411 U	7.44	3.75	102	727	0.445 U	0.273 U	3.47	0.489 U	1.72	2.22	0.582 U	15.3	1.02 U	44.9	0.266 U	1.19 U	44.5	177	61.8	68.6	36.1	49.1	4.79
			0-1	DU-22 (0-1) M	--	0.612 J	7.80	4.79	49.9	23.9	488	3,300	1.34	2.05 J	13.0	4.58	4.97	9.06	2.24 J	78.6	3.46	199	6.05	43.5	296	873	176 J	213	150	219	**29.2** J
			1-2	DU-22 (1-2) M	--	0.234 U	1.74	1.36 J	14.8 J	4.22	181 J	1,261 J	0.468	2.29 U	3.69	1.62 J	1.39 J	2.62	0.212 U	27.2	1.16	65.5	0.736	6.39	66.4	307 J	50.0	59.2	54.8	83.0	8.11
			2-3	DU-22 (2-3) M	--	0.266 U	1.31 U	0.527 U	8.64	3.77	136	1,034 J	0.494 U	0.389 U	4.19	0.863 J	1.56 J	2.67	0.886 U	20.5	1.65	82.1 J	0.266 U	1.54	49.5	237	57.8	71.3	43.9	70.0 J	5.69
	DU-23	ISM	0-1	DU-23 (0-1)	10/12/2022	1.05	8.20	7.23	44.2	23.5	570	3,570	2.15	3.52	34.6	9.20	14.1	20.2	3.80	96.8	6.09	230	15.6	61.1	299	1,040	558 JN	627 JN	323	255	**40.0**
			1-2	DU-23 (1-2)	10/12/2022	0.219 U	1.75 J	1.84 J	9.33	4.96	123	799	0.932	0.576 U	12.5	2.67	4.05	6.65	1.12 J	24.2	1.33 J	60.8	2.92	9.43	66.0	223	139 JN	194 JN	103	65.6	10.5 J
			2-3	DU-23 (2-3)	10/12/2022	0.285 U	0.163 U	1.95 J	7.95	3.84	155	941	0.619	0.196 U	5.27	1.39 J	2.04 J	3.15	0.307 U	14.8	1.04 J	32.1	1.64	4.89	59.2	301	50.7 JN	72.8 JN	46.9	41.2	5.92 J
	DU-24	ISM	0-1	DU-24 (0-1)	09/21/2022	0.434 J	6.29	4.27	55.6 J	29.7	376	2,020	0.826	1.48 J	4.50	3.19	2.43 J	4.29	1.92 J	54.8	2.14 J	77.9	5.22	37.4	320	656	30.7 JN	52.5	89.7	130	**23.3** J
			1-2	DU-24 (1-2)	09/21/2022	0.132 U	1.98 J	0.975 J	11.6	7.10	135	760	0.194 U	0.687 J	1.84 J	0.327 U	0.304 U	0.375 U	0.38 U	18.4	0.424 U	38.0	0.952	11.7	87.2	243	9.98 JN	21.6	26.1	47.5	6.44 J
			2-3	DU-24 (2-3)	09/21/2022	0.161 U	4.10	0.647 U	23.9	12.4	67.4	173 J+	0.116 U	0.337 U	0.321 U	0.249 U	0.242 U	0.297 U	0.291 U	18.8	0.473 U	11.8	0.161 U	22.7	175	127	1.65	2.85	8.18	31.1	8.88 J
	DU-25	ISM	0-1	DU-25 (0-1)	09/23/2022	0.902	7.77	11.6	64.0	21.8	1300	8,430 J	3.16	4.23	20.5	12.1	11.2	15.5	8.05	156	7.87	284	26.0	52.7	349	2,230	198	282	355	438	**46.9** J
			1-2	DU-25 (1-2)	09/23/2022	0.104 U	0.312 U	0.636 U	2.98	1.61 J	72.2	498	0.125 U	1.22 U	2.83	0.219 U	0.205 U	0.247 U	0.258 U	9.88	0.418 U	26.2	0.737	0.312 U	18.5	124	23.5	37.1	26.5	29.2	2.60 J
			2-3	DU-25 (2-3)	09/23/2022	0.141 U	0.322 U	0.567 U	2.57	0.464 U	69.9	483	0.108 U	0.505 U	1.33 J	0.211 U	0.196 U	0.233 U	0.242 U	8.83	0.412 U	20.5	0.141 U	0.322 U	15.0	120	7.21	15.5	18.7	25.2	1.94 J
	DU-26	ISM	0-1	DU-26 (0-1)A	11/09/2022	1.68	18.2	19.9	147	57.2	2,040 J	14,300 J	5.95	10.9	43.8	23.4	23.2	37	10.5	251	15.5	470	39.3	118	742	3,530	558	698	590	653	**93.3** J
			0-1 FR	DU-26 (0-1)B	11/09/2022	1.79	16.7	17.8	89.9	44	1,200	7,390 J	6.73	12.7	43.4	33	31.6	45.4	13.1	232	19.9	321	42.9	149	596	2,170	593	710	512	511	**76.9** J
			0-1 FR	DU-26 (0-1)C	11/09/2022	1.87	16.8	17.6	102	45.8	1,460	9,510 J	6.26	10.9	43.9	28.6	28.8	41.4	12.3	243	18.5	363	38.2	141	585	2,520	649	736	536	579	**80.6** J
			1-2	DU-26 (1-2)A	11/10/2022	0.875	9.88	11.9	53.2	25.8	830	5,470 J	3.25	5.24	20.7	11.2	13.1	18.6	4.71	128	10.4	359	15.6	71.5	323	1,410	253	334	266	373	**42.7** J
			1-2 FR	DU-26 (1-2)B	11/10/2022	0.742	5.38	6.98	30.7	13.5	451	2,970	2.83	5.22	15.3	16	13	17.2	6.14	108	10.3	162	16.3	56.6	202	806	160	224	208	245	**28.1**
			1-2 FR	DU-26 (1-2)C	11/10/2022	0.764	5.06	6.12	30.2	15.3	446	3,160	1.89	3.31	12.5	8.86	8.85	13	3.48	85.1	6.42	207	12	45	196	824	172	205	160	228	**24.8**
			2-3	DU-26 (2-3)A	11/11/2022	0.387	3.2	3.66	18.8	8.94	281	2,130	0.85	1.55 J	6.23	4.13	3.74	6.53	1.47 J	46.6	3.41	112	6.76	24.8	116	497	54.1	85.4	84.3	127	14.3 J
			2-3 FR	DU-26 (2-3)B	11/11/2022	0.402 J	2.87	4.42	30.9	10.1	646	4,850 J	0.998	3.86	10.6	14.6	5.93	8.12	6.24	89.8	7.63	116	3.12	19.6	132	1,050	74.9	122	204	2,160	**23.6** J
			2-3 FR	DU-26 (2-3)C	11/11/2022	0.433 J	2.84	2.87	14.3	6.21	174	1,140	1.18	1.49 J	7.41	3.81	4.03	5.78	1.5 J	31	2.46	62.7	4.11	18.8	85.4	305	97	116	77.1	80.2	11.9 J
			0-1	DU-26 (0-1) M	--	1.78	17.2	18.4	113	49.0	1,567 J	10,400 J	6.31	11.5	43.7	28.3	27.9	41.3	12.0 J	242	18.0	385	40.1	136	641	2,740	600	715	546	581	**83.6** J
			1-2	DU-26 (1-2) M	--	0.794	6.77	8.33	38.0	18.2	576	3,867 J	2.66	4.59	16.2	12.0	11.7	16.3	4.78 J	107	9.04	243	14.6	57.7	240	1,013	195	254	211	282	**31.9** J
			2-3	DU-26 (2-3) M	--	0.407 J	2.97	3.65	21.3	8.42	367 J	2,707 J	1.01	2.30 J	8.08	7.51 J	4.57	6.81	3.07 J	55.8	4.50	96.9	4.66	21.1	111	617 J	75.3	108	122	789 J	**16.6** J
Central Parcel Concrete Slab	DU-42 (Within DU-16)	Composite	0-1	DU-42 (0-1)	11/30/2022	1.1	28.3	9.54	158	91.5	302	368	0.215 U	0.723 U	1.31 J	2.36 J	2.56	3.21	0.417 U	104	1.20 U	49.4	13.2	159	1,050	598	10.6	25.4	49.1	162	**60.7** J
			1-2	DU-42 (1-2)	11/30/2022	0.49 J	10.7	3.13	65.1	30.6	110	154 J+	0.148 U	0.374 U	0.357 U	0.243 U	0.217 U	0.259 U	0.309 U	36.4	0.856 U	20.5	2.62	58.1	364	216	3.05	7.21	13.5	57.3	**22.7** J
			2-3	DU-42 (2-3)	11/30/2022	0.267 U	3.93	0.51 U	22.3	11.7	47.9	81 J+	0.227 U	0.23 U	0.219 U	0.327 U	0.295 U	0.354 U	0.423 U	15.4	0.893 U	8.28	0.267 U	21.8	149	95.9	1.06	2.25	5.35	24.3	8.27 J

Please see notes at end of table.

Table 3b
Soil Results - Dioxins/Furans - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Dioxins/Furans by EPA Method 1613B Concentrations in pg/g 2,3,7,8-TCDD	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	Total D/F TEQ (Mammal)
Human Health ISM PRG						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15
Human Health ISM Hot Spot						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,500
East Parcel	DU-27	ISM	0-1	DU-27 (0-1)	10/05/2022	1.11	17.8	25.7	161	63.7	3,150 E	21,000 E	2.37	7.99	22.1	33.8	19.3	27.6	14.5	422	28.4	998	10.8	74.3	744	5,340	87.4	310	605	1,280	**103**
			1-2	DU-27 (1-2)	10/05/2022	0.833	7.86	14.6	95.0	33.8	2,250 J	18,100 J	1.91	5.41	20.1	29.3	17.7	22.6	10.8	389	30.6	1,100	7.66	45.0	417	3,850	139 JN	298 JN	494	1,190	**69.9** J
			2-3	DU-27 (2-3)	10/05/2022	0.414 J	2.70	4.19	28.9	9.80	652	5,280 J	1.64	2.70	13.1	11.9	6.05	10.2	4.43	90.2	7.35	221	3.18	17.4	141	1,130	94.6 JN	174 JN	181	287	**24.0** J
	DU-28	ISM	0-1	DU-28 (0-1)	09/14/2022	0.217 U	1.94 J	3.45	20.7	7.68	717	6,260 J	1.01	1.16 J	4.30	7.82	2.97	4.06	2.31 J	140	8.12	622	2.86	6.89	106	1,240	19.5	41.8	143	553	**19.1** J
			1-2	DU-28 (1-2)	09/14/2022	0.541	4.77	6.61	46.8	18.0	1,060	8,530	2.02	2.37	7.07	10.5	5.65	7.56	4.71	161	9.93	537	7.05	29.1	218	1,790	32.3	73.2	209	540	**32.7**
			2-3	DU-28 (2-3)	09/14/2022	0.513	2.64	4.37	14.8	6.06	468	3,910	1.14	1.08	3.41	6.70	1.97	2.89	2.16	72.9	5.63	283	11.7	34.1	127	871	12.9	27.9	99.2	271	14.9
	DU-29	ISM	0-1	DU-29 (0-1)	09/15/2022	0.731	8.83	10.7	115	40.9	1,110	7,610 J	1.62	3.27	8.89	12.0	7.25	11.3	5.91	343	5.42	221	17.0	72.3	577	1,960	56.7 JN	125 JN	383	672	**49.7** J
			1-2	DU-29 (1-2)	09/15/2022	0.176 U	1.63 J	4.00	24.7	6.77	473	3,380	0.697	1.58 U	4.59	4.77	2.43 J	4.21	2.01 J	139	2.72	98.7	2.17	4.00	106	820	28.9 JN	65.5	149	282	**15.3** J
			2-3	DU-29 (2-3)	09/15/2022	0.151 U	0.445 U	4.19	24.0	6.82	509	3,860	0.658	0.80 U	5.84	6.69	3.22	5.12	2.77	152	4.16	139	2.84	3.92	111	863	41.3 JN	84.0 JN	177	321	**15.3** J
	DU-30	ISM	0-1	DU-30 (0-1)	09/16/2022	1.210	8.87	11.5	78.5	27.1	1,460	10,100 J	1.97	3.63	14.3	11.1	9.87	13.9	7.99	201	9.86	238	12.0	43.4	418	2,960	139 JN	237 JN	366	502	**50.5** J
			1-2	DU-30 (1-2)	09/16/2022	0.463 U	3.22	5.00	40.4	10.4	676	4950 J	0.836	1.61 U	7.19	6.54	5.14	6.83	0.870 U	89.8	4.13	108	4.71	13.7	175	1200	72.2 JN	121 JN	176	210	**22.4** J
			2-3	DU-30 (2-3)	09/16/2022	0.135 U	2.46 J	3.67	23.6	8.49	448	3030	0.900	1.09 J	3.68	3.78	2.95	4.83	0.444 U	42.0	2.55	56.5	3.29	12.9	127	795	56.1 JN	95.7 JN	112	111	14.4 J
	DU-31	ISM	0-1	DU-31 (0-1)	11/03/2022	0.638	9.32	12.5	104	34.2	1,840	12,000 J	2.5	4.88	12	14.6	12.1	16.2	9.35	192	11.8	281	7.06	43.5	404	2,920	46.8	147	382	540	**58.4** J
			1-2	DU-31 (1-2)	11/03/2022	0.318 U	3.03	3.52	27.1	8.14	624	4,430 J	1.04	2.21	4.31	5.27	4.77	6.36	3.09	84.3	5.55	182	3.35	10.6	125	994	25.1	57.5	134	243	**19.0** J
			2-3	DU-31 (2-3)	11/03/2022	0.288 U	1.67	2.36	16.3	4.87	357	2,580	0.642	0.985	2.3	3.19	2.73	3.37	2.34	42.7	2.67	105	3.4	6.7	76.1	570	16.2	28.5	74.2	122	10.9
	DU-32	ISM	0-1	DU-32 (0-1)	09/22/2022	0.16 U	5.43	6.79	55.1	15.6	1,130	8,240 J	2.92	3.28	8.65	9.74	6.97	10.2	7.18	123	8.53	204	4.79	25.2	240	1,800	32.9 JN	79.0	262	349	**34.8** J
			1-2	DU-32 (1-2)	09/22/2022	0.136 U	0.364 U	0.546 U	11.1	3.21	296	2,240	2.88	1.53 J	3.17	3.11	2.00 J	0.397 U	0.391 U	34.0	0.816 U	61.1	1.72	1.71	61.6	474	20.8	28.6	61.3	91.7	7.54 J
			2-3	DU-32 (2-3)	09/22/2022	0.122 U	0.328 U	0.504 U	13.7	4.28	282	1,980	1.70	1.02 J	2.43 J	2.71	1.72 J	2.33 J	1.78 J	30.8	1.71 J	49.3	1.32	0.328 U	59.6	447	13.3	19.9	62.5	83.1	7.59 J
	DU-33	ISM	0-1	DU-33 (0-1)	09/20/2022	0.670	5.6	8.21	54.0	20.6	876	6,150	7.25	4.50	18.0	11.4	14.1	11.9	6.38	101	6.90	149	18.8	48.3	296	1,490	328 JN	347 JN	259	266	**36.9**
			1-2	DU-33 (1-2)	09/20/2022	0.254	2.64	4.09	22.5	8.87	493	3,340	3.92	2.49 J	5.79	5.75	3.98	4.11	2.73	46.6	2.57	58.1	8.22	18.6	122	813	100 JN	87.2 JN	121	122	**16.7** J
			2-3	DU-33 (2-3)	09/20/2022	0.379	2.19 J	1.40 J	15.3	4.01	321	1,970	3.86	2.86	4.85	4.28	3.26	3.86	2.67	34.9	1.32 J	38.0	7.36	12.4	88.8	553	73.3 JN	70.6 JN	94.1	91.1	12.1 J
	DU-34	ISM	0-1	DU-34 (0-1)	09/27/2022	0.637	9.19	14.6	105	31.2	1,910	12,200 J	2.70	6.22	14.3	17.6	12.6	16.3	10.8	195	10.7	194	21.0	55.0	467	3,010	75.1 JN	175 JN	439	515	**60.3** J
			1-2	DU-34 (1-2)	09/27/2022	0.459 J	4.31	6.86	48.9	16.9	873	5,940 J	2.06	2.44 J	6.56	7.33	5.12	7.38	4.20	95.0	5.02	120	9.02	22.3	201	1,370	62.0 JN	96.8 JN	211	248	**28.2** J
			2-3	DU-34 (2-3)	09/27/2022	0.16 U	1.10 J	2.43 J	18.5	5.31	342	2,160	0.882	1.21 J	2.49 J	3.39	2.61	3.48	201	36.0	0.388 U	43.7	5.2	10.5	78.6	538	29.0 JN	39.8 JN	78.5	91.4	**30.2** J
	DU-35	ISM	0-1	DU-35 (0-1)	10/07/2022	0.468	4.95	8.91	67.0	18.7	1,340	10,400 J	5.27	4.65	9.97	10.3	8.81	11.3	7.82	143	8.93	230	10.1	30.5	258	2,520	56.4	104	287	419	**40.5** J
			1-2	DU-35 (1-2)	10/07/2022	0.211 U	1.71 J	3.15	21.8	6.44	423	2,990	3.27	2.03 J	3.38	3.73	2.64	3.23	2.05 J	41.5	2.41 J	74.4	5.86	11.1	93.5	710	31.0 JN	37.8 JN	85.7	122	13.1 J
			2-3	DU-35 (2-3)	10/07/2022	0.197 U	1.25 J	2.01 J	16.0	4.76	347	2,640	2.09	1.23 J	2.25 J	3.03	1.83 J	2.66	1.86 J	37.5	2.12 J	60.5	3.62	3.56	75.0	590	17.8 JN	25.7 JN	77.5	105	10.2 J
	DU-36	ISM	0-1	DU-36 (0-1)	11/01/2022	0.738	7.39	8.54	59.9	24.2	1,210	8,990	7.12	5.53	11.3	10.1	13.1	11.1	5.74	146	11.9	323	16	47.3	276	1,990	117	166	269	420	**42.1**
			1-2	DU-36 (1-2)	11/01/2022	0.695	6.02	7.34	48.5	18.2	1,160	8,400	6.6	4.81	9.47	9.95	13.1	9.59	5.5	112	8.75	259	14	39.9	255	2,090	322	312	224	354	**37.0**
			2-3	DU-36 (2-3)	11/01/2022	1.15	5.8	6.67	33.5	13	661	4,640	11.2	6.08	9.55	7.25	7.18	8.45	3.56	80.3	5.81	144	24.3	48	169	1,090	126	118	154	222	**28.0**
	DU-38	ISM	0-1	DU-38 (0-1)A	11/14/2022	0.243 U	5.05	5.91	46.9	16.1	836	5,470 J	2.74	3.31	6.19	7.78	5.56	7.17	4.07	81.6	4.52	115	3.5	22.1	193	1,350	45.5	74.3	174	241	**27.6** J
			0-1 FR	DU-38 (0-1)B	11/14/2022	0.451 J	4.31	6.37	46.4	15.2	876	5,530 J	3.64	4.29	6.72	7.77	5.27	7.21	4.71	88.5	4.92	113	6.48	26.9	204	1,420	44.5	76.1	179	245	**27.9** J
			0-1 FR	DU-38 (0-1)C	11/14/2022	0.664	5.52	7.25	45.5	17.1	881	5,830 J	3.31	3.56	5.63	7.57	5.86	7.98	4.44	87.1	5.53	149	9.91	38.2	223	1,430	46.3	72.9	176	250	**29.4** J
			1-2	DU-38 (1-2)A	11/16/2022	0.259 U	2.87	3.78	24.7	7.88	488	3,210	2.41	2.02 J	3.56	4.45	3.28	3.97	2.78	51.1	3.45	71.1	1.84	16.5	116	797	44	49.3	99.5	140	**15.9** J
			1-2 FR	DU-38 (1-2)B	11/16/2022	0.300 U	1.65 J	2.47 J	13.3	4.59	252	1,700	7.39	2.63	3.38	2.91	1.99 J	2.66	1.35 J	26.9	1.87 J	41.5	2.38	10.3	66.9	411	59.9	37.6	53.2	72.6	9.89 J
			1-2 FR	DU-38 (1-2)C	11/16/2022	0.421	3.52	4.66	27.7	8.85	557	3,650	3.08	2.48 J	4.85	6.29	3.85	4.82	3.21	58.8	3.31	88.4	6.31	16.6	128	906	39.9	55.3	118	162	**19.0** J
			2-3	DU-38 (2-3)A	11/17/2022	0.224 U	1.48 J	2.2 J	12.8	4.76	270	1,870	2.42	1.69 J	2.49	2.67 J	2.04 J	2.36 J	1.23 J	27.9	1.91 J	49.6	1.17	3.43	60.5	444	23.1	27.4	56.1	81.4	9.01 J
			2-3 FR	DU-38 (2-3)B	11/17/2022	0.306 U	1.77 J	1.76 J	9.7	3.09	218	1,450	4.3	1.89 J	2.6	2.38 J	1.19 J	2.24 J	0.656 U	22.3	1.34 J	34.1	2.27	7.54	54.7	359	33.2	23.6	41.5	60.9	8.12 J
			2-3 FR	DU-38 (2-3)C	11/17/2022	0.286 J	1.97 J	2.76	14.9	6.76	312	1,970	2.1	1.36 J	2.18 J	2.78	1.75 J	2.62	1.44 J	28.8	1.46 J	51.9	3.31	15.6	90.5	535	25.3	27	52.7	80.2	10.5 J
			0-1	DU-38 (0-1) M	--	0.453 J	4.96	6.51	46.3	16.1	864	5,610 J	3.23	3.72	6.18	7.71	5.56	7.45	4.41	85.7	4.99	126	6.63	29.1	207	1,400	45.4	74.4	176	245	**28.3** J
			1-2	DU-38 (1-2) M	--	0.327	2.68 J	3.64 J	21.9	7.11	432	2,853	4.29 J	2.38 J	3.93	4.55	3.04 J	3.82	2.45 J	45.6	2.88 J	67.0	3.51 J	14.5	104	705	47.9	47.4	90.2	125	14.9 J
			2-3	DU-38 (2-3) M	--	0.272 J	1.74 J	2.24 J	12.5	4.87	267	1,763	2.94	1.65 J	2.42 J	2.61 J	1.66 J	2.41 J	1.11 J	26.3	1.57 J	45.2	2.25	8.86 J	68.6	446	27.2	26.0	50.1	74.2	9.21 J
East Parcel Concrete Slab	DU-37	Composite	0-1	DU-37 (0-1)	11/28/2022	0.352 U	0.384 U	0.339 U	0.319 U	0.314 U	13.2	148 J+	0.222 U	0.171 U	0.144 U	0.138 U	0.124 U	0.139 U	0.155 U	1.83 J	0.429 U	4.64 J	0.352 U	0.384 U	5.66	24.8	0.393	1.84	2.64	5.34	0.678 J
			1-2	DU-37 (1-2)	11/28/2022	0.147 U	0.394 U	0.181 U	0.175 U	0.172 U	15.9	263 J+	0.149 U	0.143 U	0.122 U	0.180 U	0.157 U	0.186 U	0.208 U	2.75	0.673 U	7.75	0.147 U	0.394 U	5.57	28.8	0.149 U	1.16	2.23	7.31	0.632 J
			2-3	DU-37 (2-3)	11/28/2022	0.370 U	0.338 U	0.338 U	0.299 U	0.294 U	4.81	93.7 J+	0.161 U	0.274 U	0.237 U	0.191 U	0.160 U	0.187 U	0.242 U	0.488 U	0.511 U	0.949 U	0.370 U	0.338 U	0.338 U	9.08	0.161 U	0.274 U	0.242 U	0.511 U	0.569 J
	DU-39	Composite	0-1	DU-39 (0-1)	11/29/2022	0.331 U	0.744 U	0.479 U	6.77	3.11	124	778	0.231 U	0.184 U	0.942 J	0.538 U	0.471 U	1.66 J	0.627 U	9.55	1.38 J	10.9	0.443	0.744 U	30.1	206	0.231 U	6.6	17.1	24.2	3.68 J
			1-2	DU-39 (1-2)	11/29/2022	0.318 U	0.357 U	0.559 U	2.32 J	0.496 U	51.3	353	0.116 U	0.130 U	0.121 U	0.252 U	0.229 U	0.251 U	0.310 U	5.23	0.881 U	8.9	0.318 U	0.357 U	9.21	85.3	0.116 U	2.77	7.67	14.8	1.38 J
			2-3	DU-39 (2-3)	11/29/2022	0.278 U	0.376 U	0.461 U	2.36 J	0.441 U	51	326	0.222 U	0.178 U	0.166 U	0.211 U	0.186 U	0.205 U	0.231 U	6.05	0.646 U	12.3	0.278 U	0.376 U	9.94	84	0.222 U	2.72	8.52	17.9	1.36 J
	DU-40	Composite	0-1	DU-40 (0-1)	11/18/2022	0.271 U	0.351 U	0.343 U	0.322 U	0.317 U	19.1	118 J+	0.197 U	0.218 U	0.168 U	0.391 U	0.359 U	0.397 U	0.455 U	2.38 J	0.759 U	6.12	0.271 U	0.315 U	5.88	32.9	0.197 U	0.218 U	0.455 U	4.67	0.734 J
			1-2	DU-40 (1-2)	11/18/2022	0.243 U	0.225 U	0.291 U	0.265 U	0.261 U	13.5	83.9 J+	0.196 U	0.194 U	0.174 U	0.194 U	0.171 U	0.202 U	0.231 U	0.354 U	0.374 U	0.933 U	0.243 U	0.225 U	3.83	23.4	0.196 U	0.194 U	0.231 U	1.42	0.518 J
			2-3	DU-40 (2-3)	11/18/2022	0.280 U	0.353 U	0.325 U	0.321 U	0.316 U	8.4	58.3 J+	0.179 U	0.232 U	0.215 U	0.159 U	0.143 U	0.170 U	0.193 U	0.763 U	0.794 U	1.17 U	0.280 U	0.353 U	3.25 U	15.1	0.179 U	0.232 U	0.193 U	0.794 U	0.552 J
	DU-43 (Within DU-31)	Composite	0-1	DU-43 (0-1)	11/21/2022	0.269 U	0.420 U	0.481 U	5.73	1.84 J	115	826	0.240 U	0.176 U	0.83 J	0.567 U	0.495 U	0.550 U	0.666 U	9.36	0.98 U	6.34	0.269 U	0.42 U	25.7	191	0.240 U	6.02	15.3	21.6	3.00 J
			1-2	DU-43 (1-2)	11/21/2022	0.225 U	0.366 U	0.418 U	2.28 J	0.389 U	46.8	314 J+	0.230 U	0.163 U	0.139 U	0.298 U	0.282 U	0.299 U	0.344 U	3.1	0.548 U	2.59 J	0.225 U	0.366 U	9.19	78.2	0.230 U	2.33	5.86	7.51	1.26 J
			2-3	DU-43 (2-3)	11/21/2022	0.246 U	0.322 U	0.508 U	0.473 U	0.466 U	18.1	130 J+	0.241 U	0.176 U	0.149 U	0.168 U	0.150 U	0.175 U	0.198 U	1.14 J	0.639 U	1.00 U	0.246 U	0.322 U	0.508 U	30.8	0.241 U	0.176 U	0.198 U	2.66	0.663 J
	DU-44 (Within DU-36)	Composite	0-1	DU-44 (0-1)	12/01/2022	0.266 U	0.703 U	0.581 U	1.29 J	1.03 J	23	226 J+	0.234 U	0.286 U	0.255 U	1.20 U	1.12 U	1.21 U	1.47 U	2.84	0.814 U	6.71	1.47	0.703 U	8.10	40.1	0.234 U	0.286 U	1.99	6.52	1.38 J
			1-2	DU-44 (1-2)	12/01/2022	0.420 U	0.548 U	0.666 U	0.602 U	0.593 U	6.33	46 J+	0.245 U	0.277 U	0.249 U	0.587 U	0.538 U	0.62 U	0.693 U	0.713 U	0.737 U	1.02 U	0.525	0.548 U	0.666 U	11.5	0.245 U	0.277 U	0.693 U	0.737 U	0.837 J
			2-3	DU-44 (2-3)	12/01/2022	0.396 U	0.485 U	0.495 U	0.428 U	0.421 U	6.19	45.1 J+	0.281 U	0.226 U	0.217 U	0.386 U	0.357 U	0.433 U	0.495 U	0.769 U	0.883 U	1.47 U	0.396 U	0.485 U	0.495 U	10.7	0.281 U	0.226 U	0.495 U	0.883 U	0.725 J

Please see notes at end of table.

Table 3b
Soil Results - Dioxins/Furans - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Dioxins/Furans by EPA Method 1613B Concentrations in pg/g																										
						2,3,7,8-TCDD	1,2,3,7,8-PeCDD	1,2,3,4,7,8-HxCDD	1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDD	OCDD	2,3,7,8-TCDF	1,2,3,7,8-PeCDF	2,3,4,7,8-PeCDF	1,2,3,4,7,8-HxCDF	1,2,3,6,7,8-HxCDF	2,3,4,6,7,8-HxCDF	1,2,3,7,8,9-HxCDF	1,2,3,4,7,8-HpCDF	1,2,3,4,7,8,9-HpCDF	OCDF	Total TCDD	Total PeCDD	Total HxCDD	Total HpCDD	Total TCDF	Total PeCDF	Total HxCDF	Total HpCDF	Total D/F TEQ (Mammal)
Human Health ISM PRG						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15
Human Health ISM Hot Spot						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,500
East Parcel Soil Berms	DU-41	ISM	0-1	DU-41 (0-1)A	10/24/2022	2.75	44.9	81.2	421	175	8,440 J	51100 J	4.13	16.8	43.8	59.1	40.9	59.6	23.8	642	39.1	858	23.1	169	2,080	15,200	190	732	1,250	1,830	**255** J
			0-1 FR	DU-41 (0-1)B	10/24/2022	2.36	33.4	56.8	315	123	6,450 J	40400 J	4.47	14.2	40.3	46.9	28.5	51.4	20.6	546	35.3	849	22.7	138	1,510	11,800	208	643	1,080	1,530	**196** J
			0-1 FR	DU-41 (0-1)C	10/24/2022	2.47	35.6	63.1	342	140	7,200	43900	3.79	14.9	35.3	50.2	33.4	54.6	21.3	573	35.3	828	22.8	146	1,690	13,200	195	618	1,190	1,640	**211**
			1-2	DU-41 (1-2)A	10/26/2022	2.09	39.2	71.2	390	161	7,780 J	43,600 J	3.44	14.6	50.4	53.7	40.1	58.2	20.4	627	39.1	946	21.1	162	1,790	13,100	417	942	1,390	1,730	**234** J
			1-2 FR	DU-41 (1-2)B	10/26/2022	1.73	33.2	59	316	125	6,570 J	37,900 J	3.55	13.4	44.7	43.6	32.7	49.9	19	569	33.6	849	20	127	1,570	11,600	374	860	1,210	1,580	**197** J
			1-2 FR	DU-41 (1-2)C	10/26/2022	2.66	42.5	72.1	413	166	7,870 J	43,500 J	3.94	15.9	49	53.5	36.7	59.2	24.2	630	34.4	770	23.9	164	1,900	13,100	334	833	1,350	1,670	**242** J
			2-3	DU-41 (2-3)A	10/28/2022	1.33	26.2	49.4	276	98.4	4,960 J	29,300 J	2.52	10.4	32.9	31.5	26.5	39.6	14.8	416	24.5	660	12	100	1,130	8,280	252	600	857	1,180	**155** J
			2-3 FR	DU-41 (2-3)B	10/28/2022	1.11	16.8	32.1	187	68.4	3,390 J	21,600 J	1.8	7.44	22.2	26.7	19	26.9	12.1	305	19.5	598	9.68	66.2	764	5,720	158	390	625	928	**106** J
			2-3 FR	DU-41 (2-3)C	10/28/2022	1.23	22.6	42	235	85	4,350 J	27,100 J	2.57	9.55	26.9	32.1	21.7	34.3	14.3	375	23.3	563	11.4	88.5	979	7,330	205	484	785	1,050	**135** J
			0-1	DU-41 (0-1) M	--	2.53	38.0	67.0	359	146	7,363 J	45,133 J	4.13	15.3	39.8	52.1	34.3	55.2	21.9	587	36.6	845	22.9	151	1,760	13,400	198	664	1,173	1,667	**221** J
			1-2	DU-41 (1-2) M	--	2.16	38.3	67.4	373	151	7,407 J	41,667 J	3.64	14.6	48.0	50.3	36.5	55.8	21.2	609	35.7	855	21.7	151	1,753	12,600	375	878	1,317	1,660	**224** J
			2-3	DU-41 (2-3) M	--	1.22	21.9	41.2	233	83.9	4,233 J	26,000 J	2.30	9.13	27.3	30.1	22.4	33.6	13.7	365.3	22.4	607	11.0	84.9	957.7	7,110	205	491	756	1,053	**132** J

Notes:
ISM = Incremental Sampling Methodology.
bgs = Below ground surface.
EPA = United States Environmental Protection Agency.
M = Mean. These results are the mean of the field replicates collected at this decision unit.
FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.
pg/g = Picograms per gram (parts per trillion).
Total D/F TEQ = Total 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalent
Bolded values exceed the Preliminary Remediation Goal (PRG).
Shaded values exceed the hot spot level.
Italicized values represent a method detection limit that is above one or more applicable screening levels.
U = Analyte was not detected.
J = Result is estimated.
JN = The analyte was tentatively identified and did not meet method criteria for confirmation. The reported result is an estimated maximum possible concentration (EMPC).
PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

Table 4a
Soil Results - PAHs and Dibenzofuran - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PAHs and Dibenzofuran by EPA Method 8270E-SIM, Concentrations in µg/kg																					
						Acenaphthene	Acenaphthylene	Anthracene	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(g,h,i) perylene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Dibenzofuran	Total HPAH	Total LPAH	cPAHs (BaP Eq.)
					Ecological ISM PRG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	5,600	29,000	--
					Ecological ISM Hot Spot	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	100	56,000	290,000	--
West Parcel	DU-1	ISM	0-1	DU-1 (0-1)	07/20/2022	14.1	33.9	48.5	187	308	394	122 J	232	293	53.3	373	12	249	15.9	24.5	18.9	185	449	7.76 J	2,660 J	337	446 J
			1-2	DU-1 (1-2)	07/20/2022	9.66 U	46.3	49	164	286	342	113 J	249	266	35.8	404	12.9	261	28.4	32.9	43.2	235	502	**10.2**	2,620 J	424 J	400 J
			2-3	DU-1 (2-3)	07/20/2022	8.52 J	35.2	40.9	136	234	279	82 J	187	207	31.1	331	9.12 J	202	5.52 J	7.62 J	15.8	169	416	4.80 U	2,110 J	286 J	328 J
	DU-2	ISM	0-1	DU-2 (0-1)	08/01/2022	10.4	5.05 U	14.2	78.0	116	143	49.3 J	103	112	15.6	144	6.68 J	106	5.05 U	5.58 J	9.09 J	78.7	153	5.11 J	1,020 J	127 J	165 J
			1-2	DU-2 (1-2)	08/01/2022	4.70 U	4.70 U	19.0	81.9	75.1	93.2	35.0 J	50.3	87.5	9.75	158	4.70 U	56.7	4.70 U	4.70 U	4.88 J	90.2	145	4.70 U	792 J	123 J	108 J
			2-3	DU-2 (2-3)	08/01/2022	5.00 U	5.00 U	5.00 U	15.5	21.9	31.6	11.0 J	27.0	24.9	5.00 U	29.1	5.00 U	26.3	5.00 U	5.00 U	5.00 U	12.5	33.2	5.00 U	223 J	27.5	31.9 J
	DU-3	ISM	0-1	DU-3 (0-1)	08/03/2022	5.54 J	4.99 J	13.2	65.5	105	138	54.7 J	90.1	110	16.4	140	4.78 U	104	4.78 U	6.89 J	11.0	76.8	152	4.78 U	976 J	121 J	153 J
			1-2	DU-3 (1-2)	08/03/2022	5.10 U	9.18 J	8.37 J	56.7	90.1	116	43.6 J	92.8	99.7	11.5	169	5.10 U	96.8	5.10 U	5.10 U	8.24 J	87.1	208	5.10 U	984 J	121 J	129 J
			2-3	DU-3 (2-3)	08/03/2022	4.95 U	6.86 J	8.05 J	43.3	73.4	96.1	32.5 J	75.6	78.2	7.59 J	116	4.95 U	79.3	5.64 J	16.5	12.3	64.9	143	4.95 U	745 J	114 J	103 J
	DU-4	ISM	0-1	DU-4 (0-1)	08/04/2022	7.89 J	36.9	36.3	160	310	354	107 J	255	265	37.3	319	9.26 J	277	12.3	25.8	45.7	167	432	5.73 J	2,520 J	329 J	428 J
			1-2	DU-4 (1-2)	08/04/2022	23.8 U	34.3 U	283	1460	1240	1140	261 J	650	2220	196	1300	109	493	53.6	96.4	59.0	2960	2940	**33.4**	**11,900** J	3,540	1,750 J
			2-3	DU-4 (2-3)	08/04/2022	6.77 J	91.5	54.5	223	561	657	191 J	489	448	62.0	643	19.4	534	13.3	20.9	47.7	393	844	9.42 J	4,650 J	634 J	767 J
	DU-5	ISM	0-1	DU-5 (0-1)A	07/22/2022	7.41 J	9.82 J	14.5	109	168	239	66.3	119	160	50.7 U	175	6.08 J	131	5.90 J	8.66 J	10.0 J	82.2	207	5.07 U	1,400	139 J	242 J
			0-1 FR	DU-5 (0-1)B	07/22/2022	8.72 J	10.1	23.3	91.3	140	192	66.5 J	87.7	122	18.9	162	6.66 J	108	7.41 J	12.0	13.2	80.8	169	5.69 J	1,180 J	186 J	179 J
			0-1 FR	DU-5 (0-1)C	07/22/2022	10.9	13.1	31.1	106	172	233	77.3 J	107	156	21.8	213	9.26 J	128	6.95 J	10.6	12.6	113	226	7.34 J	1,240 J	173 J	192 J
			1-2	DU-5 (1-2)A	07/25/2022	8.16 J	13.2	29.8	91.2	126	174	55.7 J	81.7	132	16.9	204	7.23 J	93.6	7.06 J	10.0 J	11.1	107	208	5.04 J	1,160 J	155 J	199 J
			1-2 FR	DU-5 (1-2)B	07/25/2022	6.07 J	11.5	22.7	67.0	102	140	38.6 J	73.5	106	14.5	142	6.30 J	82.9	7.04 J	11.6	15.0	81.2	154	5.43 J	921 J	154 J	146 J
			1-2 FR	DU-5 (1-2)C	07/25/2022	9.53 J	24.6	28.9	114	193	265	74.6 J	133	182	24.7	244	7.57 J	158	8.21 J	13.1	20.1	113	289	6.09 J	1,120 J	147 J	177 J
			2-3	DU-5 (2-3)A	07/26/2022	6.04 J	15.8	29.7	95.0	134	172	54.3 J	96.9	150	20.1	191	6.84 J	110	5.74 J	9.36 J	12.6	92.2	218	5.00 U	1,440 J	201 J	241 J
			2-3 FR	DU-5 (2-3)B	07/26/2022	5.28 J	15.7	21.3	76.7	125	170	50.5 J	88.5	140	17.0	151	5.07 J	101	7.89 J	11.2	13.6	74.8	197	5.04 U	1,680 J	217 J	272 J
			2-3 FR	DU-5 (2-3)C	07/26/2022	18.0	21.8	86.9	226	292	378	130 J	163	310	34.2	518	17.7	199	10.2	12.5	16.3	374	629	9.88 J	2,880 J	547	408 J
			0-1	DU-5 (0-1) M	--	9.01 J	11.0 J	23.0	102	160	221	70.0 J	105	146	30.5	183	7.33 J	122	6.75 J	10.4 J	11.9 J	92.0	201	6.03 J	1,273 J	166 J	204 J
			1-2	DU-5 (1-2) M	--	7.92 J	16.4	27.1	90.7	140	193	56.3 J	96.1	140	18.7	197	7.03 J	112	7.44 J	11.6 J	15.4	100	217	5.52 J	1,067 J	152 J	174 J
			2-3	DU-5 (2-3) M	--	9.77 J	17.8	46.0 J	133 J	184	240	78.3 J	116	200	23.8	287 J	9.87 J	137	7.94 J	11.0 J	14.2	180 J	348 J	6.64 J	2,000 J	322 J	307 J
	DU-6	ISM	0-1	DU-6 (0-1)	07/28/2022	8.01 J	6.03 J	12.2	84.2	134	176	61.8 J	94.6	116	16.3	152	5.01 U	111	5.01 U	9.32 J	13.4	68.9	154	5.18 J	1,100 J	120 J	188 J
			1-2	DU-6 (1-2)	07/28/2022	13.4	8.14 J	18.7	95.2	143	194	61.8 J	115	134	18.7	190	8.86 J	130	6.64 J	14.1	18.6	109	211	9.02 J	1,290 J	191 J	204 J
			2-3	DU-6 (2-3)	07/28/2022	15.2	9.17 J	20.1	98.9	159	210	72.4 J	125	151	21.0	212	11.2	142	8.42 J	14.8	22.6	123	238	**11.0**	1,430 J	216 J	226 J
	DU-7	ISM	0-1	DU-7 (0-1)	07/29/2022	5.50 J	5.06 U	9.35 J	55.4	89.6	122	39.8 J	64.3	83.3	11.2	103	5.06 U	75.5	5.06 U	9.21 J	9.30 J	50.1	107	5.06 U	751 J	88.5 J	127 J
			1-2	DU-7 (1-2)	07/29/2022	5.02 U	5.02 J	7.63 J	30.7	49.4	67.2	22.9 J	47.0	47.8	6.59 J	56.3	5.02 U	50.5	5.02 U	7.90 J	11.0	33.9	61.8	5.02 U	440 J	70.5 J	71.1 J
			2-3	DU-7 (2-3)	07/29/2022	5.03 U	5.03 U	6.11 J	22.5	34.5	47.4	16.0 J	33.7	35.2	5.03 U	40.6	5.03 U	36.2	5.03 U	5.03 U	8.78 J	24.7	46.9	5.03 U	316 J	49.7 J	47.8 J
	DU-8	ISM	0-1	DU-8 (0-1)	08/05/2022	5.77 J	4.97 J	12.5	57.3	82.4	115	39.3 J	65.2	80.7	13.1	113	4.77 U	77.4	6.49 J	16.5	14.1	58.1	112	5.47 J	755 J	114 J	121 J
			1-2	DU-8 (1-2)	08/05/2022	4.84 U	5.98 J	11.7	36.7	49.0	79.0	26.1 J	41.1	55.6	7.41 J	73.9	4.84 U	48.0	7.30 J	16.6	16.1	45.9	77.0	5.53 J	494 J	101 J	73.1 J
			2-3	DU-8 (2-3)	08/05/2022	5.02 J	5.57 J	14.4	45.3	57.0	91.1	31.6 J	48.1	66.7	7.94 J	92.1	5.02 U	56.9	8.60 J	19.6	16.7	55.7	92.1	6.23 J	589 J	120 J	84.7 J
	DU-9	ISM	0-1	DU-9 (0-1)	08/08/2022	7.57 J	9.46 J	21.4	81.5	132	180	56.3 J	94.8	117	19.3	160	5.33 J	109	5.69 J	14.2	17.4	84.6	166	5.74 J	1,120 J	160 J	189 J
			1-2	DU-9 (1-2)	08/08/2022	4.79 U	5.27 J	8.43 J	34.2	54.6	76.4	25.4 J	44.7	47.9	6.14 J	66.0	4.79 U	49.6	4.79 U	9.51 J	12.6	34.7	71.6	4.79 U	477 J	75.3 J	77.1 J
			2-3	DU-9 (2-3)	08/08/2022	15.9	9.24 J	27.9	81.6	130	171	57.0 J	96.3	106	12.6	191	7.47 J	110	6.84 J	15.8	21.7	101	202	7.99 J	1,160 J	199 J	180 J
Central Parcel	DU-10	ISM	0-1	DU-10 (0-1)	08/12/2022	54	659	411	1790	3830	3600	1020 J	3480	2720	475	3590	123	3380	99.8	209	395	2000	5480	**23.5** J	**29,400** J	3,850	5,190 J
			1-2	DU-10 (1-2)	08/12/2022	77.9	800	547	1950	3450	3120	993 J	2800	2790	454	3970	376	2740	363	560	1150	3080	5990	**49.4**	**28,300** J	6,590	4,700 J
			2-3	DU-10 (2-3)	08/12/2022	36.3	304	334	1230	1900	1850	565 J	1410	1900	241	2540	97.7	1420	92	187	308	2100	3890	**24.4**	**16,900** J	3,370	2,600 J
	DU-11	ISM	0-1	DU-11 (0-1)A	08/10/2022	70.6	820	455	2030	3990	3750	1300 J	2800	3130	522	4190	198	2920	218	506	799	2370	6630	**46.9**	**31,300** J	5,220	5,400 J
			0-1 FR	DU-11 (0-1)B	08/10/2022	104	1180	751	2130	3970	3820	1270 J	2520	3070	495	4530	511	2680	431	804	1670	4340	6470	**81.9**	**31,000** J	9,360	5,340 J
			0-1 FR	DU-11 (0-1)C	08/10/2022	51.2	390	246	1050	2030	2170	538 J	1340	1550	217	2030	95.4	1420	141	329	539	1190	3200	**25.7**	**15,500** J	2,840	2,720 J
			1-2	DU-11 (1-2)A	08/10/2022	44.5	358	230	1130	1960	1790	547 J	1320	1660	261	1920	122	1340	167	400	600	1230	3130	**48.6**	**15,100** J	2,980	2,650 J
			1-2 FR	DU-11 (1-2)B	08/10/2022	16.4	228	141	564	1050	994	277 J	756	904	138	943	70.1	779	107	230	345	682	1570	**15.5**	**7,980** J	1,710	1,430 J
			1-2 FR	DU-11 (1-2)C	08/10/2022	18.6	270	172	845	1510	1400	417 J	1060	1230	212	1310	59.0	1080	113	273	447	779	2260	**17.5**	**11,300** J	2,020	2,060 J
			2-3	DU-11 (2-3)A	08/10/2022	25.1	292	214	1040	1950	1760	495 J	1690	1650	293	1860	88.9	1570	137	318	496	1190	3000	**24.1**	**15,300** J	2,620	2,690 J
			2-3 FR	DU-11 (2-3)B	08/10/2022	42.8	445	345	1770	3270	2810	827 J	2450	2630	443	3120	157	2380	159	365	609	1870	5110	**32.1**	**24,800** J	3,830	4,420 J
			2-3 FR	DU-11 (2-3)C	08/10/2022	64.7	733	666	2130	3780	3460	900 J	2820	2880	506	4400	456	2780	310	582	870	3980	6540	**61.3**	**30,200** J	7,350	5,130 J
			0-1	DU-11 (0-1) M	--	75.3	797	484	1,737	3,330	3,247	1,036 J	2,220	2,583	411	3,583	268 J	2,340	263	546	1,003	2,633	5,433	**51.5**	**25,933** J	5,807	4,487 J
			1-2	DU-11 (1-2) M	--	26.5	285	181	846	1,507	1,395	414 J	1,045	1,265	204	1,391	83.7	1,066	129	301	464	897	2,320	**27.2** J	**11,460** J	2,237	2,047 J
			2-3	DU-11 (2-3) M	--	44.2	490	408	1,647	3,000	2,677	741 J	2,320	2,387	414	3,127	234 J	2,243	202	422	658	2,347 J	4,883	**39.2**	**23,433** J	4,600	4,080 J
	DU-12	ISM	0-1	DU-12 (0-1)	08/16/2022	11.3	35.9	35.9	201	279	321	107 J	197	295	39.6	345	10.5	213	16.8	39	65.6	154	475	7.01 J	2,470 J	352	393 J
			1-2	DU-12 (1-2)	08/16/2022	9.06 J	9.63 J	17.2	83.3	101	130	41.4 J	69.5	115	12.7	169	7.5 J	79.1	6.64 J	14	23.9	109	196	5.85 J	997 J	190 J	143 J
			2-3	DU-12 (2-3)	08/16/2022	4.97 U	8.42 J	10.2	51.1	64.3	77.5	25.5 J	43.8	65.4	7.47 J	89.7	4.97 U	50.6	4.97 U	9.07 J	26.2	44.4	109	4.97 U	584 J	103 J	90.0 J
	DU-13	ISM	0-1	DU-13 (0-1)A	08/29/2022	8.01 J	46.9	44.9	196	284	328	94.5 J	250	309	36.8	316	11.5	233	26.6	58.9	94.7	177	433	8.41 J	2,480 J	442 J	398 J
			0-1 FR	DU-13 (0-1)B	08/29/2022	6.05 J	68.3	55.4	788	785	1070	368 J	617	985	127	1310	9.38 J	670	24.4	55.3	85.4	196	1210	8.20 J	**7,930** J	476 J	1,170 J
			0-1 FR	DU-13 (0-1)C	08/29/2022	7.84 J	37.2	32.1	206	314	340	95.6 J	291	321	41.8	313	10.9	262	24.9	55.2	82.4	160	444	7.23 J	2,630 J	386 J	438 J
			1-2	DU-13 (1-2)A	08/30/2022	5.06 U	16.7	15.1	91.9	141	160	44.5 J	152	134	18.8	155	5.54 J	134	9.79 J	17.9	25.5	91.1	199	5.06 U	1,230 J	174 J	199 J
			1-2 FR	DU-13 (1-2)B	08/30/2022	5.06 U	12.1	11.6	85.5	110	130	44.9 J	102	119	15.4	129	5.06 U	96.8	7.91 J	17.2	26.8	60.0	164	5.06 U	997 J	133	157 J
			1-2 FR	DU-13 (1-2)C	08/30/2022	20.4	30.4	68.1	280	316	382	115 J	232	348	42.7	555	31.3	240	21.5	34.3	65.6	426	553	**15.5**	3,060 J	676	450 J
			2-3	DU-13 (2-3)A	08/31/2022	6.59 J	22.0	28.0	134	189	197	68.3 J	178	184	23.9	238	7.56 J	164	11.9	23.6	37.8	122	292	5.20 J	1,670 J	248 J	263 J
			2-3 FR	DU-13 (2-3)B	08/31/2022	5.06 U	11.2	11.9	75.9	98.7	108	38.5 J	89.9	104	13.7	116	5.06 U	84.9	7.66 J	16.0	24.7	59.0	149	5.06 U	879 J	128	140 J
			2-3 FR	DU-13 (2-3)C	08/31/2022	5.05 U	8.98 J	10.5	67.3	87.7	109	31.5 J	83.8	95.3	12.4	106	5.05 U	78.7	6.28 J	11.7	18.4	53.1	126	5.05 U	798 J	108 J	126 J
			0-1	DU-13 (0-1) M	--	7.30 J	50.8	44.1	397 J	461	579 J	186 J	386	538 J	68.5 J	646 J	10.6 J	388 J	25.3	56.5	87.5	178	696 J	7.95 J	4,347 J	435 J	669 J
			1-2	DU-13 (1-2) M	--	10.2 J	19.7	31.6 J	152 J	189	224 J	68.1 J	162	200 J	25.6	280 J	14.0 J	157	13.1 J	23.1	39.3	192 J	305 J	8.54 J	1,762 J	328 J	269 J
			2-3	DU-13 (2-3) M	--	5.57 J	14.1 J	16.8	92.4	125	138	46.1 J	117	128	16.7	153	5.89 J	109	8.61 J	17.1	27.0	78.0	189	5.10 J	1,116 J	161 J	176 J
	DU-14	ISM	0-1	DU-14 (0-1)	08/17/2022	9.79 U	9.79 U	17.6 U	74	99.1	147	43.3 J	97.4	138	17.1	132	8.47 J	98.9	73.9	86.5	65.4	122	145	**22.9**	992 J	301 J	149 J
			1-2	DU-14 (1-2)	08/17/2022	9.64 U	13.5 U	28 U	134	166	259	72.6 J	160	281	34.1	215	14.6	165	72.2	86.8	60.3	220	216	**22.4**	1,700 J	407	257 J
			2-3	DU-14 (2-3)	08/17/2022	10.2 U	13.2 U	23.3 U	107	130	188	57.7 J	108	200	23.8	190	9.51 J	112	39	56.5	45.1	152	202	**14.3**	1,320 J	286 J	195 J
	DU-15	ISM	0-1	DU-15 (0-1)	08/19/2022	5.04 U	8.47 J	14.5	81	92.9	139	47.6 J	74	112	14.2	157	5.04 U	83.4	18.3	24.1	24.4	67.3	158	8.14 J	959 J	144 J	138 J
			1-2	DU-15 (1-2)	08/19/2022	4.93 U	4.93 U	5.52 J	26.6	32.7	53.4	16.2 J	29.8	47.3	5.76 J	39.5	4.93 U	32.6	9.18 J	12	11	30.9	43.8	4.93 U	328 J	66.8 J	49.9 J
			2-3	DU-15 (2-3)	08/19/2022	4.88 U	7.35 J	11.7	64.4	69.5	93.5	33.3 J	49	77.7	9.1 J	116	4.88 U	57.8	4.88 U	7.05 J	10.9	44.9	121	4.88 U	691 J	86.8 J	101 J

Please see notes at end of table.

Table 4a
Soil Results - PAHs and Dibenzofuran - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PAHs and Dibenzofuran by EPA Method 8270E-SIM Concentrations in µg/kg																							
						Acenaphthene	Acenaphthylene	Anthracene	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(g,h,i) perylene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Dibenzofuran	Total HPAH	Total LPAH	cPAHs (BaP Eq.)
					Ecological ISM PRG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	5,600	29,000	--
					Ecological ISM Hot Spot	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	100	56,000	290,000	--
Central Parcel	DU-16	ISM	0-1	DU-16 (0-1)A	09/12/2022	15.2 U	24.4 U	58.4	284	337	456	157 J	229	393	58.7	522	21.3	247	279	317	204	347	540	77.6	3,220 J	968	496 J
			0-1 FR	DU-16 (0-1)B	09/12/2022	10.2 U	21.0	33.8	195	286	387	130 J	227	290	51.4	350	9.77 J	243	44.0	51.6	49.1	183	373	20.4	2,530 J	353	421 J
			0-1 FR	DU-16 (0-1)C	09/12/2022	14.0 U	20.0 U	42.1	227	300	409	138 J	237	317	54.5	423	16.9	246	68.5	81.9	67.5	242	440	23.0	2,790 J	467	444 J
			0-1	DU-16 (0-1) M	--	15.2 U	21.8	44.8	235	308	417	142 J	231	333	54.9	432	16.0 J	245	131 J	150 J	107 J	257	451	40.3 J	2,847 J	596	454 J
			1-2	DU-16 (1-2)	11/07/2022	5 U	13.3	21.7	152	169	217	83 J	131	212	25.7	242	5.95 J	137	19.6	27.2	29.7	107	262	7.51 J	1,630 J	207	246 J
			2-3	DU-16 (2-3)	11/07/2022	5 U	5 U	7.22 J	42.9	38.7	53 J	19.6 J	27.6	51.5	5.09 J	70.9	5 U	32.8	5 U	5.34 J	6.72 J	35.6	74.7	5.00 U	417 J	62.4	56.9 J
	DU-17	ISM	0-1	DU-17 (0-1)	09/02/2022	5 U	5 U	9.99 U	33.4	40.9	67.1	20.7 J	42.9	62.4	8 J	53.3	5 U	42	7.14 J	13.1	16.3	43.2	57.7	5.00 U	428 J	85.1	63.4 J
			1-2	DU-17 (1-2)	09/02/2022	5.04 U	5.04 U	5.04 U	30.1	32.5	51.7	16.2 J	40.5	50.8	6.94 J	48.7	5.04 U	35.1	8.92 J	14.5	12.9	48.4	50	5.04 U	363 J	85.9	51.3 J
			2-3	DU-17 (2-3)	09/02/2022	4.95 U	4.95 U	4.95 U	21.3	21	30.2	10.1 J	22.5	26.3	4.95 U	33.1	4.95 U	21.4	4.95 U	5.16 J	5.68 J	14.1	34	4.95 U	222 J	34.8 J	30.9 J
	DU-18	ISM	0-1	DU-18 (0-1)A	09/29/2022	5.08 U	22.6	25.5	78.4	129	205	57.6 J	174	136	19.2	128	5.08 U	158	7.71 J	12.3	25.4	65.5	151	5.64 J	1,240 J	156	193 J
			0-1 FR	DU-18 (0-1)B	09/29/2022	5.08 U	21.0	27.8	95.4	137	211	62.9 J	159	157	19.9	170	6.01 J	149	7.86 J	12.5	24.4	93.3	193	6.94 J	1,350 J	188 J	203 J
			0-1 FR	DU-18 (0-1)C	09/29/2022	5.97 J	29.0	39.5	125	184	250	85.4 J	209	199	29.4	255	8.19 J	193	7.17 J	11.0	24.5	145	279	6.67 J	1,810 J	263 J	271 J
			1-2	DU-18 (1-2)A	09/30/2022	4.80 U	14.4	16.6	65.0	93.3	143	48.0 J	104	105	13.6	102	5.48 J	96.9	9.71	11.9	19.2	67.9	123	4.80 U	894 J	138 J	138 J
			1-2 FR	DU-18 (1-2)B	09/30/2022	4.96 U	8.03 J	11.1	58.9	74.5	115	31.5 J	73.6	85.9	10.3	95.0	4.96 U	70.9	4.96 U	6.60 J	13.2	38.5	107	4.96 U	723 J	82.4 J	110 J
			1-2 FR	DU-18 (1-2)C	09/30/2022	5.03 U	8.42 J	8.58 J	46.0	57.5	86.6	29.7 J	70.6	69.1	9.24 J	77.9	5.03 U	64.9	5.03 U	5.56 J	12.0	34.7	86.4	5.03 U	598 J	74.3 J	86.9 J
			2-3	DU-18 (2-3)A	10/03/2022	5.04 U	5.04 U	5.04 U	22.4	27.4	42.4 J	12.9 J	23.5	31.4	5.04 U	40.9	5.04 U	26.4	5.04 U	5.04 U	5.04 U	17.5	47.5	5.04 U	277 J	32.6	39.2 J
			2-3 FR	DU-18 (2-3)B	10/03/2022	5.06 U	8.08 J	12.7	45.9	59.3	79.5 J	30.2 J	63.5	65.6	7.99 J	83.7	5.06 U	60.4	5.06 U	5.06 U	11.5	44.2	91.4	5.06 U	587 J	84.1 J	86.2 J
			2-3 FR	DU-18 (2-3)C	10/03/2022	4.95 U	6.27 J	8.20 J	41.6	53.0	78.3 J	23.5 J	55.0	59.8	7.29 J	65.2	4.95 U	53.6	4.95 U	4.95 U	8.66 J	29.7	74.6	4.95 U	512 J	60.3 J	77.9 J
			0-1	DU-18 (0-1) M	--	5.38 J	24.2	30.9	100	150	222	68.6 J	181	164	22.8	184	6.43 J	167	7.58 J	11.9	24.8	101	208	6.42 J	1,467 J	202 J	222 J
			1-2	DU-18 (1-2) M	--	5.03 U	10.3 J	12.1 J	56.6	75.1	115	36.4 J	82.7	86.7	11.0 J	91.6	5.16 J	77.6	6.57	8.02 J	14.8	47.0	105	5.03 U	738 J	98.2 J	112 J
			2-3	DU-18 (2-3) M	--	5.06 U	6.46 J	8.65 J	36.6	46.6	66.7 J	22.2 J	47.3	52.3	6.8 J	63.3	5.06 U	46.8	5.06 U	5.06 U	8.40 J	30.5	71.2	5.06 U	459 J	59.0 J	68 J
	DU-19	ISM	0-1	DU-19 (0-1)	09/06/2022	5.93 J	44.4	38.2	163	282	356	125 J	265	242	41.6	305	10.4	259	13.7	17.9	39.2	187	335	**12.1**	2,370 J	343 J	403 J
			1-2	DU-19 (1-2)	09/06/2022	18.6	17.0	48.0	155	186	253	91.8 J	149	197	26.7	313	25.3	155	11.9	16.1	25.4	234	294	**17.4**	1,820 J	384	270 J
			2-3	DU-19 (2-3)	09/06/2022	5.07 U	7.99 J	7.78 J	40.5	53.7	76.7	26.5 J	48.1	54.0	8.25 J	69.5	5.07 U	50.0	5.07 U	5.07 U	7.12 J	32.2	86.5	5.07 U	514 J	62.7 J	79.0 J
	DU-20	ISM	0-1	DU-20 (0-1)	10/18/2022	4.81 U	14.2	10.1	51	99	164	59.7 J	91.2	115	15.3	81.4	4.9 J	86.8	5.34 J	9.47 J	13.9	42	129	4.81 U	892	97.0	145 J
			1-2	DU-20 (1-2)	10/18/2022	4.93 U	4.93 U	4.93 U	8.6 J	7.86 J	11.4 J	4.93 U	7.39 J	10.5	4.93 U	14.6	4.93 U	7.95 J	4.93 U	4.93 U	4.93 U	8.78 J	14.9	4.93 U	88.1	23.6	13.2 J
			2-3	DU-20 (2-3)	10/18/2022	4.73 U	4.73 U	4.73 U	13.7	12.7	17.2 J	7.52 J	9.69	16.5	4.73 U	21.9	4.73 U	10.4	4.73 U	4.73 U	4.73 U	10.5	23.2	4.73 U	135	24.7	19.3 J
	DU-21	ISM	0-1	DU-21 (0-1)	09/08/2022	9.34 U	30.3	49.9	132	201	346	83.8 J	231	320	42.5	249	18.8	212	36.7	61.5	53.3	246	273	**18.7**	2,090 J	464	314 J
			1-2	DU-21 (1-2)	09/08/2022	4.98 U	14.5	18.2	86.8	110	169	54.8 J	102	139	17.9	133	4.98 U	100	10.8	16.5	22.6	73.8	141	7.41 J	1,050 J	151	164 J
			2-3	DU-21 (2-3)	09/08/2022	4.68 U	8.57 J	13	44.4	57.1	89.6	27.6 J	62.7	89.2	11.3	92.9	5.57 J	57.4	11.8	16.9	16.2	85.6	91.4	5.24 J	624 J	148 J	87.9 J
	DU-22	ISM	0-1	DU-22 (0-1)A	10/13/2022	4.99 U	7.18 J	11.1	36.6	50.4	88.3	27.7 J	54.7	81.9	8.05 J	80.2	4.99 U	51.1	8.62 J	16.9	50.3	58.5	86.2	5.49 J	565	149	76.4 J
			0-1 FR	DU-22 (0-1)B	10/13/2022	4.9 U	4.9 U	8.3 J	25.9	30.8	64.4	17.9 J	34.7	68.2	6.22 J	40.8	4.9 U	31.9	10.3	15.5	14.5	48.7	52.9	4.90 U	374	94.4	49.5 J
			0-1 FR	DU-22 (0-1)C	10/13/2022	168	14.8 U	195	194	78.6	161	50.4 J	57.3	237	10.5	1130	240	60.8	28.7	33.6	17.2	1290	672	112	2,650	1,950	131 J
			1-2	DU-22 (1-2)A	10/14/2022	5.05 U	5.05 U	5.05 U	16 J	13	24.5 J	10.3 J	14.8	27.1	5.05 U	21.3	5.05 U	15.6	5.05 U	5.88 J	10.9	19.4	22.2	5.05 U	167	46.3	21.3 J
			1-2 FR	DU-22 (1-2)B	10/14/2022	4.9 U	4.9 U	4.9 U	19.2 J	18.4	38.4 J	18.6 J	19	36.4	4.9 U	26.1	4.9 U	20.2	4.9 U	5.13 J	7.85 J	17.5	36	4.90 U	235	40.3	28.9 J
			1-2 FR	DU-22 (1-2)C	10/14/2022	4.73 U	4.73 U	4.73 U	16.2 J	15.8	32.2 J	11.6 J	20.4	27.7	4.73 U	32.2	4.73 U	19.4	4.73 U	4.73 U	6.15 J	20.9	31.4	4.73 U	209	38.9	25.1 J
			2-3	DU-22 (2-3)A	10/14/2022	4.99 U	4.99 U	4.99 U	11.3 J	11.7	22.8 J	8.48 J	13.2	27	4.99 U	21.3	4.99 U	13.3	4.99 U	8.23 J	21.6	25.4	23.2	4.99 U	155	65.2	19.0 J
			2-3 FR	DU-22 (2-3)B	10/14/2022	4.96 U	4.96 U	4.96 U	17.9 J	17.3	31.6 J	12.6 J	28	34.5	4.96 U	25.8	4.96 U	25	4.96 U	8.61 J	12	26.4	30.2	4.96 U	225	56.9	27.4 J
			2-3 FR	DU-22 (2-3)C	10/14/2022	5.05 U	5.05 U	5.05 U	11.2 J	18.6	44.8 J	18 J	19.8	28.4 J	5.05 U	19.2	5.05 U	22.6	5.05 U	5.05 U	8.01 J	11.9	22.2	5.05 U	207	32.5	29.2 J
			0-1	DU-22 (0-1) M	--	59.3 J	8.96 J	71.5 J	85.5 J	53.3	105	32.0 J	48.9	129 J	8.26 J	417 J	83.3 J	47.9	15.9 J	22.0	27.3 J	466 J	270 J	**40.8** J	1,196 J	731 J	85.6 J
			1-2	DU-22 (1-2) M	--	5.05 U	5.05 U	5.05 U	17.1 J	15.7	31.7 J	13.5 J	18.1	30.4	5.05 U	26.5	5.05 U	18.4	5.05 U	5.25 J	8.30 J	19.3	29.9	5.05 U	204	41.8	25.1 J
			2-3	DU-22 (2-3) M	--	5.05 U	5.05 U	5.05 U	13.5 J	15.9	33.1 J	13.0 J	20.3	30.0 J	5.05 U	22.1	5.05 U	20.3	5.05 U	7.30 J	13.87 J	21.2	25.2	5.05 U	196	51.5	25.2 J
	DU-23	ISM	0-1	DU-23 (0-1)	10/12/2022	5.06 U	8.72 J	10.9	47	69.7	122	38.9 J	80	109	11.8	94.3	5.06 U	71.3	8.36 J	16.9	36.4	63.1	111	6.11 J	755	141	106 J
			1-2	DU-23 (1-2)	10/12/2022	5.04 U	12.8	5.74 J	29.1 J	74.1	118	29.7 J	46.5	75.6 J	9.87 J	36	5.04 U	51.9	5.04 U	6 J	10.2	24	66	5.04 U	537	63.8	104 J
			2-3	DU-23 (2-3)	10/12/2022	5.05 U	5.05 U	5.05 U	18.9 J	25.1	45.7	15.6 J	17.4	33.4 J	5.05 U	23.2	5.05 U	19.3	5.05 U	5.05 U	6.41 J	12.3	29.9	5.05 U	231	31.3	36.2 J
Central Parcel	DU-24	ISM	0-1	DU-24 (0-1)	09/21/2022	4.99 U	8.87 J	9.1 J	56.9	63	90.3	29.5 J	46.2	75.1	7.52 J	105	4.99 U	50.5	4.99 U	4.99 U	5.45 J	50.3	106	4.99 U	630 J	81.2 J	90.7 J
			1-2	DU-24 (1-2)	09/21/2022	4.98 U	5.67 J	6.15 J	41.1	53.2	69.1	26.4 J	38.6	59.3	5.36 J	74	4.98 U	41.2	4.98 U	4.98 U	4.98 U	33	92.1	4.98 U	500 J	54.8 J	74.0 J
			2-3	DU-24 (2-3)	09/21/2022	4.96 U	4.96 U	4.96 U	8.77 J	9.02 J	13 J	4.96 U	7.04 J	10.3	4.96 U	12.9	4.96 U	8.05 J	4.96 U	4.96 U	4.96 U	5.33 J	14.3	4.96 U	88 J	20.2 J	14.5 J
	DU-25	ISM	0-1	DU-25 (0-1)	09/23/2022	4.86 U	41.3	33.8	183	275	353	125 J	230	327	33.5	503	10.8	223	7.84 J	15.6	40.2	283	516	**12.3**	2,770 J	427	386 J
			1-2	DU-25 (1-2)	09/23/2022	4.99 U	10.3	7.48 J	45.1	64.8	82.8	26.1 J	54.8	76.6	7.23 J	116	4.99 U	53	4.99 U	4.99 U	12.3	63.1	117	4.99 U	643 J	101 J	90.5 J
			2-3	DU-25 (2-3)	09/23/2022	4.83 U	7.83 J	7.02 J	46.1	63.2	75.6	28 J	48.3	71.4	6.6 J	111	4.83 U	50	4.83 U	4.83 U	7.72 J	57.5	113	4.83 U	613 J	87.3 J	87.3 J
	DU-26	ISM	0-1	DU-26 (0-1)A	11/09/2022	10	83.9	76.4	291	494	702	205 J	483	524	79.2	798	23.8	482	26	30.5	77.4	477	831	**24.6**	4,890 J	779	723 J
			0-1 FR	DU-26 (0-1)B	11/09/2022	5.53 J	43.3	41.4	163	260	355	122 J	260	290	43.3	377	11.2	256	17.8	22.8	45.3	237	422	**13.5**	2,550 J	407 J	382 J
			0-1 FR	DU-26 (0-1)C	11/09/2022	5.99 J	44.9	44.9	175	267	381	121 J	268	301	44.1	403	12.3	259	14.8	20.9	46.3	249	438	**13.8**	2,660 J	424 J	394 J
			1-2	DU-26 (1-2)A	11/10/2022	4.93 U	7.66 J	6.79 J	34.9	51.9	76.1	24.5 J	54.7	58.8	7.86 J	67.3	4.93 U	53	4.93 U	5.57 J	10.7	39.2	76.2	4.93 U	505	74.9	76.5 J
			1-2 FR	DU-26 (1-2)B	11/10/2022	4.95 U	7.06 J	6.72 J	44.1	54.2	94.2	27.9 J	57.6	73.5	8.08 J	89.6	4.95 U	55.8	4.95 U	5.51 J	10.3	36.2	103	4.95 U	608	70.7	82.0 J
			1-2 FR	DU-26 (1-2)C	11/10/2022	4.89 J	31	18.2	127	197	246	73.8 J	181	180	28.2	194	4.65 U	179	5.77 J	8.86 J	16.7	75.7	257	4.65 U	1,660	158	281 J
			2-3	DU-26 (2-3)A	11/11/2022	4.93 U	8.01 J	7.6 J	36.1	44.2	68.1	20.5 J	51.2	53.4	6.47 J	72.9	4.93 U	49.1	4.93 U	4.93 U	9.45 J	36.8	85.4	4.93 U	487	69.3	66.3 J
			2-3 FR	DU-26 (2-3)B	11/11/2022	4.98 U	13	14.3	81.2	99.5	136	50.2 J	102	106	16.5	144	4.98 U	100	4.98 U	5.28 J	12.4	74.3	158	4.98 U	993	124	148 J
			2-3 FR	DU-26 (2-3)C	11/11/2022	4.99 U	11.5	9.11 J	50.6	70.6	94.4	29.2 J	83.6	76.5	10.4	100	4.99 U	72.6	4.99 U	5.46 J	11.9	50.5	108	4.99 U	696	93.5	103 J
			0-1	DU-26 (0-1) M	--	7.17 J	57.4	54.2	210	340	479	149 J	337	372	55.533	526	15.8	332	19.5	24.7	56.3	321	564	**17.3**	3,367 J	537 J	500 J
			1-2	DU-26 (1-2) M	--	4.92 J	15.2 J	10.6 J	68.7 J	101 J	139 J	42.1 J	97.8 J	104 J	14.713 J	117	4.95 U	95.9 J	5.22 J	6.65 J	12.6	50.4	145 J	4.95 U	924 J	101	147 J
			2-3	DU-26 (2-3) M	--	4.99 U	10.8 J	10.3 J	56.0	71.4	99.5	33.3 J	78.9	78.6	11.123 J	106	4.99 U	73.9	4.99 U	5.22 J	11.3 J	53.9	117	4.99 U	725	95.6	106 J

Please see notes at end of table.

Table 4a
Soil Results - PAHs and Dibenzofuran - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PAHs and Dibenzofuran by EPA Method 8270E-SIM Concentrations in µg/kg Acenaphthene	Acenaphthylene	Anthracene	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(g,h,i) perylene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Dibenzofuran	Total HPAH	Total LPAH	cPAHs (BaP Eq.)
				Ecological ISM PRG		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	5,600	29,000	--
				Ecological ISM Hot Spot		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	100	56,000	290,000	--
Central Parcel Concrete Slab	DU-42 (Within DU-16)	Composite	0-1	DU-42 (0-1)	11/30/2022	4.96 U	4.96 U	5.74 J	30.7	36.9	43.7 J	16.6 J	40.6	37.3	4.96 U	49.7	4.96 U	36.9	5.82 J	6.82 J	8.12 J	39.7	51.7	4.96 U	347	67.8	50.7 J
			1-2	DU-42 (1-2)	11/30/2022	4.76 U	4.76 U	4.76 U	20	21.4	27.8	10.3 J	25.5	23.9	4.76 U	33.3	4.76 U	22.1	4.76 U	5.21 J	6.01 J	22.2	33.2	4.76 U	220	42.9	30.9 J
			2-3	DU-42 (2-3)	11/30/2022	4.96 U	4.96 U	4.96 U	16.1	15.4	18	5.68 J	16.8	17.5	4.96 U	23.1	4.96 U	15.8	4.96 U	4.96 U	5.33 J	12	26.8	4.96 U	158	29.7	22.9 J
East Parcel	DU-27	ISM	0-1	DU-27 (0-1)	10/05/2022	5 U	21.7	55.8	70.2	130	250	64.5 J	172	170	29.4	146	5 U	203	5 U	5 U	12	61.9	160	5.00 U	1,400 J	159	213 J
			1-2	DU-27 (1-2)	10/05/2022	4.94 U	37.1	65.2	117	162	243	69.4 J	165	195	24.8	304	12.5	180	5.93 J	8.7 J	22.3	215	316	**10.1**	1,780 J	363 J	242 J
			2-3	DU-27 (2-3)	10/05/2022	5.02 U	12.1	22	39.6	65.5	100	28.2 J	86.5	75.5	9.64 J	81.7	5.02 U	78.4	5.02 U	5.16 J	16	42.7	92	5.02 U	657 J	103 J	97.3 J
	DU-28	ISM	0-1	DU-28 (0-1)	09/14/2022	4.95 U	39.1	76.8	112	303	415	117 J	253	236	45.8	268	6.98 J	298	4.95 U	7.73 J	19.8	108	312	7.02 J	2,360 J	261 J	433 J
			1-2	DU-28 (1-2)	09/14/2022	5.14 J	34.8	105	220	353	562	137 J	269	372	62.2	424	8.53 J	330	4.88 U	6.31 J	16.5	133	409	8.50 J	3,140 J	309 J	528 J
			2-3	DU-28 (2-3)	09/14/2022	5 U	36.1	95	97.4	235	345	82.1 J	228	204	44.7	175	7.42 J	280	10.5	15.4	18.4	63.4	194	8.38 J	1,890 J	238 J	353 J
	DU-29	ISM	0-1	DU-29 (0-1)	09/15/2022	5.06 U	14.1	16	69.9	109	140	46.3 J	103	113	13.6	142	5.06 U	102	12.5	16.6	20.9	84.1	149	8.46 J	988 J	157	154 J
			1-2	DU-29 (1-2)	09/15/2022	5.05 U	6.51 J	7.61 J	44.7	49	63.6	22.7 J	33.1	51.7	5.94 J	83.9	5.05 U	37	5.05 U	5.53 J	8.88 J	30.5	86.4	5.05 U	478 J	64.1 J	69.7 J
			2-3	DU-29 (2-3)	09/15/2022	5 U	5.26 J	6.88 J	27.8	41.3	56.1	19.2 J	33.6	40.1	5.22 J	57.4	5 U	36.8	5 U	5 U	8.06 J	28.5	62.8	5.00 U	380 J	56.2 J	58.8 J
	DU-30	ISM	0-1	DU-30 (0-1)	09/16/2022	5.01 U	34.8	34.1	140	283	347	106 J	230	208	40	262	5.01 U	255	7.51 J	13.7	21	94.2	276	7.17 J	2,150 J	203	398 J
			1-2	DU-30 (1-2)	09/16/2022	5 U	19.5	14.2	63.2	119	146	50.5 J	108	100	17.1	135	5 U	115	5 U	8.62 J	18.3	53.9	147	5.00 U	1,000 J	120 J	169 J
			2-3	DU-30 (2-3)	09/16/2022	5.02 U	7.93 J	7.28 J	33.7	49.3	68.6	20.7 J	42.6	49.9	6.61 J	72.3	5.02 U	44.9	5.02 U	5.12 J	9.29 J	33.5	76.2	5.02 U	465 J	68.1 J	70.9 J
	DU-31	ISM	0-1	DU-31 (0-1)	11/03/2022	4.93 U	16.6	16	68.9	82.4	132	40.5 J	80	101	12.7	128	4.93 U	79.9	4.93 U	6.02 J	15.2	57.6	129	5.00 J	854	116	124 J
			1-2	DU-31 (1-2)	11/03/2022	5.02 U	21	14.6	57.4	79.8	120	41.3 J	79.8	86.9	13.1	106	5.02 U	78.5	5.02 U	6.09 J	17.8	62.2	105	5.38 J	768	127	119 J
			2-3	DU-31 (2-3)	11/03/2022	4.99 U	13.1	12.9	52.5	62	92.4	28.2 J	56.7	72.9	9.5 J	110	4.99 U	55.8	4.99 U	4.99 U	12.2	64.3	109	4.99 U	649	110	91.9 J
	DU-32	ISM	0-1	DU-32 (0-1)	09/22/2022	4.75 U	16.3	12.5	56.4	78.4	125	44.2 J	70.4	87.5	10.4	118	4.75 U	75.9	4.75 U	7.23 J	17.3	63.5	110	6.29 J	776 J	122 J	115 J
			1-2	DU-32 (1-2)	09/22/2022	4.68 U	9.57	8.09 J	35.5	51.3	74.3	25.2 J	59.8	57.3	7.29 J	61.2	4.68 U	55.2	4.68 U	4.68 U	10.5	33.2	64.1	4.68 U	491 J	68.4 J	75.4 J
			2-3	DU-32 (2-3)	09/22/2022	5.7 J	87.1	71.7	297	409	477	184 J	253	368	48.4	657	42.9	287	16	26.6	94.8	417	545	**40.5**	3,530 J	746 J	566 J
	DU-33	ISM	0-1	DU-33 (0-1)	09/20/2022	4.74 U	7.78 J	8.94 J	34.1	38.3	64	18.4 J	38.8	53.3 J	4.74 U	65.9 J	4.74 U	35	8.49 J	13.5	25	44.5	63.9 J	8.13 J	414 J	104 J	54.2 J
			1-2	DU-33 (1-2)	09/20/2022	4.91 U	10.5	10.2	36	36.6	61.1	17.9 J	33.9	61.7	4.91 U	85.5	4.91 U	29.1	4.91 J	9.28 J	27.7	65.3	86.5	6.56 J	451 J	128 J	51.9 J
			2-3	DU-33 (2-3)	09/20/2022	4.87 U	5.05 J	7.41 J	37.8	40.6	53.8	16.1 J	34.1	46.3	4.87 U	66.4	4.87 U	31.1	4.87 U	5.59 J	11.5	30.6	72.4	4.87 U	401 J	65.0 J	55.5 J
	DU-34	ISM	0-1	DU-34 (0-1)	09/27/2022	6.51 J	60.9	41.7	130	175	259	97.2 J	140	190	23.8	298	16.8	144	9.77 J	19.3	52	199	260	**17.8**	1,720 J	396 J	253 J
			1-2	DU-34 (1-2)	09/27/2022	5.07 U	40.6	23.9	95.3	126	185	59 J	102	132	18.7	181	7.87 J	102	5.44 J	10.9	28.9	95.6	185	9.78 J	1,190 J	210	184 J
			2-3	DU-34 (2-3)	09/27/2022	4.79 U	16.7	12.2	48.5	66.5	102	33.9 J	54.1	74.7	9.69	102	4.79 U	56.3	4.79 U	7.4 J	15.7	59.1	103	5.14 J	651 J	116 J	97.3 J
	DU-35	ISM	0-1	DU-35 (0-1)	10/07/2022	4.88 U	12.9	13.9	46.8	63.5	95.8	30.9 J	60.9	76.7	9.03 J	86.7	4.88 U	59.3	4.88 U	7.41 J	15.3	50	86.6	5.27 J	616	104	93.1 J
			1-2	DU-35 (1-2)	10/07/2022	5.03 U	19	15.6	52.8	81.8	114	34.9 J	74.9	74.5	12.1	88.1	5.03 U	77	5.03 U	6.35 J	14.1	45.8	94.2	5.03 U	704	106	119 J
			2-3	DU-35 (2-3)	10/07/2022	4.86 U	4.86 U	4.86 U	19.8	24.1	42.1 J	13.4 J	25.8	32.8	4.86 U	30.8	4.86 U	26.4	4.86 U	4.86 U	5.83 J	15.4	32.7	4.86 U	250	33.4	35.5 J
	DU-36	ISM	0-1	DU-36 (0-1)	11/01/2022	5.04 U	5.4 J	7.26 J	42.6	52.8	89.2	33.1 J	76.2	78.5	9.76 J	86.3	5.04 U	61.2	5.04 U	8.38 J	17.3	45.8	87.6	5.99 J	617	89.2	82.3 J
			1-2	DU-36 (1-2)	11/01/2022	4.99 U	9.87 J	18.3	55.3	68	107	36.2 J	86.3	91.5	10.9	116	4.99 U	74.6	6.15 J	12.3	22.9	61.1	131	8.23 J	777	129	103 J
			2-3	DU-36 (2-3)	11/01/2022	5.04 U	5.04 U	5.04 U	23.1	25.9	42.3	13.2 J	33.6	37.9	5.04 U	43.9	5.04 U	28	5.04 U	6.54 J	14.7	25.1	44.2	5.04 U	295	56.4	37.9 J
	DU-38	ISM	0-1	DU-38 (0-1)A	11/14/2022	4.88 U	5.9 J	7 J	36.5	33.1	59.4	17.8 J	30.3	49.8	4.94 J	66.9	4.88 U	29.1	4.88 U	4.88 U	8.39 J	35.2	64.3	4.88 U	392	63.8	50.8 J
			0-1 FR	DU-38 (0-1)B	11/14/2022	4.82 U	8.51 J	10.3	59.4	55.7	82.9 J	31.6 J	42.6	74.2	7.97 J	99.6	4.82 U	44.8	4.82 U	5.93 J	9.09 J	45.6	95.7	4.82 U	594	84.3	82.8 J
			0-1 FR	DU-38 (0-1)C	11/14/2022	5.04 U	10.2	8.9 J	46.6	50	73.9	26.4 J	40.7	60.1	7.19 J	89.7	5.04 U	42.5	5.04 U	6.31 J	13.2	48.3	78.8	5.56 J	516	92.0	73.8 J
			1-2	DU-38 (1-2)A	11/16/2022	5 U	5.27 J	8.19 J	38.5	35.5	56.6 J	19.2 J	30.8	55.6	5.05 J	77.4	5 U	29.6	5 U	7.08 J	14.8	37.2	73.2	5.00 U	421	77.5	53.3 J
			1-2 FR	DU-38 (1-2)B	11/16/2022	5.08 U	5.5 J	8.84 J	42.2	34.6	54.3	17.2 J	27.7	54.1	5.08 U	74.6	5.08 U	25.5	5.08 U	8.92 J	15.2	41.8	73.4	5.08 U	406	85.3	49.6 J
			1-2 FR	DU-38 (1-2)C	11/16/2022	5.04 U	5.91 J	8.4 J	46.8	42.8	62.6	23.4 J	35.7	60.6	6.06 J	72.3	5.04 U	34.3	5.04 U	6.9 J	14.3	38.4	70.5	5.04 U	455	79.0	63.5 J
			2-3	DU-38 (2-3)A	11/17/2022	4.98 U	4.98 U	5.5 J	36.2	27.8	44.1 J	15.2 J	20.5	41.4	4.98 U	63.5	4.98 U	21.9	4.98 U	4.98 U	6.47 J	25.6	59.8	4.98 U	333	47.5	40.7 J
			2-3 FR	DU-38 (2-3)B	11/17/2022	5.06 U	5.06 U	6.23 J	37.6	30.6	47.1 J	15.8 J	21.9	44.4	5.06 U	59.2	5.06 U	24	5.06 U	5.06 U	7.13 J	24.2	56.8	5.06 U	340	47.7	44.2 J
			2-3 FR	DU-38 (2-3)C	11/17/2022	5.35 J	5.07 U	15.6	50.9	28.3	51	19.7 J	18.4	68.2	5.07 U	146	5.07 U	20.8	5.07 U	5.07 U	7.88 J	37.4	113	5.07 U	519	73.8	43.4 J
			0-1	DU-38 (0-1) M	--	5.04 U	8.20 J	8.73 J	47.5	46.3	72.1 J	25.3 J	37.9	61.4	6.70 J	85.4	5.04 U	38.8	5.04 U	5.71 J	10.2 J	43.0	79.6	5.09 J	501	80.0	69.1 J
			1-2	DU-38 (1-2) M	--	5.08 U	5.56 J	8.48 J	42.5	37.6	57.8 J	19.9 J	31.4	56.8	5.40 J	74.8	5.08 U	29.8	5.08 U	7.63 J	14.8	39.1	72.4	5.08 U	427	80.6	55.5 J
			2-3	DU-38 (2-3) M	--	5.13 J	5.07 U	9.11 J	41.6	28.9	47.4 J	16.9 J	20.3	51.3	5.07 U	89.6	5.07 U	22.2	5.07 U	5.07 U	7.16 J	29.1	76.5	5.07 U	397	56.3	42.8 J
East Parcel Concrete Slabs	DU-37	Composite	0-1	DU-37 (0-1)	11/28/2022	5.03 U	5.03 U	5.03 U	7.17 J	7.09 J	10.6	5.03 U	13.4	8.11 J	5.03 U	10.8	5.03 U	9.61 J	5.03 U	5.03 U	5.03 U	5.87 J	11.6	5.03 U	83.4	21.0	12.4 J
			1-2	DU-37 (1-2)	11/28/2022	5.01 U	5.01 U	5.01 U	6.37 J	5.85 J	8.16 J	5.01 U	38.3	5.92 J	5.01 U	9.28 J	5.01 U	15.7	5.01 U	5.01 U	5.01 U	6.29 J	10.2	5.01 U	105	21.3	11.4 J
			2-3	DU-37 (2-3)	11/28/2022	5 U	19.8	36.3	79.1	66.2	76.4 J	27.6 J	104	93.8	8.12 J	164	22.4	67.4	9.38 J	8.06 J	8.03 J	157	164	**11.5**	851	254	97.0 J
	DU-39	Composite	0-1	DU-39 (0-1)	11/29/2022	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 UJ	4.9 UJ	4.9 U	4.9 J	4.90 U	27.0	17.2	5.66 J
			1-2	DU-39 (1-2)	11/29/2022	16.9	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	10.4	4.93 U	34.2	56.1	70.2	16.6	4.93 U	4.93 U	24.7	175	5.70
			2-3	DU-39 (2-3)	11/29/2022	7.48 J	4.94 U	4.94 U	12.1	6.92 J	10.9 J	4.94 U	6.14 J	11.5	4.94 U	18.4	4.94 U	6.65 J	24.2	40.3	62.8	11.2	17.9	4.94 U	95.5	129	12.4 J
	DU-40	Composite	0-1	DU-40 (0-1)	11/18/2022	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	24.9	17.4	5.74
			1-2	DU-40 (1-2)	11/18/2022	5.00 U	5.00 U	5.00 U	5.62 J	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	28.1	17.5	6.09 J
			2-3	DU-40 (2-3)	11/18/2022	5.05 U	5.05 U	5.05 U	5.18 J	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	27.9	17.7	6.10 J
	DU-43 (Within DU-31)	Composite	0-1	DU-43 (0-1)	11/21/2022	4.94 U	4.94 U	4.94 U	9.79 J	10.1	12.1 J	4.94 U	24.1	11.8	4.94 U	15.0	4.94 U	15.5	4.94 U	4.94 U	4.94 U	8.74 J	16.4	4.94 U	120	23.6	16.3 J
			1-2	DU-43 (1-2)	11/21/2022	5.07 U	5.07 U	5.07 U	8.33 J	5.45 J	12.3 J	5.07 U	5.60 J	17.0	5.07 U	34.0	5.07 U	5.25 J	5.07 U	5.12 J	32.6	33.4	28.9	5.07 U	122	81.3	10.6 J
			2-3	DU-43 (2-3)	11/21/2022	4.98 U	4.98 U	4.98 U	7.88 J	5.06 J	8.04 J	4.98 U	4.98 U	7.27 J	4.98 U	10.5	4.98 U	5.01 J	4.98 U	4.98 U	4.98 U	4.98 U	10.4	4.98 U	61.6	17.4	9.68 J
	DU-44 (Within DU-36)	Composite	0-1	DU-44 (0-1)	12/01/2022	4.95 U	4.95 U	4.95 U	17.0	11.1	16.8	5.07 J	12.1	18.9	4.95 U	25.0	4.95 U	9.55 J	4.95 U	4.95 U	5.35 J	11.7	25.5	4.95 U	143	29.4	18.0 J
			1-2	DU-44 (1-2)	12/01/2022	5.00 U	5.00 U	5.00 U	12.7	7.18 J	10.6	5.00 U	8.05 J	10.2	5.00 U	14.9	5.00 U	6.96 J	5.00 U	5.00 U	5.00 U	5.62 J	15.4	5.00 U	91.0	20.6	12.7 J
			2-3	DU-44 (2-3)	12/01/2022	4.88 U	4.88 U	4.88 U	12.8	7.60 J	10.1 J	4.88 U	4.88 U	9.86	4.88 U	15.8	4.88 U	5.61 J	4.88 U	4.88 U	4.88 U	4.88 U	14.9	4.88 U	84.0	17.1	12.9 J

Please see notes at end of table.

Table 4a
Soil Results - PAHs and Dibenzofuran - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PAHs and Dibenzofuran by EPA Method 8270E-SIM Concentrations in µg/kg																								
						Acenaphthene	Acenaphthylene	Anthracene	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(g,h,i) perylene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Dibenzofuran	Total HPAH	Total LPAH	cPAHs (BaP Eq.)
				Ecological ISM PRG		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10	5,600	29,000	--	
				Ecological ISM Hot Spot		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	100	56,000	290,000	--	
East Parcel Soil Berms	DU-41	ISM	0-1	DU-41 (0-1)A	10/24/2022	8.09 J	34.2	51.6	142	196 J	269	106 J	214 J	221	24.1	331	6.07 J	209 J	17.6	23	22.1	107	364	**11.6**	2,080	252	283 J	
			0-1 FR	DU-41 (0-1)B	10/24/2022	5.06 J	41.7	50.4	128	233	326	96.9 J	252	225	30.8	267	6.2 J	252	21.5	26.9	35.4	122	301	**13.1**	2,110	288	336 J	
			0-1 FR	DU-41 (0-1)C	10/24/2022	8.96 J	31.6	60.5	112	172	271	77.1 J	186	197	25.4	261	7.76 J	183	10.3	15.7	23.9	164	268	**18.4**	1,750	312	255 J	
			1-2	DU-41 (1-2)A	10/26/2022	30.0	25.1 U	56.8	139	172	247	97.1 J	188	226	25.1	315	23.4	173	80.3	92.6	70.1	274	354	**42.7**	1,940	559	254 J	
			1-2 FR	DU-41 (1-2)B	10/26/2022	14.2 U	28.3 U	56.6	123	189	287	92.3 J	190	235	26.4	277	13.7	183	101	115	83.8	254	319	**37.1**	1,920	544	276 J	
			1-2 FR	DU-41 (1-2)C	10/26/2022	10.1 U	22.2 U	27.0	86.1	134	212	65.4 J	144	161	18.9	194	6.46 J	135	55.9	62.8	56.4	138	215	**21.6**	1,370	307	197 J	
			2-3	DU-41 (2-3)A	10/28/2022	6.08 J	12.0	20.6	69.0	90.1	135	49.2 J	103	117	12.9	147	5.21 J	97.6	23.1	28.9	30.7	98.3	159	**10.8**	980	202	134 J	
			2-3 FR	DU-41 (2-3)B	10/28/2022	4.94 U	12.7	23.1	72.4	101	148	52.0 J	102	123	15.1	137	4.94 U	104	18.8	24.3	22.9	75.2	147	8.18 J	1,000	163	149 J	
			2-3 FR	DU-41 (2-3)C	10/28/2022	7.48 J	13.1	23.4	71.2	101	148	53.1 J	106	124	14.4	168	6.68 J	104	28.8	31.6	30.0	119	187	**12.9**	1,080	231	148 J	
			0-1	DU-41 (0-1) M	--	7.37 J	35.8	54.2	127	200 J	289	93.3 J	217 J	214	26.8	286	6.68 J	215 J	16.5	21.9	27.1	131	311	**14.4**	1,980	284	291 J	
			1-2	DU-41 (1-2) M	--	18.1	28.3 U	46.8	116	165	249	84.9 J	174	207	23.5	262	14.5 J	164	79.1	90.1	70.1	222	296	**33.8**	1,743	470	242 J	
			2-3	DU-41 (2-3) M	--	6.17 J	12.6	22.4	70.9	97.4	144	51.4 J	104	121	14.1	151	5.61 J	102	23.6	28.3	27.9	97.5	164	**10.6** J	1,020	199	144 J	

Notes:
ISM = Incremental Sampling Methodology.
bgs = Below ground surface.
PAHs = Polycyclic aromatic hydrocarbons.
EPA = United States Environmental Protection Agency.
M = Mean. These results are the mean of the field replicates collected at this decision unit.
FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.
µg/kg = Micrograms per kilogram (parts per billion).
Bolded values exceed the Preliminary Remediation Goal (PRG).
Shaded values exceed the hot spot level.
Italicized values represent a method detection limit that is above one or more applicable screening levels.

U = Analyte was not detected.
J = Result is estimated.
PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

HPAH = High-molecular-weight polycyclic aromatic hydrocarbon
LPAH = Low-molecular-weight polycyclic aromatic hydrocarbon
cPAHs = carcinogenic polycyclic aromatic hydrocarbon

Table 4b
Soil Results - PAHs and Dibenzofuran - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PAHs and Dibenzofuran by EPA Method 8270E-SIM Concentrations in µg/kg Acenaphthene	Acenaphthylene	Anthracene	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(g,h,i) perylene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Dibenzofuran	Total HPAH	Total LPAH	cPAHs (BaP Eq.)
Human Health ISM PRG						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	550
Human Health ISM Hot Spot						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	55,000
West Parcel	DU-1	ISM	0-1	DU-1 (0-1)	07/20/2022	14.1	33.9	48.5	187	308	394	122 J	232	293	53.3	373	12	249	15.9	24.5	18.9	185	449	7.76 J	2,660 J	337 J	446 J
			1-2	DU-1 (1-2)	07/20/2022	9.66 U	46.3	49	164	286	342	113 J	249	266	35.8	404	12.9	261	28.4	32.9	43.2	235	502	10.2	2,620 J	424 J	400 J
			2-3	DU-1 (2-3)	07/20/2022	8.52 J	35.2	40.9	136	234	279	82 J	187	207	31.1	331	9.12 J	202	5.52 J	7.62 J	15.8	169	416	4.80 U	2,110 J	286 J	328 J
	DU-2	ISM	0-1	DU-2 (0-1)	08/01/2022	10.4	5.05 U	14.2	78.0	116	143	49.3 J	103	112	15.6	144	6.68 J	106	5.05 U	5.58 J	9.09 J	78.7	153	5.11 J	1,020 J	127 J	165 J
			1-2	DU-2 (1-2)	08/01/2022	4.70 U	4.70 U	19.0	81.9	75.1	93.2	35.0 J	50.3	87.5	9.75	158	4.70 U	56.7	4.70 U	4.70 U	4.88 J	90.2	145	4.70 U	792 J	123 J	108 J
			2-3	DU-2 (2-3)	08/01/2022	5.00 U	5.00 U	5.00 U	15.5	21.9	31.6	11.0 J	27.0	24.9	5.00 U	29.1	5.00 U	26.3	5.00 U	5.00 U	5.00 U	12.5	33.2	5.00 U	223 J	27.5	31.9 J
	DU-3	ISM	0-1	DU-3 (0-1)	08/03/2022	5.54 J	4.99 J	13.2	65.5	105	138	54.7 J	90.1	110	16.4	140	4.78 U	104	4.78 U	6.89 J	11.0	76.8	152	4.78 U	976 J	121 J	153 J
			1-2	DU-3 (1-2)	08/03/2022	5.10 U	9.18 J	8.37 J	56.7	90.1	116	43.6 J	92.8	99.7	11.5	169	5.10 U	96.8	5.10 U	5.10 U	8.24 J	87.1	208	5.10 U	984 J	121 J	129 J
			2-3	DU-3 (2-3)	08/03/2022	4.95 U	6.86 J	8.05 J	43.3	73.4	96.1	32.5 J	75.6	78.2	7.59 J	116	4.95 U	79.3	5.64 J	16.5	12.3	64.9	143	4.95 U	745 J	114 J	103 J
	DU-4	ISM	0-1	DU-4 (0-1)	08/04/2022	7.89 J	36.9	36.3	160	310	354	107 J	255	265	37.3	319	9.26 J	277	12.3	25.8	45.7	167	432	5.73 J	2,520 J	329 J	428 J
			1-2	DU-4 (1-2)	08/04/2022	23.8 U	34.3 U	283	1460	1240	1140	261 J	650	2220	196	1300	109	493	53.6	96.4	59.0	2960	2940	33.4	11,900 J	3,540	**1,750** J
			2-3	DU-4 (2-3)	08/04/2022	6.77 J	91.5	54.5	223	561	657	191 J	489	448	62.0	643	19.4	534	13.3	20.9	47.7	393	844	9.42 J	4,650 J	634 J	**767** J
	DU-5	ISM	0-1	DU-5 (0-1)A	07/22/2022	7.41 J	9.82 J	14.5	109	168	239	66.3	119	160	50.7 U	175	6.08 J	131	5.90 J	8.66 J	10.0 J	82.2	207	5.07 U	1,400	139 J	242 J
			0-1 FR	DU-5 (0-1)B	07/22/2022	8.72 J	10.1	23.3	91.3	140	192	66.5 J	87.7	122	18.9	162	6.66 J	108	7.41 J	12.0	13.2	80.8	169	5.69 J	1,180 J	186 J	179 J
			0-1 FR	DU-5 (0-1)C	07/22/2022	10.9	13.1	31.1	106	172	233	77.3 J	107	156	21.8	213	9.26 J	128	6.95 J	10.6	12.6	113	226	7.34 J	1,240 J	173 J	192 J
			1-2	DU-5 (1-2)A	07/25/2022	8.16 J	13.2	29.8	91.2	126	174	55.7 J	81.7	132	16.9	204	7.23 J	93.6	7.06 J	10.0 J	11.1	107	208	5.04 J	1,160 J	155 J	199 J
			1-2 FR	DU-5 (1-2)B	07/25/2022	6.07 J	11.5	22.7	67.0	102	140	38.6 J	73.5	106	14.5	142	6.30 J	82.9	7.04 J	11.6	15.0	81.2	154	5.43 J	921 J	154 J	146 J
			1-2 FR	DU-5 (1-2)C	07/25/2022	9.53 J	24.6	28.9	114	193	265	74.6 J	133	182	24.7	244	7.57 J	158	8.21 J	13.1	20.1	113	289	6.09 J	1,120 J	147 J	177 J
			2-3	DU-5 (2-3)A	07/26/2022	6.04 J	15.8	29.7	95.0	134	172	54.3 J	96.9	150	20.1	191	6.84 J	110	5.74 J	9.36 J	12.6	92.2	218	5.00 U	1,440 J	201 J	241 J
			2-3 FR	DU-5 (2-3)B	07/26/2022	5.28 J	15.7	21.3	76.7	125	170	50.5 J	88.5	140	17.0	151	5.07 J	101	7.89 J	11.2	13.6	74.8	197	5.04 U	1,680 J	217 J	272 J
			2-3 FR	DU-5 (2-3)C	07/26/2022	18.0	21.8	86.9	226	292	378	130 J	163	310	34.2	518	17.7	199	10.2	12.5	16.3	374	629	9.88 J	2,880 J	547	408 J
			0-1	DU-5 (0-1) M	--	9.01 J	11.0 J	23.0	102	160	221	70.0 J	105	146	30.5	183	7.33 J	122	6.75 J	10.4 J	11.9 J	92.0	201	6.03 J	1,273 J	166 J	204 J
			1-2	DU-5 (1-2) M	--	7.92 J	16.4	27.1	90.7	140	193	56.3 J	96.1	140	18.7	197	7.03 J	112	7.44 J	11.6 J	15.4	100	217	5.52 J	1,067 J	152 J	174 J
			2-3	DU-5 (2-3) M	--	9.77 J	17.8	46.0 J	133 J	184	240	78.3 J	116	200	23.8	287 J	9.87 J	137	7.94 J	11.0 J	14.2	180 J	348 J	6.64 J	2,000 J	322 J	307 J
	DU-6	ISM	0-1	DU-6 (0-1)	07/28/2022	8.01 J	6.03 J	12.2	84.2	134	176	61.8 J	94.6	116	16.3	152	5.01 U	111	5.01 U	9.32 J	13.4	68.9	154	5.18 J	1,100 J	120 J	188 J
			1-2	DU-6 (1-2)	07/28/2022	13.4	8.14 J	18.7	95.2	143	194	61.8 J	115	134	18.7	190	8.86 J	130	6.64 J	14.1	18.6	109	211	9.02 J	1,290 J	191 J	204 J
			2-3	DU-6 (2-3)	07/28/2022	15.2	9.17 J	20.1	98.9	159	210	72.4 J	125	151	21.0	212	11.2	142	8.42 J	14.8	22.6	123	238	11.0	1,430 J	216 J	226 J
	DU-7	ISM	0-1	DU-7 (0-1)	07/29/2022	5.50 J	5.06 U	9.35 J	55.4	89.6	122	39.8 J	64.3	83.3	11.2	103	5.06 U	75.5	5.06 U	9.21 J	9.30 J	50.1	107	5.06 U	751 J	88.5 J	127 J
			1-2	DU-7 (1-2)	07/29/2022	5.02 U	5.02 J	7.63 J	30.7	49.4	67.2	22.9 J	47.0	47.8	6.59 J	56.3	5.02 U	50.5	5.02 U	7.90 J	11.0	33.9	61.8	5.02 U	440 J	70.5 J	71.1 J
			2-3	DU-7 (2-3)	07/29/2022	5.03 U	5.03 U	6.11 J	22.5	34.5	47.4	16.0 J	33.7	35.2	5.03 U	40.6	5.03 U	36.2	5.03 U	5.03 U	8.78 J	24.7	46.9	5.03 U	316 J	49.7 J	47.8 J
	DU-8	ISM	0-1	DU-8 (0-1)	08/05/2022	5.77 J	4.97 J	12.5	57.3	82.4	115	39.3 J	65.2	80.7	13.1	113	4.77 U	77.4	6.49 J	16.5	14.1	58.1	112	5.47 J	755 J	114 J	121 J
			1-2	DU-8 (1-2)	08/05/2022	4.84 U	5.98 J	11.7	36.7	49.0	79.0	26.1 J	41.1	55.6	7.41 J	73.9	4.84 U	48.0	7.30 J	16.6	16.1	45.9	77.0	5.53 J	494 J	101 J	73.1 J
			2-3	DU-8 (2-3)	08/05/2022	5.02 J	5.57 J	14.4	45.3	57.0	91.1	31.6 J	48.1	66.7	7.94 J	92.1	5.02 U	56.9	8.60 J	19.6	16.7	55.7	92.1	6.23 J	589 J	120 J	84.7 J
	DU-9	ISM	0-1	DU-9 (0-1)	08/08/2022	7.57 J	9.46 J	21.4	81.5	132	180	56.3 J	94.8	117	19.3	160	5.33 J	109	5.69 J	14.2 J	17.4	84.6	166	5.74 J	1,120 J	160 J	189 J
			1-2	DU-9 (1-2)	08/08/2022	4.79 U	5.27 J	8.43 J	34.2	54.6	76.4	25.4 J	44.7	47.9	6.14 J	66.0	4.79 U	49.6	4.79 U	9.51 J	12.6	34.7	71.6	4.79 U	477 J	75.3 J	77.1 J
			2-3	DU-9 (2-3)	08/08/2022	15.9	9.24 J	27.9	81.6	130	171	57.0 J	96.3	106	12.6	191	7.47 J	110	6.84 J	15.8	21.7	101	202	7.99 J	1,160 J	199 J	180 J
Central Parcel	DU-10	ISM	0-1	DU-10 (0-1)	08/12/2022	54	659	411	1790	3830	3600	1020 J	3480	2720	475	3590	123	3380	99.8	209	395	2000	5480	23.5 J	29,400 J	3,850	**5,190** J
			1-2	DU-10 (1-2)	08/12/2022	77.9	800	547	1950	3450	3120	993 J	2800	2790	454	3970	376	2740	363	560	1150	3080	5990	49.4	28,300 J	6,590	**4,700** J
			2-3	DU-10 (2-3)	08/12/2022	36.3	304	334	1230	1900	1850	565 J	1410	1900	241	2540	97.7	1420	92	187	308	2100	3890	24.4	16,900 J	3,370	**2,600** J
	DU-11	ISM	0-1	DU-11 (0-1)A	08/10/2022	70.6	820	455	2030	3990	3750	1300 J	2800	3130	522	4190	198	2920	218	506	799	2370	6630	46.9	31,300 J	5,220	**5,400** J
			0-1 FR	DU-11 (0-1)B	08/10/2022	104	1180	751	2130	3970	3820	1270 J	2520	3070	495	4530	511	2680	431	804	1670	4340	6470	81.9	31,000 J	9,360	**5,340** J
			0-1 FR	DU-11 (0-1)C	08/10/2022	51.2	390	246	1050	2030	2170	538 J	1340	1550	217	2030	95.4	1420	141	329	539	1190	3200	25.7	15,500 J	2,840	**2,720** J
			1-2	DU-11 (1-2)A	08/10/2022	44.5	358	230	1130	1960	1790	547 J	1320	1660	261	1920	122	1340	167	400	600	1230	3130	48.6	15,100 J	2,980	**2,650** J
			1-2 FR	DU-11 (1-2)B	08/10/2022	16.4	228	141	564	1050	994	277 J	756	904	138	943	70.1	779	107	230	345	682	1570	15.5	7,980 J	1,710	**1,430** J
			1-2 FR	DU-11 (1-2)C	08/10/2022	18.6	270	172	845	1510	1400	417 J	1060	1230	212	1310	59.0	1080	113	273	447	779	2260	17.5	11,300 J	2,020	**2,060** J
			2-3	DU-11 (2-3)A	08/10/2022	25.1	292	214	1040	1950	1760	495 J	1690	1650	293	1860	88.9	1570	137	318	496	1190	3000	24.1	15,300 J	2,620	**2,690** J
			2-3 FR	DU-11 (2-3)B	08/10/2022	42.8	445	345	1770	3270	2810	827 J	2450	2630	443	3120	157	2380	159	365	609	1870	5110	32.1	24,800 J	3,830	**4,420** J
			2-3 FR	DU-11 (2-3)C	08/10/2022	64.7	733	666	2130	3780	3460	900 J	2820	2880	506	4400	456	2780	310	582	870	3980	6540	61.3	30,200 J	7,350	**5,130** J
			0-1	DU-11 (0-1) M	--	75.3	797	484	1,737	3,330	3,247	1,036 J	2,220	2,583	411	3,583	268 J	2,340	263	546	1,003	2,633	5,433	51.5	25,933 J	5,807	**4,487** J
			1-2	DU-11 (1-2) M	--	26.5	285	181	846	1,507	1,395	414 J	1,045	1,265	204	1,391	83.7	1,066	129	301	464	897	2,320	27.2 J	11,460 J	2,237	**2,047** J
			2-3	DU-11 (2-3) M	--	44.2	490	408	1,647	3,000	2,677	741 J	2,320	2,387	414	3,127	234 J	2,243	202	422	658	2,347 J	4,883	39.2	23,433 J	4,600	**4,080** J
	DU-12	ISM	0-1	DU-12 (0-1)	08/16/2022	11.3	35.9	35.9	201	279	321	107 J	197	295	39.6	345	10.5	213	16.8	39	65.6	154	475	7.01 J	2,470 J	352	393 J
			1-2	DU-12 (1-2)	08/16/2022	9.06 J	9.63 J	17.2	83.3	101	130	41.4 J	69.5	115	12.7	169	7.5 J	79.1	6.64 J	14	23.9	109	196	5.85 J	997 J	190 J	143 J
			2-3	DU-12 (2-3)	08/16/2022	4.97 U	8.42 J	10.2	51.1	64.3	77.5	25.5 J	43.8	65.4	7.47 J	89.7	4.97 U	50.6	4.97 U	9.07 J	26.2	44.4	109	4.97 U	584 J	103 J	90.0 J
	DU-13	ISM	0-1	DU-13 (0-1)A	08/29/2022	8.01 J	46.9	44.9	196	284	328	94.5 J	250	309	36.8	316	11.5	233	26.6	58.9	94.7	177	433	8.41 J	2,480 J	442 J	398 J
			0-1 FR	DU-13 (0-1)B	08/29/2022	6.05 J	68.3	55.4	788	785	1070	368 J	617	985	127	1310	9.38 J	670	24.4	55.3	85.4	196	1210	8.20 J	7,930 J	476 J	**1,170** J
			0-1 FR	DU-13 (0-1)C	08/29/2022	7.84 J	37.2	32.1	206	314	340	95.6 J	291	321	41.8	313	10.9	262	24.9	55.2	82.4	160	444	7.23 J	2,630 J	386 J	438 J
			1-2	DU-13 (1-2)A	08/30/2022	5.06 U	16.7	15.1	91.9	141	160	44.5 J	152	134	18.8	155	5.54 J	134	9.79 J	17.9	25.5	91.1	199	5.06 U	1,230 J	174 J	199 J
			1-2 FR	DU-13 (1-2)B	08/30/2022	5.06 U	12.1	11.6	85.5	110	130	44.9 J	102	119	15.4	129	5.06 U	96.8	7.91 J	17.2	26.8	60.0	164	5.06 U	997 J	133	157 J
			1-2 FR	DU-13 (1-2)C	08/30/2022	20.4	30.4	68.1	280	316	382	115 J	232	348	42.7	555	31.3	240	21.5	34.3	65.6	426	553	15.5	3,060 J	676	450 J
			2-3	DU-13 (2-3)A	08/31/2022	6.59 J	22.0	28.0	134	189	197	68.3 J	178	184	23.9	238	7.56 J	164	11.9	23.6	37.8	122	292	5.20 J	1,670 J	248 J	263 J
			2-3 FR	DU-13 (2-3)B	08/31/2022	5.06 U	11.2	11.9	75.9	98.7	108	38.5 J	89.9	104	13.7	116	5.06 U	84.9	7.66 J	16.0	24.7	59.0	149	5.06 U	879 J	128	140 J
			2-3 FR	DU-13 (2-3)C	08/31/2022	5.05 U	8.98 J	10.5	67.3	87.7	109	31.5 J	83.8	95.3	12.4	106	5.05 U	78.7	6.28 J	11.7	18.4	53.1	126	5.05 U	798 J	108 J	126 J
			0-1	DU-13 (0-1) M	--	7.30 J	50.8	44.1	397 J	461	579 J	186 J	386	538 J	68.5 J	646 J	10.6 J	388 J	25.3	56.5	87.5	178	696 J	7.95 J	4,347 J	435 J	**669** J
			1-2	DU-13 (1-2) M	--	10.2 J	19.7	31.6 J	152 J	189	224 J	68.1 J	162	200 J	25.6	280 J	14.0 J	157	13.1 J	23.1	39.3	192 J	305 J	8.54 J	1,762 J	328 J	269 J
			2-3	DU-13 (2-3) M	--	5.57 J	14.1 J	16.8	92.4	125	138	46.1 J	117	128	16.7	153	5.89 J	109	8.61 J	17.1	27.0	78.0	189	5.10 J	1,116 J	161 J	176 J
	DU-14	ISM	0-1	DU-14 (0-1)	08/17/2022	9.79 U	9.79 U	17.6 U	74	99.1	147	43.3 J	97.4	138	17.1	132	8.47 J	98.9	73.9	86.5	65.4	122	145	22.9	992 J	301 J	149 J
			1-2	DU-14 (1-2)	08/17/2022	9.64 U	13.5 U	28 U	134	166	259	72.6 J	160	281	34.1	215	14.6	165	72.2	86.8	60.3	220	216	22.4	1,700 J	407	257 J
			2-3	DU-14 (2-3)	08/17/2022	10.2 U	13.2 U	23.3 U	107	130	188	57.7 J	108	200	23.8	190	9.51 J	112	39	56.5	45.1	152	202	14.3	1,320 J	286 J	195 J
	DU-15	ISM	0-1	DU-15 (0-1)	08/19/2022	5.04 U	8.47 J	14.5	81	92.9	139	47.6 J	74	112	14.2	157	5.04 U	83.4	18.3	24.1	24.4	67.3	158	8.14 J	959 J	144 J	138 J
			1-2	DU-15 (1-2)	08/19/2022	4.93 U	4.93 U	5.52 J	26.6	32.7	53.4	16.2 J	29.8	47.3	5.76 J	39.5	4.93 U	32.6	9.18 J	12	11	30.9	43.8	4.93 U	328 J	66.8 J	49.9 J
			2-3	DU-15 (2-3)	08/19/2022	4.88 U	7.35 J	11.7	64.4	69.5	93.5	33.3 J	49	77.7	9.1 J	116	4.88 U	57.8	4.88 U	7.05 J	10.9	44.9	121	4.88 U	691 J	86.8 J	101 J

Please see notes at end of table.

Table 4b
Soil Results - PAHs and Dibenzofuran - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PAHs and Dibenzofuran by EPA Method 8270E-SIM Concentrations in µg/kg																							
						Acenaphthene	Acenaphthylene	Anthracene	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(g,h,i) perylene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Dibenzofuran	Total HPAH	Total LPAH	cPAHs (BaP Eq.)
				Human Health ISM PRG		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	550
				Human Health ISM Hot Spot		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	55,000
Central Parcel	DU-16	ISM	0-1	DU-16 (0-1)A	09/12/2022	15.2 U	24.4 U	58.4	284	337	456	157 J	229	393	58.7	522	21.3	247	279	317	204	347	540	77.6	3,220 J	968	496 J
			0-1 FR	DU-16 (0-1)B	09/12/2022	10.2 U	21.0	33.8	195	286	387	130 J	227	290	51.4	350	9.77 J	243	44.0	51.6	49.1	183	373	20.4	2,530 J	353	421 J
			0-1 FR	DU-16 (0-1)C	09/12/2022	14.0 U	20.0 U	42.1	227	300	409	138 J	237	317	54.5	423	16.9	246	68.5	81.9	67.5	242	440	23.0	2,790 J	467	444 J
			0-1	DU-16 (0-1) M	--	15.2 U	21.8	44.8	235	308	417	142 J	231	333	54.9	432	16.0 J	245	131 J	150 J	107 J	257	451	40.3 J	2,847 J	596	454 J
			1-2	DU-16 (1-2)	11/07/2022	5 U	13.3	21.7	152	169	217	83 J	131	212	25.7	242	5.95 J	137	19.6	27.2	29.7	107	262	7.51 J	1,630 J	207	246 J
			2-3	DU-16 (2-3)	11/07/2022	5 U	5 U	7.22 J	42.9	38.7	53 J	19.6 J	27.6	51.5	5.09 J	70.9	5 U	32.8	5 U	5.34 J	6.72 J	35.6	74.7	5.00 U	417 J	62.4	56.9 J
	DU-17	ISM	0-1	DU-17 (0-1)	09/02/2022	5 U	5 U	9.99 U	33.4	40.9	67.1	20.7 J	42.9	62.4	8 J	53.3	5 U	42	7.14 J	13.1	16.3	43.2	57.7	5.00 U	428 J	85.1	63.4 J
			1-2	DU-17 (1-2)	09/02/2022	5.04 U	5.04 U	5.04 U	30.1	32.5	51.7	16.2 J	40.5	50.8	6.94 J	48.7	5.04 U	35.1	8.92 J	14.5	12.9	48.4	50	5.04 U	363 J	85.9	51.3 J
			2-3	DU-17 (2-3)	09/02/2022	4.95 U	4.95 U	4.95 U	21.3	21	30.2	10.1 J	22.5	26.3	4.95 U	33.1	4.95 U	21.4	4.95 U	5.16 J	5.68 J	14.1	34	4.95 U	222 J	34.8 J	30.9 J
	DU-18	ISM	0-1	DU-18 (0-1)A	09/29/2022	5.08 U	22.6	25.5	78.4	129	205	57.6 J	174	136	19.2	128	5.08 U	158	7.71 J	12.3	25.4	65.5	151	5.64 J	1,240 J	156	193 J
			0-1 FR	DU-18 (0-1)B	09/29/2022	5.08 U	21.0	27.8	95.4	137	211	62.9 J	159	157	19.9	170	6.01 J	149	7.86 J	12.5	24.4	93.3	193	6.94 J	1,350 J	188 J	203 J
			0-1 FR	DU-18 (0-1)C	09/29/2022	5.97 J	29.0	39.5	125	184	250	85.4 J	209	199	29.4	255	8.19 J	193	7.17 J	11.0	24.5	145	279	6.67 J	1,810 J	263 J	271 J
			1-2	DU-18 (1-2)A	09/30/2022	4.80 U	14.4	16.6	65.0	93.3	143	48.0 J	104	105	13.6	102	5.48 J	96.9	9.71	11.9	19.2	67.9	123	4.80 U	894 J	138 J	138 J
			1-2 FR	DU-18 (1-2)B	09/30/2022	4.96 U	8.03 J	11.1	58.9	74.5	115	31.5 J	73.6	85.9	10.3	95.0	4.96 U	70.9	4.96 U	6.60 J	13.2	38.5	107	4.96 U	723 J	82.4 J	110 J
			1-2 FR	DU-18 (1-2)C	09/30/2022	5.03 U	8.42 J	8.58 J	46.0	57.5	86.6	29.7 J	70.6	69.1	9.24 J	77.9	5.03 U	64.9	5.03 U	5.56 J	12.0	34.7	86.4	5.03 U	598 J	74.3 J	86.9 J
			2-3	DU-18 (2-3)A	10/03/2022	5.04 U	5.04 U	5.04 U	22.4	27.4	42.4 J	12.9 J	23.5	31.4	5.04 U	40.9	5.04 U	26.4	5.04 U	5.04 U	5.04 U	17.5	47.5	5.04 U	277 J	32.6	39.2 J
			2-3 FR	DU-18 (2-3)B	10/03/2022	5.06 U	8.08 J	12.7	45.9	59.3	79.5 J	30.2 J	63.5	65.6	7.99 J	83.7	5.06 U	60.4	5.06 U	5.06 U	11.5	44.2	91.4	5.06 U	587 J	84.1 J	86.2 J
			2-3 FR	DU-18 (2-3)C	10/03/2022	4.95 U	6.27 J	8.20 J	41.6	53.0	78.3 J	23.5 J	55.0	59.8	7.29 J	65.2	4.95 U	53.6	4.95 U	4.95 U	8.66 J	29.7	74.6	4.95 U	512 J	60.3 J	77.9 J
			0-1	DU-18 (0-1) M	--	5.38 J	24.2	30.9	100	150	222	68.6 J	181	164	22.8	184	6.43 J	167	7.58 J	11.9	24.8	101	208	6.42 J	1,467 J	202 J	222 J
			1-2	DU-18 (1-2) M	--	5.03 U	10.3 J	12.1 J	56.6	75.1	115	36.4 J	82.7	86.7	11.0 J	91.6	5.16 J	77.6	6.57	8.02 J	14.8	47.0	105	5.03 U	738 J	98.2 J	112 J
			2-3	DU-18 (2-3) M	--	5.06 U	6.46 J	8.65 J	36.6	46.6	66.7 J	22.2 J	47.3	52.3	6.8 J	63.3	5.06 U	46.8	5.06 U	5.06 U	8.40 J	30.5	71.2	5.06 U	459 J	59.0 J	68 J
	DU-19	ISM	0-1	DU-19 (0-1)	09/06/2022	5.93 J	44.4	38.2	163	282	356	125 J	265	242	41.6	305	10.4	259	13.7	17.9	39.2	187	335	12.1	2,370 J	343 J	403 J
			1-2	DU-19 (1-2)	09/06/2022	18.6	17.0	48.0	155	186	253	91.8 J	149	197	26.7	313	25.3	155	11.9	16.1	25.4	234	294	17.4	1,820 J	384	270 J
			2-3	DU-19 (2-3)	09/06/2022	5.07 U	7.99 J	7.78 J	40.5	53.7	76.7	26.5 J	48.1	54.0	8.25 J	69.5	5.07 U	50.0	5.07 U	5.07 U	7.12 J	32.2	86.5	5.07 U	514 J	62.7 J	79.0 J
	DU-20	ISM	0-1	DU-20 (0-1)	10/18/2022	4.81 U	14.2	10.1	51	99	164	59.7 J	91.2	115	15.3	81.4	4.9 J	86.8	5.34 J	9.47 J	13.9	42	129	4.81 U	892	97.0	145 J
			1-2	DU-20 (1-2)	10/18/2022	4.93 U	4.93 U	4.93 U	8.6 J	7.86 J	11.4 J	4.93 U	7.39 J	10.5	4.93 U	14.6	4.93 U	7.95 J	4.93 U	4.93 U	4.93 U	8.78 J	14.9	4.93 U	88.1	23.6	13.2 J
			2-3	DU-20 (2-3)	10/18/2022	4.73 U	4.73 U	4.73 U	13.7	12.7	17.2 J	7.52 J	9.69	16.5	4.73 U	21.9	4.73 U	10.4	4.73 U	4.73 U	4.73 U	10.5	23.2	4.73 U	135	24.7	19.3 J
	DU-21	ISM	0-1	DU-21 (0-1)	09/08/2022	9.34 U	30.3	49.9	132	201	346	83.8 J	231	320	42.5	249	18.8	212	36.7	61.5	53.3	246	273	18.7	2,090 J	464	314 J
			1-2	DU-21 (1-2)	09/08/2022	4.98 U	14.5	18.2	86.8	110	169	54.8 J	102	139	17.9	133	4.98 U	100	10.8	16.5	22.6	73.8	141	7.41 J	1,050 J	151	164 J
			2-3	DU-21 (2-3)	09/08/2022	4.68 U	8.57 J	13	44.4	57.1	89.6	27.6 J	62.7	89.2	11.3	92.9	5.57 J	57.4	11.8	16.9	16.2	85.6	91.4	5.24 J	624 J	148 J	87.9 J
	DU-22	ISM	0-1	DU-22 (0-1)A	10/13/2022	4.99 U	7.18 J	11.1	36.6	50.4	88.3	27.7 J	54.7	81.9	8.05 J	80.2	4.99 U	51.1	8.62 J	16.9	50.3	58.5	86.2	5.49 J	565	149	76.4 J
			0-1 FR	DU-22 (0-1)B	10/13/2022	4.9 U	4.9 U	8.3 J	25.9	30.8	64.4	17.9 J	34.7	68.2	6.22 J	40.8	4.9 U	31.9	10.3	15.5	14.5	48.7	52.9	4.90 U	374	94.4	49.5 J
			0-1 FR	DU-22 (0-1)C	10/13/2022	168	14.8 U	195	194	78.6	161	50.4 J	57.3	237	10.5	1130	240	60.8	28.7	33.6	17.2	1290	672	112	2,650	1,950	131 J
			1-2	DU-22 (1-2)A	10/14/2022	5.05 U	5.05 U	5.05 U	16 J	13	24.5 J	10.3 J	14.8	27.1	5.05 U	21.3	5.05 U	15.6	5.05 U	5.88 J	10.9	19.4	22.2	5.05 U	167	46.3	21.3 J
			1-2 FR	DU-22 (1-2)B	10/14/2022	4.9 U	4.9 U	4.9 U	19.2 J	18.4	38.4 J	18.6 J	19	36.4	4.9 U	26.1	4.9 U	20.2	4.9 U	5.13 J	7.85 J	17.5	36	4.90 U	235	40.3	28.9 J
			1-2 FR	DU-22 (1-2)C	10/14/2022	4.73 U	4.73 U	4.73 U	16.2 J	15.8	32.2 J	11.6 J	20.4	27.7	4.73 U	32.2	4.73 U	19.4	4.73 U	4.73 U	6.15 J	20.9	31.4	4.73 U	209	38.9	25.1 J
			2-3	DU-22 (2-3)A	10/14/2022	4.99 U	4.99 U	4.99 U	11.3 J	11.7	22.8 J	8.48 J	13.2	27	4.99 U	21.3	4.99 U	13.3	4.99 U	8.23 J	21.6	25.4	23.2	4.99 U	155	65.2	19.0 J
			2-3 FR	DU-22 (2-3)B	10/14/2022	4.96 U	4.96 U	4.96 U	17.9 J	17.3	31.6 J	12.6 J	28	34.5	4.96 U	25.8	4.96 U	25	4.96 U	8.61 J	12	26.4	30.2	4.96 U	225	56.9	27.4 J
			2-3 FR	DU-22 (2-3)C	10/14/2022	5.05 U	5.05 U	5.05 U	11.2 J	18.6	44.8 J	18 J	19.8	28.4 J	5.05 U	19.2	5.05 U	22.6	5.05 U	5.05 U	8.01 J	11.9	22.2	5.05 U	207	32.5	29.2 J
			0-1	DU-22 (0-1) M	--	59.3 J	8.96 J	71.5 J	85.5 J	53.3	105	32.0 J	48.9	129 J	8.26 J	417 J	83.3 J	47.9	15.9 J	22.0	27.3 J	466 J	270 J	40.8 J	1,196 J	731 J	85.6 J
			1-2	DU-22 (1-2) M	--	5.05 U	5.05 U	5.05 U	17.1 J	15.7	31.7 J	13.5 J	18.1	30.4	5.05 U	26.5	5.05 U	18.4	5.05 U	5.25 J	8.30 J	19.3	29.9	5.05 U	204	41.8	25.1 J
			2-3	DU-22 (2-3) M	--	5.05 U	5.05 U	5.05 U	13.5 J	15.9	33.1 J	13.0 J	20.3	30.0 J	5.05 U	22.1	5.05 U	20.3	5.05 U	7.30 J	13.87 J	21.2	25.2	5.05 U	196	51.5	25.2 J
	DU-23	ISM	0-1	DU-23 (0-1)	10/12/2022	5.06 U	8.72 J	10.9	47	69.7	122	38.9 J	80	109	11.8	94.3	5.06 U	71.3	8.36 J	16.9	36.4	63.1	111	6.11 J	755	141	106 J
			1-2	DU-23 (1-2)	10/12/2022	5.04 U	12.8	5.74 J	29.1 J	74.1	118	29.7 J	46.5	75.6 J	9.87 J	36	5.04 U	51.9	5.04 U	6 J	10.2	24	66	5.04 U	537	63.8	104 J
			2-3	DU-23 (2-3)	10/12/2022	5.05 U	5.05 U	5.05 U	18.9 J	25.1	45.7	15.6 J	17.4	33.4 J	5.05 U	23.2	5.05 U	19.3	5.05 U	5.05 U	6.41 J	12.3	29.9	5.05 U	231	31.3	36.2 J
Central Parcel	DU-24	ISM	0-1	DU-24 (0-1)	09/21/2022	4.99 U	8.87 J	9.1 J	56.9	63	90.3	29.5 J	46.2	75.1	7.52 J	105	4.99 U	50.5	4.99 U	4.99 U	5.45 J	50.3	106	4.99 U	630 J	81.2 J	90.7 J
			1-2	DU-24 (1-2)	09/21/2022	4.98 U	5.67 J	6.15 J	41.1	53.2	69.1	26.4 J	38.6	59.3	5.36 J	74	4.98 U	41.2	4.98 U	4.98 U	4.98 U	33	92.1	4.98 U	500 J	54.8 J	74.0 J
			2-3	DU-24 (2-3)	09/21/2022	4.96 U	4.96 U	4.96 U	8.77 J	9.02 J	13 J	4.96 U	7.04 J	10.3	4.96 U	12.9	4.96 U	8.05 J	4.96 U	4.96 U	4.96 U	5.33 J	14.3	4.96 U	88 J	20.2 J	14.5 J
	DU-25	ISM	0-1	DU-25 (0-1)	09/23/2022	4.86 U	41.3	33.8	183	275	353	125 J	230	327	33.5	503	10.8	223	7.84 J	15.6	40.2	283	516	12.3	2,770 J	427	386 J
			1-2	DU-25 (1-2)	09/23/2022	4.99 U	10.3	7.48 J	45.1	64.8	82.8	26.1 J	54.8	76.6	7.23 J	116	4.99 U	53	4.99 U	4.99 U	12.3	63.1	117	4.99 U	643 J	101 J	90.5 J
			2-3	DU-25 (2-3)	09/23/2022	4.83 U	7.83 J	7.02 J	46.1	63.2	75.6	28 J	48.3	71.4	6.6 J	111	4.83 U	50	4.83 U	4.83 U	7.72 J	57.5	113	4.83 U	613 J	87.3 J	87.3 J
	DU-26	ISM	0-1	DU-26 (0-1)A	11/09/2022	10	83.9	76.4	291	494	702	205 J	483	524	79.2	798	23.8	482	26	30.5	77.4	477	831	24.6	4,890 J	779	**723** J
			0-1 FR	DU-26 (0-1)B	11/09/2022	5.53 J	43.3	41.4	163	260	355	122 J	260	290	43.3	377	11.2	256	17.8	22.8	45.3	237	422	13.5	2,550 J	407 J	382 J
			0-1 FR	DU-26 (0-1)C	11/09/2022	5.99 J	44.9	44.9	175	267	381	121 J	268	301	44.1	403	12.3	259	14.8	20.9	46.3	249	438	13.8	2,660 J	424 J	394 J
			1-2	DU-26 (1-2)A	11/10/2022	4.93 U	7.66 J	6.79 J	34.9	51.9	76.1	24.5 J	54.7	58.8	7.86 J	67.3	4.93 U	53	4.93 U	5.57 J	10.7	39.2	76.2	4.93 U	505	74.9	76.5 J
			1-2 FR	DU-26 (1-2)B	11/10/2022	4.95 U	7.06 J	6.72 J	44.1	54.2	94.2	27.9 J	57.6	73.5	8.08 J	89.6	4.95 U	55.8	4.95 U	5.51 J	10.3	36.2	103	4.95 U	608	70.7	82.0 J
			1-2 FR	DU-26 (1-2)C	11/10/2022	4.89 J	31	18.2	127	197	246	73.8 J	181	180	28.2	194	4.65 U	179	5.77 J	8.86 J	16.7	75.7	257	4.65 U	1,660	158	281 J
			2-3	DU-26 (2-3)A	11/11/2022	4.93 U	8.01 J	7.6 J	36.1	44.2	68.1	20.5 J	51.2	53.4	6.47 J	72.9	4.93 U	49.1	4.93 U	4.93 U	9.45 J	36.8	85.4	4.93 U	487	69.3	66.3 J
			2-3 FR	DU-26 (2-3)B	11/11/2022	4.98 U	13	14.3	81.2	99.5	136	50.2 J	102	106	16.5	144	4.98 U	100	4.98 U	5.28 J	12.4	74.3	158	4.98 U	993	124	148 J
			2-3 FR	DU-26 (2-3)C	11/11/2022	4.99 U	11.5	9.11 J	50.6	70.6	94.4	29.2 J	83.6	76.5	10.4	100	4.99 U	72.6	4.99 U	5.46 J	11.9	50.5	108	4.99 U	696	93.5	103 J
			0-1	DU-26 (0-1) M	--	7.17 J	57.4	54.2	210	340	479	149 J	337	372	55.533	526	15.8	332	19.5	24.7	56.3	321	564	17.3	3,367 J	537 J	500 J
			1-2	DU-26 (1-2) M	--	4.92 J	15.2 J	10.6 J	68.7 J	101 J	139 J	42.1 J	97.8 J	104 J	14.713 J	117	4.95 U	95.9 J	5.22 J	6.65 J	12.6	50.4	145 J	4.95 U	924 J	101	147 J
			2-3	DU-26 (2-3) M	--	4.99 U	10.8 J	10.3 J	56.0	71.4	99.5	33.3 J	78.9	78.6	11.123 J	106	4.99 U	73.9	4.99 U	5.22 J	11.3 J	53.9	117	4.99 U	725	95.6	106 J

Please see notes at end of table.

Table 4b
Soil Results - PAHs and Dibenzofuran - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PAHs and Dibenzofuran by EPA Method 8270E-SIM Concentrations in µg/kg																						
						Acenaphthene	Acenaphthylene	Anthracene	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(g,h,i) perylene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Dibenzofuran	Total HPAH	Total LPAH	cPAHs (BaP Eq.)
Human Health ISM PRG						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	550
Human Health ISM Hot Spot						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	55,000
Central Parcel Concrete Slab	DU-42 (Within DU-16)	Composite	0-1	DU-42 (0-1)	11/30/2022	4.96 U	4.96 U	5.74 J	30.7	36.9	43.7 J	16.6 J	40.6	37.3	4.96 U	49.7	4.96 U	36.9	5.82 J	6.82 J	8.12 J	39.7	51.7	4.96 U	347	67.8	50.7 J
			1-2	DU-42 (1-2)	11/30/2022	4.76 U	4.76 U	4.76 U	20	21.4	27.8	10.3 J	25.5	23.9	4.76 U	33.3	4.76 U	22.1	4.76 U	5.21 J	6.01 J	22.2	33.2	4.76 U	220	42.9	30.9 J
			2-3	DU-42 (2-3)	11/30/2022	4.96 U	4.96 U	4.96 U	16.1	15.4	18	5.68 J	16.8	17.5	4.96 U	23.1	4.96 U	15.8	4.96 U	4.96 U	5.33 J	12	26.8	4.96 U	158	29.7	22.9 J
East Parcel	DU-27	ISM	0-1	DU-27 (0-1)	10/05/2022	5 U	21.7	55.8	70.2	130	250	64.5 J	172	170	29.4	146	5 U	203	5 U	5 U	12	61.9	160	5.00 U	1,400 J	159	213 J
			1-2	DU-27 (1-2)	10/05/2022	4.94 U	37.1	65.2	117	162	243	69.4 J	165	195	24.8	304	12.5	180	5.93 J	8.7 J	22.3	215	316	10.1	1,780 J	363 J	242 J
			2-3	DU-27 (2-3)	10/05/2022	5.02 U	12.1	22	39.6	65.5	100	28.2 J	86.5	75.5	9.64 J	81.7	5.02 U	78.4	5.02 U	5.16 J	16	42.7	92	5.02 U	657 J	103 J	97.3 J
	DU-28	ISM	0-1	DU-28 (0-1)	09/14/2022	4.95 U	39.1	76.8	112	303	415	117 J	253	236	45.8	268	6.98 J	298	4.95 U	7.73 J	19.8	108	312	7.02 J	2,360 J	261 J	433 J
			1-2	DU-28 (1-2)	09/14/2022	5.14 J	34.8	105	220	353	562	137 J	269	372	62.2	424	8.53 J	330	4.88 U	6.31 J	16.5	133	409	8.50 J	3,140 J	309 J	528 J
			2-3	DU-28 (2-3)	09/14/2022	5 U	36.1	95	97.4	235	345	82.1 J	228	204	44.7	175	7.42 J	280	10.5	15.4	18.4	63.4	194	8.38 J	1,890 J	238 J	353 J
	DU-29	ISM	0-1	DU-29 (0-1)	09/15/2022	5.06 U	14.1	16	69.9	109	140	46.3 J	103	113	13.6	142	5.06 U	102	12.5	16.6	20.9	84.1	149	8.46 J	988 J	157	154 J
			1-2	DU-29 (1-2)	09/15/2022	5.05 U	6.51 J	7.61 J	44.7	49	63.6	22.7 J	33.1	51.7	5.94 J	83.9	5.05 U	37	5.05 U	5.53 J	8.88 J	30.5	86.4	5.05 U	478 J	64.1 J	69.7 J
			2-3	DU-29 (2-3)	09/15/2022	5 U	5.26 J	6.88 J	27.8	41.3	56.1	19.2 J	33.6	40.1	5.22 J	57.4	5 U	36.8	5 U	5 U	8.06 J	28.5	62.8	5.00 U	380 J	56.2 J	58.8 J
	DU-30	ISM	0-1	DU-30 (0-1)	09/16/2022	5.01 U	34.8	34.1	140	283	347	106 J	230	208	40	262	5.01 U	255	7.51 J	13.7	21	94.2	276	7.17 J	2,150 J	203	398 J
			1-2	DU-30 (1-2)	09/16/2022	5 U	19.5	14.2	63.2	119	146	50.5 J	108	100	17.1	135	5 U	115	5 U	8.62 J	18.3	53.9	147	5.00 U	1,000 J	120 J	169 J
			2-3	DU-30 (2-3)	09/16/2022	5.02 U	7.93 J	7.28 J	33.7	49.3	68.6	20.7 J	42.6	49.9	6.61 J	72.3	5.02 U	44.9	5.02 U	5.12 J	9.29 J	33.5	76.2	5.02 U	465 J	68.1 J	70.9 J
	DU-31	ISM	0-1	DU-31 (0-1)	11/03/2022	4.93 U	16.6	16	68.9	82.4	132	40.5 J	80	101	12.7	128	4.93 U	79.9	4.93 U	6.02 J	15.2	57.6	129	5.00 J	854	116	124 J
			1-2	DU-31 (1-2)	11/03/2022	5.02 U	21	14.6	57.4	79.8	120	41.3 J	79.8	86.9	13.1	106	5.02 U	78.5	5.02 U	6.09 J	17.8	62.2	105	5.38 J	768	127	119 J
			2-3	DU-31 (2-3)	11/03/2022	4.99 U	13.1	12.9	52.5	62	92.4	28.2 J	56.7	72.9	9.5 J	110	4.99 U	55.8	4.99 U	4.99 U	12.2	64.3	109	4.99 U	649	110	91.9 J
	DU-32	ISM	0-1	DU-32 (0-1)	09/22/2022	4.75 U	16.3	12.5	56.4	78.4	125	44.2 J	70.4	87.5	10.4	118	4.75 U	75.9	4.75 U	7.23 J	17.3	63.5	110	6.29 J	776 J	122 J	115 J
			1-2	DU-32 (1-2)	09/22/2022	4.68 U	9.57	8.09 J	35.5	51.3	74.3	25.2 J	59.8	57.3	7.29 J	61.2	4.68 U	55.2	4.68 U	4.68 U	10.5	33.2	64.1	4.68 U	491 J	68.4 J	75.4 J
			2-3	DU-32 (2-3)	09/22/2022	5.7 J	87.1	71.7	297	409	477	184 J	253	368	48.4	657	42.9	287	16	26.6	94.8	417	545	40.5	3,530 J	746 J	**566** J
	DU-33	ISM	0-1	DU-33 (0-1)	09/20/2022	4.74 U	7.78 J	8.94 J	34.1	38.3	64	18.4 J	38.8	53.3 J	4.74 U	65.9 J	4.74 U	35	8.49 J	13.5	25	44.5	63.9 J	8.13 J	414 J	104 J	54.2 J
			1-2	DU-33 (1-2)	09/20/2022	4.91 U	10.5	10.2	36	36.6	61.1	17.9 J	33.9	61.7	4.91 U	85.5	4.91 U	29.1	4.91 J	9.28 J	27.7	65.3	86.5	6.56 J	451 J	128 J	51.9 J
			2-3	DU-33 (2-3)	09/20/2022	4.87 U	5.05 J	7.41 J	37.8	40.6	53.8	16.1 J	34.1	46.3	4.87 U	66.4	4.87 U	31.1	4.87 U	5.59 J	11.5	30.6	72.4	4.87 U	401 J	65.0 J	55.5 J
	DU-34	ISM	0-1	DU-34 (0-1)	09/27/2022	6.51 J	60.9	41.7	130	175	259	97.2 J	140	190	23.8	298	16.8	144	9.77 J	19.3	52	199	260	17.8	1,720 J	396 J	253 J
			1-2	DU-34 (1-2)	09/27/2022	5.07 U	40.6	23.9	95.3	126	185	59 J	102	132	18.7	181	7.87 J	102	5.44 J	10.9	28.9	95.6	185	9.78 J	1,190 J	210	184 J
			2-3	DU-34 (2-3)	09/27/2022	4.79 U	16.7	12.2	48.5	66.5	102	33.9 J	54.1	74.7	9.69	102	4.79 U	56.3	4.79 U	7.4 J	15.7	59.1	103	5.14 J	651 J	116 J	97.3 J
	DU-35	ISM	0-1	DU-35 (0-1)	10/07/2022	4.88 U	12.9	13.9	46.8	63.5	95.8	30.9 J	60.9	76.7	9.03 J	86.7	4.88 U	59.3	4.88 U	7.41 J	15.3	50	86.6	5.27 J	616	104	93.1 J
			1-2	DU-35 (1-2)	10/07/2022	5.03 U	19	15.6	52.8	81.8	114	34.9 J	74.9	74.5	12.1	88.1	5.03 U	77	5.03 U	6.35 J	14.1	45.8	94.2	5.03 U	704	106	119 J
			2-3	DU-35 (2-3)	10/07/2022	4.86 U	4.86 U	4.86 U	19.8	24.1	42.1 J	13.4 J	25.8	32.8	4.86 U	30.8	4.86 U	26.4	4.86 U	4.86 U	5.83 J	15.4	32.7	4.86 U	250	33.4	35.5 J
	DU-36	ISM	0-1	DU-36 (0-1)	11/01/2022	5.04 U	5.4 J	7.26 J	42.6	52.8	89.2	33.1 J	76.2	78.5	9.76 J	86.3	5.04 U	61.2	5.04 U	8.38 J	17.3	45.8	87.6	5.99 J	617	89.2	82.3 J
			1-2	DU-36 (1-2)	11/01/2022	4.99 U	9.87 J	18.3	55.3	68	107	36.2 J	86.3	91.5	10.9	116	4.99 U	74.6	6.15 J	12.3	22.9	61.1	131	8.23 J	777	129	103 J
			2-3	DU-36 (2-3)	11/01/2022	5.04 U	5.04 U	5.04 U	23.1	25.9	42.3	13.2 J	33.6	37.9	5.04 U	43.9	5.04 U	28	5.04 U	6.54 J	14.7	25.1	44.2	5.04 U	295	56.4	37.9 J
	DU-38	ISM	0-1	DU-38 (0-1)A	11/14/2022	4.88 U	5.9 J	7 J	36.5	33.1	59.4	17.8 J	30.3	49.8	4.94 J	66.9	4.88 U	29.1	4.88 U	4.88 U	8.39 J	35.2	64.3	4.88 U	392	63.8	50.8 J
			0-1 FR	DU-38 (0-1)B	11/14/2022	4.82 U	8.51 J	10.3	59.4	55.7	82.9 J	31.6 J	42.6	74.2	7.97 J	99.6	4.82 U	44.8	4.82 U	5.93 J	9.09 J	45.6	95.7	4.82 U	594	84.3	82.8 J
			0-1 FR	DU-38 (0-1)C	11/14/2022	5.04 U	10.2	8.9 J	46.6	50	73.9	26.4 J	40.7	60.1	7.19 J	89.7	5.04 U	42.5	5.04 U	6.31 J	13.2	48.3	78.8	5.56 J	516	92.0	73.8 J
			1-2	DU-38 (1-2)A	11/16/2022	5 U	5.27 J	8.19 J	38.5	35.5	56.6 J	19.2 J	30.8	55.6	5.05 J	77.4	5 U	29.6	5 U	7.08 J	14.8	37.2	73.2	5.00 U	421	77.5	53.3 J
			1-2 FR	DU-38 (1-2)B	11/16/2022	5.08 U	5.5 J	8.84 J	42.2	34.6	54.3	17.2 J	27.7	54.1	5.08 U	74.6	5.08 U	25.5	5.08 U	8.92 J	15.2	41.8	73.4	5.08 U	406	85.3	49.6 J
			1-2 FR	DU-38 (1-2)C	11/16/2022	5.04 U	5.91 J	8.4 J	46.8	42.8	62.6	23.4 J	35.7	60.6	6.06 J	72.3	5.04 U	34.3	5.04 U	6.9 J	14.3	38.4	70.5	5.04 U	455	79.0	63.5 J
			2-3	DU-38 (2-3)A	11/17/2022	4.98 U	4.98 U	5.5 J	36.2	27.8	44.1 J	15.2 J	20.5	41.4	4.98 U	63.5	4.98 U	21.9	4.98 U	4.98 U	6.47 J	25.6	59.8	4.98 U	333	47.5	40.7 J
			2-3 FR	DU-38 (2-3)B	11/17/2022	5.06 U	5.06 U	6.23 J	37.6	30.6	47.1 J	15.8 J	21.9	44.4	5.06 U	59.2	5.06 U	24	5.06 U	5.06 U	7.13 J	24.2	56.8	5.06 U	340	47.7	44.2 J
			2-3 FR	DU-38 (2-3)C	11/17/2022	5.35 J	5.07 U	15.6	50.9	28.3	51	19.7 J	18.4	68.2	5.07 U	146	5.07 U	20.8	5.07 U	5.07 U	7.88 J	37.4	113	5.07 U	519	73.8	43.4 J
			0-1	DU-38 (0-1) M	--	5.04 U	8.20 J	8.73 J	47.5	46.3	72.1 J	25.3 J	37.9	61.4	6.70 J	85.4	5.04 U	38.8	5.04 U	5.71 J	10.2 J	43.0	79.6	5.09 J	501	80.0	69.1 J
			1-2	DU-38 (1-2) M	--	5.08 U	5.56 J	8.48 J	42.5	37.6	57.8 J	19.9 J	31.4	56.8	5.40 J	74.8	5.08 U	29.8	5.08 U	7.63 J	14.8	39.1	72.4	5.08 U	427	80.6	55.5 J
			2-3	DU-38 (2-3) M	--	5.13 J	5.07 U	9.11 J	41.6	28.9	47.4 J	16.9 J	20.3	51.3	5.07 U	89.6	5.07 U	22.2	5.07 U	5.07 U	7.16 J	29.1	76.5	5.07 U	397	56.3	42.8 J
East Parcel Concrete Slabs	DU-37	Composite	0-1	DU-37 (0-1)	11/28/2022	5.03 U	5.03 U	5.03 U	7.17 J	7.09 J	10.6	5.03 U	13.4	8.11 J	5.03 U	10.8	5.03 U	9.61 J	5.03 U	5.03 U	5.03 U	5.87 J	11.6	5.03 U	83.4	21.0	12.4 J
			1-2	DU-37 (1-2)	11/28/2022	5.01 U	5.01 U	5.01 U	6.37 J	5.85 J	8.16 J	5.01 U	38.3	5.92 J	5.01 U	9.28 J	5.01 U	15.7	5.01 U	5.01 U	5.01 U	6.29 J	10.2	5.01 U	105	21.3	11.4 J
			2-3	DU-37 (2-3)	11/28/2022	5 U	19.8	36.3	79.1	66.2	76.4 J	27.6 J	104	93.8	8.12 J	164	22.4	67.4	9.38 J	8.06 J	8.03 J	157	164	11.5	851	254	97.0 J
	DU-39	Composite	0-1	DU-39 (0-1)	11/29/2022	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 UJ	4.9 UJ	4.9 U	4.9 J	4.90 U	27.0	17.2	5.66 J
			1-2	DU-39 (1-2)	11/29/2022	16.9	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	10.4	4.93 U	34.2	56.1	70.2	16.6	4.93 U	4.93 U	24.7	175	5.70
			2-3	DU-39 (2-3)	11/29/2022	7.48 J	4.94 U	4.94 U	12.1	6.92 J	10.9 J	4.94 U	6.14 J	11.5	4.94 U	18.4	4.94 U	6.65 J	24.2	40.3	62.8	11.2	17.9	4.94 U	95.5	129	12.4 J
	DU-40	Composite	0-1	DU-40 (0-1)	11/18/2022	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	24.9	17.4	5.74
			1-2	DU-40 (1-2)	11/18/2022	5.00 U	5.00 U	5.00 U	5.62 J	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	28.1	17.5	6.09 J
			2-3	DU-40 (2-3)	11/18/2022	5.05 U	5.05 U	5.05 U	5.18 J	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	27.9	17.7	6.10 J
	DU-43 (Within DU-31)	Composite	0-1	DU-43 (0-1)	11/21/2022	4.94 U	4.94 U	4.94 U	9.79 J	10.1	12.1 J	4.94 U	24.1	11.8	4.94 U	15.0	4.94 U	15.5	4.94 U	4.94 U	4.94 U	8.74 J	16.4	4.94 U	120	23.6	16.3 J
			1-2	DU-43 (1-2)	11/21/2022	5.07 U	5.07 U	5.07 U	8.33 J	5.45 J	12.3 J	5.07 U	5.60 J	17.0	5.07 U	34.0	5.07 U	5.25 J	5.07 U	5.12 J	32.6	33.4	28.9	5.07 U	122	81.3	10.6 J
			2-3	DU-43 (2-3)	11/21/2022	4.98 U	4.98 U	4.98 U	7.88 J	5.06 J	8.04 J	4.98 U	4.98 U	7.27 J	4.98 U	10.5	4.98 U	5.01 J	4.98 U	4.98 U	4.98 U	4.98 U	10.4	4.98 U	61.6	17.4	9.68 J
	DU-44 (Within DU-36)	Composite	0-1	DU-44 (0-1)	12/01/2022	4.95 U	4.95 U	4.95 U	17.0	11.1	16.8	5.07 J	12.1	18.9	4.95 U	25.0	4.95 U	9.55 J	4.95 U	4.95 U	5.35 J	11.7	25.5	4.95 U	143	29.4	18.0 J
			1-2	DU-44 (1-2)	12/01/2022	5.00 U	5.00 U	5.00 U	12.7	7.18 J	10.6	5.00 U	8.05 J	10.2	5.00 U	14.9	5.00 U	6.96 J	5.00 U	5.00 U	5.00 U	5.62 J	15.4	5.00 U	91.0	20.6	12.7 J
			2-3	DU-44 (2-3)	12/01/2022	4.88 U	4.88 U	4.88 U	12.8	7.60 J	10.1 J	4.88 U	4.88 U	9.86	4.88 U	15.8	4.88 U	5.61 J	4.88 U	4.88 U	4.88 U	4.88 U	14.9	4.88 U	84.0	17.1	12.9 J

Please see notes at end of table.

Table 4b
Soil Results - PAHs and Dibenzofuran - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PAHs and Dibenzofuran by EPA Method 8270E-SIM Concentrations in µg/kg																					
						Acenaphthene	Acenaphthylene	Anthracene	Benz(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(k) fluoranthene	Benzo(g,h,i) perylene	Chrysene	Dibenz(a,h) anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl naphthalene	2-Methyl naphthalene	Naphthalene	Phenanthrene	Pyrene	Dibenzofuran	Total HPAH	Total LPAH	cPAHs (BaP Eq.)
Human Health ISM PRG						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	550
Human Health ISM Hot Spot						--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	55,000
East Parcel Soil Berms	DU-41	ISM	0-1	DU-41 (0-1)A	10/24/2022	8.09 J	34.2	51.6	142	196 J	269	106 J	214 J	221	24.1	331	6.07 J	209 J	17.6	23	22.1	107	364	11.6	2,080	252	283 J
			0-1 FR	DU-41 (0-1)B	10/24/2022	5.06 J	41.7	50.4	128	233	326	96.9 J	252	225	30.8	267	6.2 J	252	21.5	26.9	35.4	122	301	13.1	2,110	288	336 J
			0-1 FR	DU-41 (0-1)C	10/24/2022	8.96 J	31.6	60.5	112	172	271	77.1 J	186	197	25.4	261	7.76 J	183	10.3	15.7	23.9	164	268	18.4	1,750	312	255 J
			1-2	DU-41 (1-2)A	10/26/2022	30.0	25.1 U	56.8	139	172	247	97.1 J	188	226	25.1	315	23.4	173	80.3	92.6	70.1	274	354	42.7	1,940	559	254 J
			1-2 FR	DU-41 (1-2)B	10/26/2022	14.2 U	28.3 U	56.6	123	189	287	92.3 J	190	235	26.4	277	13.7	183	101	115	83.8	254	319	37.1	1,920	544	276 J
			1-2 FR	DU-41 (1-2)C	10/26/2022	10.1 U	22.2 U	27.0	86.1	134	212	65.4 J	144	161	18.9	194	6.46 J	135	55.9	62.8	56.4	138	215	21.6	1,370	307	197 J
			2-3	DU-41 (2-3)A	10/28/2022	6.08 J	12.0	20.6	69.0	90.1	135	49.2 J	103	117	12.9	147	5.21 J	97.6	23.1	28.9	30.7	98.3	159	10.8	980	202	134 J
			2-3 FR	DU-41 (2-3)B	10/28/2022	4.94 U	12.7	23.1	72.4	101	148	52.0 J	102	123	15.1	137	4.94 U	104	18.8	24.3	22.9	75.2	147	8.18 J	1,000	163	149 J
			2-3 FR	DU-41 (2-3)C	10/28/2022	7.48 J	13.1	23.4	71.2	101	148	53.1 J	106	124	14.4	168	6.68 J	104	28.8	31.6	30.0	119	187	12.9	1,080	231	148 J
			0-1	DU-41 (0-1) M	--	7.37 J	35.8	54.2	127	200 J	289	93.3 J	217 J	214	26.8	286	6.68 J	215 J	16.5	21.9	27.1	131	311	14.4	1,980	284	291 J
			1-2	DU-41 (1-2) M	--	18.1	28.3 U	46.8	116	165	249	84.9 J	174	207	23.5	262	14.5 J	164	79.1	90.1	70.1	222	296	33.8	1,743	470	242 J
			2-3	DU-41 (2-3) M	--	6.17 J	12.6	22.4	70.9	97.4	144	51.4 J	104	121	14.1	151	5.61 J	102	23.6	28.3	27.9	97.5	164	10.6 J	1,020	199	144 J

Notes:
ISM = Incremental Sampling Methodology.
bgs = Below ground surface.
PAHs = Polycyclic aromatic hydrocarbons.
EPA = United States Environmental Protection Agency.
M = Mean. These results are the mean of the field replicates collected at this decision unit.
FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.
µg/kg = Micrograms per kilogram (parts per billion).
Bolded values exceed the Preliminary Remediation Goal (PRG).
Shaded values exceed the hot spot level.
Italicized values represent a method detection limit that is above one or more applicable screening levels.
U = Analyte was not detected.
J = Result is estimated.
PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
HPAH = High-molecular-weight polycyclic aromatic hydrocarbon
LPAH = Low-molecular-weight polycyclic aromatic hydrocarbon
cPAHs = carcinogenic polycyclic aromatic hydrocarbon

Table 5a
Soil Results - PCB Aroclors - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PCBs by EPA Method 8082A Concentrations in µg/kg																	
						Aroclor 1016		Aroclor 1221		Aroclor 1232		Aroclor 1242		Aroclor 1248		Aroclor 1254		Aroclor 1260		Aroclor 1262		Aroclor 1268		Total PCB Aroclors	
					Ecological ISM PRG	--		--		--		--		--		--		--		--		--		98	
					Ecological ISM Hot Spot	--		--		--		--		--		--		--		--		--		980	
West Parcel	DU-1	ISM	0-1	DU-1 (0-1)	07/20/2022	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	407		5.00	U	5.00	U	5.00	U	**427**	
			1-2	DU-1 (1-2)	07/20/2022	50.9	U	50.9	U	50.9	U	50.9	U	50.9	U	2,550		50.9	U	50.9	U	50.9	U	**2,750**	
			2-3	DU-1 (2-3)	07/20/2022	4.99	U	4.99	U	27.3	U	4.99	U	11.1	U	4.99	U	75.9		4.99	U	4.99	U	**110**	
	DU-2	ISM	0-1	DU-2 (0-1)	08/01/2022	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	166		5.09	U	5.09	U	**186**	
			1-2	DU-2 (1-2)	08/01/2022	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	538		5.02	U	5.02	U	**558**	
			2-3	DU-2 (2-3)	08/01/2022	4.68	U	4.68	U	4.68	U	4.68	U	4.68	U	5.18	J	8.30	J	4.68	U	4.68	U	29.9	J
	DU-3	ISM	0-1	DU-3 (0-1)	08/03/2022	4.82	U	4.82	U	4.82	U	4.82	U	4.82	U	4.82	U	5.74	J	4.82	U	4.82	U	25.0	J
			1-2	DU-3 (1-2)	08/03/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U
			2-3	DU-3 (2-3)	08/03/2022	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U
	DU-4	ISM	0-1	DU-4 (0-1)	08/04/2022	4.94	U	4.94	U	4.94	U	4.94	U	4.94	U	6.06	J	8.35	J	4.94	U	4.94	U	31.7	J
			1-2	DU-4 (1-2)	08/04/2022	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	5.27	J	4.81	U	4.81	U	24.5	J
			2-3	DU-4 (2-3)	08/04/2022	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	11.0	J	6.62	J	4.99	U	4.99	U	35.1	J
	DU-5	ISM	0-1	DU-5 (0-1)A	07/22/2022	4.99	U	4.99	U	4.99	U	5.67	J	4.99	U	38.9	J	28.0	J	4.99	U	4.99	U	87.5	J
			0-1 FR	DU-5 (0-1)B	07/22/2022	4.71	U	4.71	U	4.71	U	4.71	U	4.71	U	23.9	J	32.5	J	4.71	U	4.71	U	72.9	J
			0-1 FR	DU-5 (0-1)C	07/22/2022	5.04	U	10.1	U	5.04	U	5.04	U	5.04	U	116	J	41.0	J	5.04	U	5.04	U	**177**	J
			1-2	DU-5 (1-2)A	07/25/2022	4.84	U	9.68	U	15.7	U	4.84	U	4.84	U	60.4	J	58.1	J	4.84	U	4.84	U	**143**	J
			1-2 FR	DU-5 (1-2)B	07/25/2022	4.88	U	4.88	U	4.88	U	4.88	U	4.88	U	56.9	J	49.9	J	4.88	U	4.88	U	**124**	J
			1-2 FR	DU-5 (1-2)C	07/25/2022	4.81	U	9.62	U	4.81	U	4.81	U	4.81	U	42.2	J	32.6	J	4.81	U	4.81	U	94.0	J
			2-3	DU-5 (2-3)A	07/26/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	51.3	J	27.0	J	4.91	U	4.91	U	95.5	J
			2-3 FR	DU-5 (2-3)B	07/26/2022	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	49.8	J	27.6	J	4.81	U	4.81	U	94.2	J
			2-3 FR	DU-5 (2-3)C	07/26/2022	4.92	U	4.92	U	4.92	U	4.92	U	4.92	U	4.92	U	367		4.92	U	4.92	U	**387**	
			0-1	DU-5 (0-1) M	--	5.04	U	10.1	U	5.04	U	5.14	J	5.04	U	59.6	J	33.8	J	5.04	U	5.04	U	**112**	J
			1-2	DU-5 (1-2) M	--	4.88	U	9.68	U	15.7	U	4.88	U	4.88	U	53.2	J	46.9	J	4.88	U	4.88	U	**120**	J
			2-3	DU-5 (2-3) M	--	4.92	U	4.92	U	4.92	U	4.92	U	4.92	U	35.3	J	141	J	4.92	U	4.92	U	**192**	J
	DU-6	ISM	0-1	DU-6 (0-1)	07/28/2022	5.03	U	10.1	U	5.03	U	5.03	U	5.03	U	18.3	J	24.1	J	5.03	U	5.03	U	62.5	J
			1-2	DU-6 (1-2)	07/28/2022	5.01	U	10.0	U	5.01	U	5.01	U	5.01	U	28.5	J	62.0	J	5.01	U	5.01	U	**111**	J
			2-3	DU-6 (2-3)	07/28/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	147		5.05	U	5.05	U	**167**	
	DU-7	ISM	0-1	DU-7 (0-1)	07/29/2022	5.07	U	5.07	U	5.07	U	5.07	U	5.07	U	10.1		24.9	J	5.07	U	5.07	U	52.7	J
			1-2	DU-7 (1-2)	07/29/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	13.3	J	25.8	J	5.04	U	5.04	U	56.7	J
			2-3	DU-7 (2-3)	07/29/2022	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	12.8	J	19.7	J	5.06	U	5.06	U	50.2	J
	DU-8	ISM	0-1	DU-8 (0-1)	08/05/2022	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	29.8	J	51.3	J	5.09	U	5.09	U	**98.9**	J
			1-2	DU-8 (1-2)	08/05/2022	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	47.4	JN	5.09	U	5.09	U	67.8	J
			2-3	DU-8 (2-3)	08/05/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	78.5	JN	4.98	U	4.98	U	**98.4**	J
	DU-9	ISM	0-1	DU-9 (0-1)	08/08/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	11.7	J	34.7	J	5.04	U	5.04	U	64.0	J
			1-2	DU-9 (1-2)	08/08/2022	5.11	U	5.11	U	5.11	U	5.11	U	5.11	U	5.11	U	14.9		5.11	U	5.11	U	35.3	
			2-3	DU-9 (2-3)	08/08/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	10.7	J	19.4	J	5.05	U	5.05	U	47.8	J
Central Parcel	DU-10	ISM	0-1	DU-10 (0-1)	08/12/2022	4.97	U	4.97	U	4.97	U	4.97	U	4.97	U	8.58	J	7.73	J	4.97	U	4.97	U	33.7	J
			1-2	DU-10 (1-2)	08/12/2022	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	6.07	J	5.03	U	5.03	U	5.03	U	26.2	J
			2-3	DU-10 (2-3)	08/12/2022	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U
	DU-11	ISM	0-1	DU-11 (0-1)A	08/10/2022	4.90	U	4.90	U	4.90	U	4.90	U	4.90	U	8.89	J	10.9	J	4.90	U	4.90	U	36.9	J
			0-1 FR	DU-11 (0-1)B	08/10/2022	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	6.91	J	9.72	J	5.03	U	5.03	U	34.2	J
			0-1 FR	DU-11 (0-1)C	08/10/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	6.55	J	9.95	J	4.98	U	4.98	U	33.9	J
			1-2	DU-11 (1-2)A	08/10/2022	5.10	U	5.10	U	5.10	U	5.10	U	5.10	U	8.13	J	11.2	J	5.10	U	5.10	U	37.2	J
			1-2 FR	DU-11 (1-2)B	08/10/2022	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	7.58	J	11.8	J	5.02	U	5.02	U	37.0	J
			1-2 FR	DU-11 (1-2)C	08/10/2022	4.94	U	4.94	U	4.94	U	4.94	U	4.94	U	6.06	J	10.5	J	4.94	U	4.94	U	33.9	J
			2-3	DU-11 (2-3)A	08/10/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	8.30	J	13.4	J	4.91	U	4.91	U	38.9	J
			2-3 FR	DU-11 (2-3)B	08/10/2022	4.90	U	4.90	U	4.90	U	4.90	U	4.90	U	9.36	J	11.4	J	4.90	U	4.90	U	37.9	J
			2-3 FR	DU-11 (2-3)C	08/10/2022	4.77	U	4.77	U	4.77	U	4.77	U	4.77	U	6.71	J	10.9	J	4.77	U	4.77	U	34.3	J
			0-1	DU-11 (0-1) M	--	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	7.45	J	10.2	J	5.03	U	5.03	U	35.0	J
			1-2	DU-11 (1-2) M	--	5.10	U	5.10	U	5.10	U	5.10	U	5.10	U	7.26	J	11.2	J	5.10	U	5.10	U	36.0	J
			2-3	DU-11 (2-3) M	--	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	8.12	J	11.9	J	4.91	U	4.91	U	37.0	J

Please see notes at end of table.

Table 5a
Soil Results - PCB Aroclors - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PCBs by EPA Method 8082A Concentrations in µg/kg									
						Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCB Aroclors
					Ecological ISM PRG	--	--	--	--	--	--	--	--	--	98
					Ecological ISM Hot Spot	--	--	--	--	--	--	--	--	--	980
Central Parcel	DU-12	ISM	0-1	DU-12 (0-1)	08/16/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	21.3 J	14.4 J	5.01 U	5.01 U	53.2 J
			1-2	DU-12 (1-2)	08/16/2022	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	6.52 J	8.04 J	4.91 U	4.91 U	31.7 J
			2-3	DU-12 (2-3)	08/16/2022	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U
	DU-13	ISM	0-1	DU-13 (0-1)A	08/29/2022	5.02 U	5.02 U	5.02 U	5.02 U	5.02 U	23.5 J	9.40 J	5.02 U	5.02 U	50.5 J
			0-1 FR	DU-13 (0-1)B	08/29/2022	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	39.5 J	13.2 J	4.97 U	4.97 U	70.1 J
			0-1 FR	DU-13 (0-1)C	08/29/2022	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	28.2 J	12.2 J	4.99 U	4.99 U	57.9 J
			1-2	DU-13 (1-2)A	08/30/2022	4.90 U	4.90 U	4.90 U	4.90 U	4.90 U	5.91 J	4.90 U	4.90 U	4.90 U	25.5 J
			1-2 FR	DU-13 (1-2)B	08/30/2022	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	7.25 J	4.98 U	4.98 U	4.98 U	27.2 J
			1-2 FR	DU-13 (1-2)C	08/30/2022	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	6.98 J	4.86 U	4.86 U	4.86 U	26.4 J
			2-3	DU-13 (2-3)A	08/31/2022	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	10.8 J	4.93 U	4.93 U	4.93 U	30.5 J
			2-3 FR	DU-13 (2-3)B	08/31/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	13.0 J	5.01 U	5.01 U	5.01 U	33.0 J
			2-3 FR	DU-13 (2-3)C	08/31/2022	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	12.1 J	4.89 U	4.89 U	4.89 U	31.7 J
			0-1	DU-13 (0-1) M	--	5.02 U	5.02 U	5.02 U	5.02 U	5.02 U	30.4 J	11.6 J	5.02 U	5.02 U	59.5 J
			1-2	DU-13 (1-2) M	--	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	6.71 J	5.0 U	4.98 U	4.98 U	26.4 J
			2-3	DU-13 (2-3) M	--	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	11.97 J	5.0 U	5.01 U	5.01 U	31.7 J
	DU-14	ISM	0-1	DU-14 (0-1)	08/17/2022	4.94 U	4.94 U	4.94 U	4.94 U	4.94 U	5.96 J	5.02 J	4.94 U	4.94 U	28.3 J
			1-2	DU-14 (1-2)	08/17/2022	4.80 U	4.80 U	4.80 U	4.80 U	4.80 U	4.80 U	4.80 U	4.80 U	4.80 U	4.80 U
			2-3	DU-14 (2-3)	08/17/2022	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U
	DU-15	ISM	0-1	DU-15 (0-1)	08/19/2022	4.92 U	4.92 U	4.92 U	4.92 U	4.92 U	7.09 J	4.92 U	4.92 U	4.92 U	26.8 J
			1-2	DU-15 (1-2)	08/19/2022	4.77 U	4.77 U	4.77 U	4.77 U	4.77 U	4.77 U	4.77 U	4.77 U	4.77 U	4.77 U
			2-3	DU-15 (2-3)	08/19/2022	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U
	DU-16	ISM	0-1	DU-16 (0-1)A	09/12/2022	4.75 U	4.75 U	4.75 U	4.75 U	4.75 U	7.47 J	7.39 J	4.75 U	4.75 U	31.5 J
			0-1 FR	DU-16 (0-1)B	09/12/2022	4.79 U	4.79 U	4.79 U	4.79 U	4.79 U	6.65 J	5.69 J	4.79 U	4.79 U	29.1 J
			0-1 FR	DU-16 (0-1)C	09/12/2022	5.02 U	5.02 U	5.02 U	5.02 U	5.02 U	8.66 J	8.33 J	5.02 U	5.02 U	34.6 J
			0-1	DU-16 (0-1) M	--	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	5.68 J	5.66 J	4.81 U	4.81 U	13.7 J
			1-2	DU-16 (1-2)	11/07/2022	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U
			2-3	DU-16 (2-3)	11/07/2022	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U
	DU-17	ISM	0-1	DU-17 (0-1)	09/02/2022	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.53 J	5.04 U	5.04 U	5.04 U	25.7 J
			1-2	DU-17 (1-2)	09/02/2022	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U
			2-3	DU-17 (2-3)	09/02/2022	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U
	DU-18	ISM	0-1	DU-18 (0-1)A	09/29/2022	4.94 U	4.94 U	4.94 U	4.94 U	4.94 U	8.94 J	4.94 U	4.94 U	4.94 U	28.7 J
			0-1 FR	DU-18 (0-1)B	09/29/2022	4.87 U	4.87 U	4.87 U	4.87 U	4.87 U	38.9 JN	4.87 U	4.87 U	4.87 U	58.4 J
			0-1 FR	DU-18 (0-1)C	09/29/2022	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	20.8 J	10.1 U	5.06 U	5.06 U	43.6 J
			1-2	DU-18 (1-2)A	09/30/2022	4.62 U	4.62 U	4.62 U	4.62 U	4.62 U	12.2 J	5.19 J	4.62 U	4.62 U	33.6 J
			1-2 FR	DU-18 (1-2)B	09/30/2022	4.68 U	4.68 U	4.68 U	4.68 U	4.68 U	7.79 J	4.68 U	4.68 U	4.68 U	26.5 J
			1-2 FR	DU-18 (1-2)C	09/30/2022	4.96 UJ	4.96 UJ	4.96 UJ	4.96 UJ	4.96 UJ	4.96 UJ	4.96 UJ	4.96 UJ	4.96 UJ	44.6 UJ
			2-3	DU-18 (2-3)A	10/03/2022	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	5.92 J	4.93 U	4.93 U	4.93 U	25.6 J
			2-3 FR	DU-18 (2-3)B	10/03/2022	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	10.1 J	4.89 U	4.89 U	4.89 U	29.7 J
			2-3 FR	DU-18 (2-3)C	10/03/2022	4.87 U	4.87 U	4.87 U	4.87 U	4.87 U	12.1 J	4.87 U	4.87 U	4.87 U	31.6 J

Please see notes at end of table.

Table 5a
Soil Results - PCB Aroclors - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PCBs by EPA Method 8082A Concentrations in µg/kg									
						Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCB Aroclors
				Ecological ISM PRG		--	--	--	--	--	--	--	--	--	98
				Ecological ISM Hot Spot		--	--	--	--	--	--	--	--	--	980
Central Parcel	DU-18	ISM	0-1	DU-18 (0-1) M	--	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	22.9 J	10.1 U	5.06 U	5.06 U	43.5 J
			1-2	DU-18 (1-2) M	--	4.75 U	4.75 U	4.75 U	4.75 U	4.75 U	8.32 J	4.94 J	4.75 U	4.75 U	34.9 J
			2-3	DU-18 (2-3) M	--	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	9.37 J	4.93 U	4.93 U	4.93 U	29.0 J
	DU-19	ISM	0-1	DU-19 (0-1)	09/06/2022	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	116	20.8 U	4.98 U	4.98 U	**144**
			1-2	DU-19 (1-2)	09/06/2022	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	8.64 J	10.0 U	5.00 U	5.00 U	31.1 J
			2-3	DU-19 (2-3)	09/06/2022	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	16.3 J	22.8 J	5.05 U	5.05 U	56.8 J
	DU-20	ISM	0-1	DU-20 (0-1)	10/18/2022	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	11.1 J	10.5 J	4.98 U	4.98 U	39.0 J
			1-2	DU-20 (1-2)	10/18/2022	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U
			2-3	DU-20 (2-3)	10/18/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U
	DU-21	ISM	0-1	DU-21 (0-1)	09/08/2022	4.94 U	4.94 U	4.94 U	4.94 U	4.94 U	16.0 J	15.9 J	4.94 U	4.94 U	49.2 J
			1-2	DU-21 (1-2)	09/08/2022	4.82 U	4.82 U	4.82 U	4.82 U	4.82 U	6.73 J	12.8 J	4.82 U	4.82 U	36.4 J
			2-3	DU-21 (2-3)	09/08/2022	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
	DU-22	ISM	0-1	DU-22 (0-1)A	10/13/2022	4.85 U	4.85 U	4.85 U	4.85 U	4.85 U	4.85 U	4.85 U	4.85 U	4.85 U	4.85 U
			0-1 FR	DU-22 (0-1)B	10/13/2022	4.97 U	4.97 U	4.97 U	4.97 U	4.97 U	15.3 J	9.91 J	4.97 U	4.97 U	42.6 J
			0-1 FR	DU-22 (0-1)C	10/13/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	9.15 J	17.1 J	5.01 U	5.01 U	43.8 J
			1-2	DU-22 (1-2)A	10/14/2022	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U
			1-2 FR	DU-22 (1-2)B	10/14/2022	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	5.92 J	4.98 U	4.98 U	25.8 J
			1-2 FR	DU-22 (1-2)C	10/14/2022	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U
			2-3	DU-22 (2-3)A	10/14/2022	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U
			2-3 FR	DU-22 (2-3)B	10/14/2022	4.79 U	4.79 U	4.79 U	4.79 U	4.79 U	4.79 U	4.79 U	4.79 U	4.79 U	4.79 U
			2-3 FR	DU-22 (2-3)C	10/14/2022	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.00 U
			0-1	DU-22 (0-1) M	--	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	9.77 J	10.6 J	5.01 U	5.01 U	30.4 J
			1-2	DU-22 (1-2) M	--	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	5.27 J	4.99 U	4.99 U	11.9 J
			2-3	DU-22 (2-3) M	--	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.0 U
	DU-23	ISM	0-1	DU-23 (0-1)	10/12/2022	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	22.1 J	19.3 J	5.05 U	5.05 U	59.1 J
			1-2	DU-23 (1-2)	10/12/2022	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	6.63 J	4.96 U	4.96 U	26.5 J
			2-3	DU-23 (2-3)	10/12/2022	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U
	DU-24	ISM	0-1	DU-24 (0-1)	09/21/2022	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	12.5	5.03 U	5.03 U	5.03 U	32.6
			1-2	DU-24 (1-2)	09/21/2022	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U
			2-3	DU-24 (2-3)	09/21/2022	4.83 U	4.83 U	4.83 U	4.83 U	4.83 U	4.83 U	4.83 U	4.83 U	4.83 U	4.83 U
	DU-25	ISM	0-1	DU-25 (0-1)	09/23/2022	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	32.1 J	15.9 J	4.95 U	4.95 U	65.3 J
			1-2	DU-25 (1-2)	09/23/2022	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U
			2-3	DU-25 (2-3)	09/23/2022	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U
	DU-26	ISM	0-1	DU-26 (0-1)A	11/09/2022	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	122 J	4.93 U	45.9 J	**185** J
			0-1 FR	DU-26 (0-1)B	11/09/2022	4.71 U	4.71 U	4.71 U	4.71 U	4.71 U	20.8 J	46.7 J	4.71 U	4.71 U	84.0 J
			0-1 FR	DU-26 (0-1)C	11/09/2022	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	23.6 J	48.1 J	4.96 U	4.96 U	89.1 J
			1-2	DU-26 (1-2)A	11/10/2022	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	51	4.88 U	4.88 U	70.5
			1-2 FR	DU-26 (1-2)B	11/10/2022	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	17.5 J	27.5 J	5.05 U	5.05 U	62.7 J
			1-2 FR	DU-26 (1-2)C	11/10/2022	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	40.2	4.99 U	4.99 U	60.2
			2-3	DU-26 (2-3)A	11/11/2022	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	14.9	5.05 U	5.05 U	35.1
			2-3 FR	DU-26 (2-3)B	11/11/2022	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	169	4.93 U	4.93 U	**189**
			2-3 FR	DU-26 (2-3)C	11/11/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	21.5	5.01 U	5.01 U	41.5
			0-1	DU-26 (0-1) M	--	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	16.4 J	72.3 J	4.96 U	18.5 J	**119** J
			1-2	DU-26 (1-2) M	--	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	9.12 J	39.6 J	5.05 U	5.05 U	64.5 J
			2-3	DU-26 (2-3) M	--	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	68.5 J	5.05 U	5.05 U	88.5 J
Central Parcel Concrete Slab	DU-42 (Within DU-16)	Composite	0-1	DU-42 (0-1)	11/30/2022	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
			1-2	DU-42 (1-2)	11/30/2022	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
			2-3	DU-42 (2-3)	11/30/2022	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U	4.91 U

Please see notes at end of table.

Table 5a
Soil Results - PCB Aroclors - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PCBs by EPA Method 8082A Concentrations in µg/kg																	
						Aroclor 1016		Aroclor 1221		Aroclor 1232		Aroclor 1242		Aroclor 1248		Aroclor 1254		Aroclor 1260		Aroclor 1262		Aroclor 1268		Total PCB Aroclors	
					Ecological ISM PRG	--		--		--		--		--		--		--		--		--		98	
					Ecological ISM Hot Spot	--		--		--		--		--		--		--		--		--		980	
East Parcel	DU-27	ISM	0-1	DU-27 (0-1)	10/05/2022	4.97	U	4.97	U	4.97	U	27.6	J	4.97	U	124	J	19.9	J	4.97	U	4.97	U	**186**	J
			1-2	DU-27 (1-2)	10/05/2022	4.88	U	4.88	U	4.88	U	4.88	U	4.88	U	148	JN	4.88	U	4.88	U	4.88	U	**168**	J
			2-3	DU-27 (2-3)	10/05/2022	4.92	U	4.92	U	4.92	U	4.92	U	4.92	U	158		4.92	U	4.92	U	4.92	U	**178**	
	DU-28	ISM	0-1	DU-28 (0-1)	09/14/2022	5.10	U	5.10	U	5.10	U	5.10	U	5.10	U	79.9		5.10	U	5.10	U	5.10	U	**100**	
			1-2	DU-28 (1-2)	09/14/2022	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	51.4		5.09	U	5.09	U	5.09	U	71.8	
			2-3	DU-28 (2-3)	09/14/2022	5.10	U	5.10	U	5.10	U	5.10	U	5.10	U	16.6		5.10	U	5.10	U	5.10	U	37.0	
	DU-29	ISM	0-1	DU-29 (0-1)	09/15/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	5.34	J	4.91	U	4.91	U	25.0	J
			1-2	DU-29 (1-2)	09/15/2022	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U
			2-3	DU-29 (2-3)	09/15/2022	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U
	DU-30	ISM	0-1	DU-30 (0-1)	09/16/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	5.57	J	9.23	J	5.05	U	5.05	U	32.5	J
			1-2	DU-30 (1-2)	09/16/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U
			2-3	DU-30 (2-3)	09/16/2022	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	45.6	UJ
	DU-31	ISM	0-1	DU-31 (0-1)	11/03/2022	4.67	U	4.67	U	4.67	U	4.67	U	4.67	U	7	J	4.67	U	4.67	U	4.67	U	25.7	J
			1-2	DU-31 (1-2)	11/03/2022	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	9.85	J	4.99	U	4.99	U	4.99	U	29.8	J
			2-3	DU-31 (2-3)	11/03/2022	4.62	U	4.62	U	4.62	U	4.62	U	4.62	U	8.51	J	4.62	U	4.62	U	4.62	U	27.0	J
	DU-32	ISM	0-1	DU-32 (0-1)	09/22/2022	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U
			1-2	DU-32 (1-2)	09/22/2022	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U
			2-3	DU-32 (2-3)	09/22/2022	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U
	DU-33	ISM	0-1	DU-33 (0-1)	09/20/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	65.3	JN	4.98	U	4.98	U	4.98	U	85.2	J
			1-2	DU-33 (1-2)	09/20/2022	4.77	U	4.77	U	4.77	U	4.77	U	4.77	U	31.0	JN	4.77	U	4.77	U	4.77	U	50.1	J
			2-3	DU-33 (2-3)	09/20/2022	4.66	U	4.66	U	4.66	U	4.66	U	4.66	U	39.3	JN	4.66	U	4.66	U	4.66	U	57.9	J
East Parcel	DU-34	ISM	0-1	DU-34 (0-1)	09/27/2022	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	13.0	JN	5.01	U	5.01	U	5.01	U	33.0	J
			1-2	DU-34 (1-2)	09/27/2022	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	20.0	JN	5.02	UJ	5.02	UJ	5.02	UJ	47.6	J
			2-3	DU-34 (2-3)	09/27/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U
	DU-35	ISM	0-1	DU-35 (0-1)	10/07/2022	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	8.55	J	4.95	U	4.95	U	28.4	J
			1-2	DU-35 (1-2)	10/07/2022	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	15.1	J	6.97	J	5.01	U	5.01	U	39.6	J
			2-3	DU-35 (2-3)	10/07/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U
	DU-36	ISM	0-1	DU-36 (0-1)	11/01/2022	4.66	U	4.66	U	4.66	U	4.66	U	4.66	U	6.34	J	5.21	J	4.66	U	4.66	U	27.9	J
			1-2	DU-36 (1-2)	11/01/2022	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U
			2-3	DU-36 (2-3)	11/01/2022	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	8.15	J	5.06	U	5.06	U	5.06	U	28.4	J
	DU-38	ISM	0-1	DU-38 (0-1)A	11/14/2022	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	10.3	J	9.57	J	5.03	U	5.03	U	37.5	J
			0-1 FR	DU-38 (0-1)B	11/14/2022	5	U	5	U	5	U	5	U	5	U	10.7	J	13	J	5	U	5	U	41.2	J
			0-1 FR	DU-38 (0-1)C	11/14/2022	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	10.5	J	13.1	J	4.99	U	4.99	U	41.1	J
			1-2	DU-38 (1-2)A	11/16/2022	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	14	J	12.8	J	5.03	U	5.03	U	44.4	J
			1-2 FR	DU-38 (1-2)B	11/16/2022	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	13.7	J	5.74	J	5.02	U	5.02	U	37.0	J
			1-2 FR	DU-38 (1-2)C	11/16/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	9.88	J	7.51	J	5.05	U	5.05	U	35.1	J
			2-3	DU-38 (2-3)A	11/17/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	9.82	J	5.05	U	5.05	U	5.05	U	30.0	J
			2-3 FR	DU-38 (2-3)B	11/17/2022	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	7.88	J	4.96	U	4.96	U	4.96	U	27.7	J
			2-3 FR	DU-38 (2-3)C	11/17/2022	5.07	U	5.07	U	5.07	U	5.07	U	5.07	U	6.14	J	5.07	U	5.07	U	5.07	U	26.4	J
			0-1	DU-38 (0-1) M	--	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	10.5	J	11.9	J	5.03	U	5.03	U	39.9	J
			1-2	DU-38 (1-2) M	--	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	12.5	J	8.7	J	5.05	U	5.05	U	38.8	J
			2-3	DU-38 (2-3) M	--	5.07	U	5.07	U	5.07	U	5.07	U	5.07	U	7.95	J	5.1	U	5.07	U	5.07	U	28.1	J

Please see notes at end of table.

Table 5a
Soil Results - PCB Aroclors - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PCBs by EPA Method 8082A Concentrations in µg/kg									
						Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCB Aroclors
					Ecological ISM PRG	--	--	--	--	--	--	--	--	--	98
					Ecological ISM Hot Spot	--	--	--	--	--	--	--	--	--	980
East Parcel Concrete Slab	DU-37	Composite	0-1	DU-37 (0-1)	11/28/2022	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U
			1-2	DU-37 (1-2)	11/28/2022	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U
			2-3	DU-37 (2-3)	11/28/2022	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U
	DU-39	Composite	0-1	DU-39 (0-1)	11/29/2022	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U
			1-2	DU-39 (1-2)	11/29/2022	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U
			2-3	DU-39 (2-3)	11/29/2022	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.90 U
	DU-40	Composite	0-1	DU-40 (0-1)	11/18/2022	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U
			1-2	DU-40 (1-2)	11/18/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U
			2-3	DU-40 (2-3)	11/18/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U
	DU-43 (Within DU-31)	Composite	0-1	DU-43 (0-1)	11/21/2022	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U
			1-2	DU-43 (1-2)	11/21/2022	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U
			2-3	DU-43 (2-3)	11/21/2022	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U
	DU-44 (Within DU-36)	Composite	0-1	DU-44 (0-1)	12/01/2022	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U
			1-2	DU-44 (1-2)	12/01/2022	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U
			2-3	DU-44 (2-3)	12/01/2022	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U
East Parcel Soil Berms	DU-41	ISM	0-1	DU-41 (0-1)A	10/24/2022	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	14.5 J	12.5 J	5.03 U	5.03 U	44.61 J
			0-1 FR	DU-41 (0-1)B	10/24/2022	4.83 U	4.83 U	4.83 U	4.83 U	4.83 U	40.1 J	12.1 J	4.83 U	4.83 U	69.11 J
			0-1 FR	DU-41 (0-1)C	10/24/2022	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	21.6 J	17.9 J	4.88 U	4.88 U	56.58 J
			1-2	DU-41 (1-2)A	10/26/2022	4.83 U	4.83 U	4.83 U	4.83 U	4.83 U	58.4 J	17.3 J	4.83 U	4.83 U	92.61 J
			1-2 FR	DU-41 (1-2)B	10/26/2022	4.79 U	4.79 U	4.79 U	4.79 U	4.79 U	12.8 J	10.8 J	4.79 U	4.79 U	40.37 J
			1-2 FR	DU-41 (1-2)C	10/26/2022	4.94 U	4.94 U	4.94 U	4.94 U	4.94 U	46.6 J	12.6 J	4.94 U	4.94 U	76.49 J
			2-3	DU-41 (2-3)A	10/28/2022	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	9.84 J	7.82 J	5.05 U	5.05 U	35.34 J
			2-3 FR	DU-41 (2-3)B	10/28/2022	4.92 U	4.92 U	4.92 U	4.92 U	4.92 U	5.41 J	6.56 J	4.92 U	4.92 U	29.19 J
			2-3 FR	DU-41 (2-3)C	10/28/2022	4.90 U	4.90 U	4.90 U	4.90 U	4.90 U	6.60 J	20.00 J	4.90 U	4.90 U	43.75 J
			0-1	DU-41 (0-1) M	--	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	25.4 J	14.2 J	5.03 U	5.03 U	56.8 J
			1-2	DU-41 (1-2) M	--	4.94 U	4.94 U	4.94 U	4.94 U	4.94 U	39.3 J	13.6 J	4.94 U	4.94 U	69.8 J
			2-3	DU-41 (2-3) M	--	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	7.28 J	11.5 J	5.05 U	5.05 U	36.1 J

Notes:

ISM = Incremental Sampling Methodology.

bgs = Below ground surface.

PCBs = Polychlorinated biphenyls.

EPA = United States Environmental Protection Agency.

M = Mean. These results are the mean of the field replicates collected at this decision unit.

FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.

µg/kg = Micrograms per kilogram (parts per billion).

Bolded values exceed the Preliminary Remediation Goal (PRG).

Shaded values exceed the hot spot level.

Italicized values represent a method detection limit that is above one or more applicable screening levels.

U = Analyte was not detected.

J = Result is estimated.

JN = The analyte was tentatively identified and did not meet method criteria for confirmation.

UJ = The analyte was analyzed for but was not detected. However, the detection limit may be inaccurate or imprecise.

PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

Table 5b
Soil Results - PCB Aroclors - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PCBs by EPA Method 8082A Concentrations in µg/kg																			
						Aroclor 1016		Aroclor 1221		Aroclor 1232		Aroclor 1242		Aroclor 1248		Aroclor 1254		Aroclor 1260		Aroclor 1262		Aroclor 1268		Total PCB Aroclors	
					Human Health ISM PRG	--		--		--		--		--		--		--		--		--		740	
					Human Health ISM Hot Spot	--		--		--		--		--		--		--		--		--		40,000	
West Parcel	DU-1	ISM	0-1	DU-1 (0-1)	07/20/2022	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	407		5.00	U	5.00	U	5.00	U	427	
			1-2	DU-1 (1-2)	07/20/2022	50.9	U	50.9	U	50.9	U	50.9	U	50.9	U	2,550		50.9	U	50.9	U	50.9	U	**2,750**	
			2-3	DU-1 (2-3)	07/20/2022	4.99	U	4.99	U	27.3	U	4.99	U	11.1	U	4.99	U	75.9		4.99	U	4.99	U	110	
	DU-2	ISM	0-1	DU-2 (0-1)	08/01/2022	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	166		5.09	U	5.09	U	186	
			1-2	DU-2 (1-2)	08/01/2022	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	538		5.02	U	5.02	U	558	
			2-3	DU-2 (2-3)	08/01/2022	4.68	U	4.68	U	4.68	U	4.68	U	4.68	U	5.18	J	8.30	J	4.68	U	4.68	U	29.9	J
	DU-3	ISM	0-1	DU-3 (0-1)	08/03/2022	4.82	U	4.82	U	4.82	U	4.82	U	4.82	U	4.82	U	5.74	J	4.82	U	4.82	U	25.0	J
			1-2	DU-3 (1-2)	08/03/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U
			2-3	DU-3 (2-3)	08/03/2022	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U
	DU-4	ISM	0-1	DU-4 (0-1)	08/04/2022	4.94	U	4.94	U	4.94	U	4.94	U	4.94	U	6.06	J	8.35	J	4.94	U	4.94	U	31.7	J
			1-2	DU-4 (1-2)	08/04/2022	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	5.27	J	4.81	U	4.81	U	24.5	J
			2-3	DU-4 (2-3)	08/04/2022	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	11.0	J	6.62	J	4.99	U	4.99	U	35.1	J
	DU-5	ISM	0-1	DU-5 (0-1)A	07/22/2022	4.99	U	4.99	U	4.99	U	5.67	J	4.99	U	38.9	J	28.0	J	4.99	U	4.99	U	87.5	J
			0-1 FR	DU-5 (0-1)B	07/22/2022	4.71	U	4.71	U	4.71	U	4.71	U	4.71	U	23.9	J	32.5	J	4.71	U	4.71	U	72.9	J
			0-1 FR	DU-5 (0-1)C	07/22/2022	5.04	U	10.1	U	5.04	U	5.04	U	5.04	U	116	J	41.0	J	5.04	U	5.04	U	177	J
			1-2	DU-5 (1-2)A	07/25/2022	4.84	U	9.68	U	15.7	U	4.84	U	4.84	U	60.4	J	58.1	J	4.84	U	4.84	U	143	J
			1-2 FR	DU-5 (1-2)B	07/25/2022	4.88	U	4.88	U	4.88	U	4.88	U	4.88	U	56.9	J	49.9	J	4.88	U	4.88	U	124	J
			1-2 FR	DU-5 (1-2)C	07/25/2022	4.81	U	9.62	U	4.81	U	4.81	U	4.81	U	42.2	J	32.6	J	4.81	U	4.81	U	94.0	J
			2-3	DU-5 (2-3)A	07/26/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	51.3	J	27.0	J	4.91	U	4.91	U	95.5	J
			2-3 FR	DU-5 (2-3)B	07/26/2022	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	49.8	J	27.6	J	4.81	U	4.81	U	94.2	J
			2-3 FR	DU-5 (2-3)C	07/26/2022	4.92	U	4.92	U	4.92	U	4.92	U	4.92	U	4.92	U	367		4.92	U	4.92	U	387	
			0-1	DU-5 (0-1) M	--	5.04	U	10.1	U	5.04	U	5.14	J	5.04	U	59.6	J	33.8	J	5.04	U	5.04	U	112	J
			1-2	DU-5 (1-2) M	--	4.88	U	9.68	U	15.7	U	4.88	U	4.88	U	53.2	J	46.9	J	4.88	U	4.88	U	120	J
			2-3	DU-5 (2-3) M	--	4.92	U	4.92	U	4.92	U	4.92	U	4.92	U	35.3	J	141	J	4.92	U	4.92	U	192	J
	DU-6	ISM	0-1	DU-6 (0-1)	07/28/2022	5.03	U	10.1	U	5.03	U	5.03	U	5.03	U	18.3	J	24.1	J	5.03	U	5.03	U	62.5	J
			1-2	DU-6 (1-2)	07/28/2022	5.01	U	10.0	U	5.01	U	5.01	U	5.01	U	28.5	J	62.0	J	5.01	U	5.01	U	111	J
			2-3	DU-6 (2-3)	07/28/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	147		5.05	U	5.05	U	167	
	DU-7	ISM	0-1	DU-7 (0-1)	07/29/2022	5.07	U	5.07	U	5.07	U	5.07	U	5.07	U	10.1		24.9	J	5.07	U	5.07	U	52.7	J
			1-2	DU-7 (1-2)	07/29/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	13.3	J	25.8	J	5.04	U	5.04	U	56.7	J
			2-3	DU-7 (2-3)	07/29/2022	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	12.8	J	19.7	J	5.06	U	5.06	U	50.2	J
	DU-8	ISM	0-1	DU-8 (0-1)	08/05/2022	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	29.8	J	51.3	J	5.09	U	5.09	U	98.9	J
			1-2	DU-8 (1-2)	08/05/2022	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	47.4	JN	5.09	U	5.09	U	67.8	J
			2-3	DU-8 (2-3)	08/05/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	78.5	JN	4.98	U	4.98	U	98.4	J
	DU-9	ISM	0-1	DU-9 (0-1)	08/08/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	11.7	J	34.7	J	5.04	U	5.04	U	64.0	J
			1-2	DU-9 (1-2)	08/08/2022	5.11	U	5.11	U	5.11	U	5.11	U	5.11	U	5.11	U	14.9		5.11	U	5.11	U	35.3	
			2-3	DU-9 (2-3)	08/08/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	10.7	J	19.4	J	5.05	U	5.05	U	47.8	J
Central Parcel	DU-10	ISM	0-1	DU-10 (0-1)	08/12/2022	4.97	U	4.97	U	4.97	U	4.97	U	4.97	U	8.58	J	7.73	J	4.97	U	4.97	U	33.7	J
			1-2	DU-10 (1-2)	08/12/2022	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	6.07	J	5.03	U	5.03	U	5.03	U	26.2	J
			2-3	DU-10 (2-3)	08/12/2022	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U
	DU-11	ISM	0-1	DU-11 (0-1)A	08/10/2022	4.90	U	4.90	U	4.90	U	4.90	U	4.90	U	8.89	J	10.9	J	4.90	U	4.90	U	36.9	J
			0-1 FR	DU-11 (0-1)B	08/10/2022	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	6.91	J	9.72	J	5.03	U	5.03	U	34.2	J
			0-1 FR	DU-11 (0-1)C	08/10/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	6.55	J	9.95	J	4.98	U	4.98	U	33.9	J
			1-2	DU-11 (1-2)A	08/10/2022	5.10	U	5.10	U	5.10	U	5.10	U	5.10	U	8.13	J	11.2	J	5.10	U	5.10	U	37.2	J
			1-2 FR	DU-11 (1-2)B	08/10/2022	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	7.58	J	11.8	J	5.02	U	5.02	U	37.0	J
			1-2 FR	DU-11 (1-2)C	08/10/2022	4.94	U	4.94	U	4.94	U	4.94	U	4.94	U	6.06	J	10.5	J	4.94	U	4.94	U	33.9	J
			2-3	DU-11 (2-3)A	08/10/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	8.30	J	13.4	J	4.91	U	4.91	U	38.9	J
			2-3 FR	DU-11 (2-3)B	08/10/2022	4.90	U	4.90	U	4.90	U	4.90	U	4.90	U	9.36	J	11.4	J	4.90	U	4.90	U	37.9	J
			2-3 FR	DU-11 (2-3)C	08/10/2022	4.77	U	4.77	U	4.77	U	4.77	U	4.77	U	6.71	J	10.9	J	4.77	U	4.77	U	34.3	J
			0-1	DU-11 (0-1) M	--	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	7.45	J	10.2	J	5.03	U	5.03	U	35.0	J
			1-2	DU-11 (1-2) M	--	5.10	U	5.10	U	5.10	U	5.10	U	5.10	U	7.26	J	11.2	J	5.10	U	5.10	U	36.0	J
			2-3	DU-11 (2-3) M	--	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	8.12	J	11.9	J	4.91	U	4.91	U	37.0	J

Please see notes at end of table.

Table 5b
Soil Results - PCB Aroclors - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PCBs by EPA Method 8082A Concentrations in µg/kg																			
						Aroclor 1016		Aroclor 1221		Aroclor 1232		Aroclor 1242		Aroclor 1248		Aroclor 1254		Aroclor 1260		Aroclor 1262		Aroclor 1268		Total PCB Aroclors	
					Human Health ISM PRG	--		--		--		--		--		--		--		--		--		740	
					Human Health ISM Hot Spot	--		--		--		--		--		--		--		--		--		40,000	
Central Parcel	DU-12	ISM	0-1	DU-12 (0-1)	08/16/2022	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	21.3	J	14.4	J	5.01	U	5.01	U	53.2	J
			1-2	DU-12 (1-2)	08/16/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	6.52	J	8.04	J	4.91	U	4.91	U	31.7	J
			2-3	DU-12 (2-3)	08/16/2022	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U
	DU-13	ISM	0-1	DU-13 (0-1)A	08/29/2022	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	23.5	J	9.40	J	5.02	U	5.02	U	50.5	J
			0-1 FR	DU-13 (0-1)B	08/29/2022	4.97	U	4.97	U	4.97	U	4.97	U	4.97	U	39.5	J	13.2	J	4.97	U	4.97	U	70.1	J
			0-1 FR	DU-13 (0-1)C	08/29/2022	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	28.2	J	12.2	J	4.99	U	4.99	U	57.9	J
			1-2	DU-13 (1-2)A	08/30/2022	4.90	U	4.90	U	4.90	U	4.90	U	4.90	U	5.91	J	4.90	U	4.90	U	4.90	U	25.5	J
			1-2 FR	DU-13 (1-2)B	08/30/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	7.25	J	4.98	U	4.98	U	4.98	U	27.2	J
			1-2 FR	DU-13 (1-2)C	08/30/2022	4.86	U	4.86	U	4.86	U	4.86	U	4.86	U	6.98	J	4.86	U	4.86	U	4.86	U	26.4	J
			2-3	DU-13 (2-3)A	08/31/2022	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	10.8	J	4.93	U	4.93	U	4.93	U	30.5	J
			2-3 FR	DU-13 (2-3)B	08/31/2022	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	13.0	J	5.01	U	5.01	U	5.01	U	33.0	J
			2-3 FR	DU-13 (2-3)C	08/31/2022	4.89	U	4.89	U	4.89	U	4.89	U	4.89	U	12.1	J	4.89	U	4.89	U	4.89	U	31.7	J
			0-1	DU-13 (0-1) M	--	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	30.4	J	11.6	J	5.02	U	5.02	U	59.5	J
			1-2	DU-13 (1-2) M	--	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	6.71	J	5.0	U	4.98	U	4.98	U	26.4	J
			2-3	DU-13 (2-3) M	--	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	11.97	J	5.0	U	5.01	U	5.01	U	31.7	J
	DU-14	ISM	0-1	DU-14 (0-1)	08/17/2022	4.94	U	4.94	U	4.94	U	4.94	U	4.94	U	5.96	J	5.02	J	4.94	U	4.94	U	28.3	J
			1-2	DU-14 (1-2)	08/17/2022	4.80	U	4.80	U	4.80	U	4.80	U	4.80	U	4.80	U	4.80	U	4.80	U	4.80	U	4.80	U
			2-3	DU-14 (2-3)	08/17/2022	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U
	DU-15	ISM	0-1	DU-15 (0-1)	08/19/2022	4.92	U	4.92	U	4.92	U	4.92	U	4.92	U	7.09	J	4.92	U	4.92	U	4.92	U	26.8	J
			1-2	DU-15 (1-2)	08/19/2022	4.77	U	4.77	U	4.77	U	4.77	U	4.77	U	4.77	U	4.77	U	4.77	U	4.77	U	4.77	U
			2-3	DU-15 (2-3)	08/19/2022	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U
	DU-16	ISM	0-1	DU-16 (0-1)A	09/12/2022	4.75	U	4.75	U	4.75	U	4.75	U	4.75	U	7.47	J	7.39	J	4.75	U	4.75	U	31.5	J
			0-1 FR	DU-16 (0-1)B	09/12/2022	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	6.65	J	5.69	J	4.79	U	4.79	U	29.1	J
			0-1 FR	DU-16 (0-1)C	09/12/2022	5.02	U	5.02	U	5.02	U	5.02	U	5.02	U	8.66	J	8.33	J	5.02	U	5.02	U	34.6	J
			0-1	DU-16 (0-1) M	--	4.81	U	4.81	U	4.81	U	4.81	U	4.81	U	5.68	J	5.66	J	4.81	U	4.81	U	13.7	J
			1-2	DU-16 (1-2)	11/07/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U
			2-3	DU-16 (2-3)	11/07/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U
	DU-17	ISM	0-1	DU-17 (0-1)	09/02/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.53	J	5.04	U	5.04	U	5.04	U	25.7	J
			1-2	DU-17 (1-2)	09/02/2022	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U
			2-3	DU-17 (2-3)	09/02/2022	4.86	U	4.86	U	4.86	U	4.86	U	4.86	U	4.86	U	4.86	U	4.86	U	4.86	U	4.86	U
	DU-18	ISM	0-1	DU-18 (0-1)A	09/29/2022	4.94	U	4.94	U	4.94	U	4.94	U	4.94	U	8.94	J	4.94	U	4.94	U	4.94	U	28.7	J
			0-1 FR	DU-18 (0-1)B	09/29/2022	4.87	U	4.87	U	4.87	U	4.87	U	4.87	U	38.9	JN	4.87	U	4.87	U	4.87	U	58.4	J
			0-1 FR	DU-18 (0-1)C	09/29/2022	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	20.8	J	10.1	U	5.06	U	5.06	U	43.6	J
			1-2	DU-18 (1-2)A	09/30/2022	4.62	U	4.62	U	4.62	U	4.62	U	4.62	U	12.2	J	5.19	J	4.62	U	4.62	U	33.6	J
			1-2 FR	DU-18 (1-2)B	09/30/2022	4.68	U	4.68	U	4.68	U	4.68	U	4.68	U	7.79	J	4.68	U	4.68	U	4.68	U	26.5	J
			1-2 FR	DU-18 (1-2)C	09/30/2022	4.96	UJ	4.96	UJ	4.96	UJ	4.96	UJ	4.96	UJ	4.96	UJ	4.96	UJ	4.96	UJ	4.96	UJ	44.6	UJ
			2-3	DU-18 (2-3)A	10/03/2022	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	5.92	J	4.93	U	4.93	U	4.93	U	25.6	J
			2-3 FR	DU-18 (2-3)B	10/03/2022	4.89	U	4.89	U	4.89	U	4.89	U	4.89	U	10.1	J	4.89	U	4.89	U	4.89	U	29.7	J
			2-3 FR	DU-18 (2-3)C	10/03/2022	4.87	U	4.87	U	4.87	U	4.87	U	4.87	U	12.1	J	4.87	U	4.87	U	4.87	U	31.6	J
			0-1	DU-18 (0-1) M	--	5.06	U	5.06	U	5.06	U	5.06	U	5.06	U	22.9	J	10.1	U	5.06	U	5.06	U	43.5	J
			1-2	DU-18 (1-2) M	--	4.75		4.75		4.75		4.75		4.75		8.32	J	4.94	J	4.75		4.75		34.9	J
			2-3	DU-18 (2-3) M	--	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	9.37	J	4.93	U	4.93	U	4.93	U	29.0	J
	DU-19	ISM	0-1	DU-19 (0-1)	09/06/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	116		20.8	U	4.98	U	4.98	U	144	
			1-2	DU-19 (1-2)	09/06/2022	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	8.64	J	10.0	U	5.00	U	5.00	U	31.1	J
			2-3	DU-19 (2-3)	09/06/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	16.3	J	22.8	J	5.05	U	5.05	U	56.8	J
	DU-20	ISM	0-1	DU-20 (0-1)	10/18/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	11.1	J	10.5	J	4.98	U	4.98	U	39.0	J
			1-2	DU-20 (1-2)	10/18/2022	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U
			2-3	DU-20 (2-3)	10/18/2022	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U
	DU-21	ISM	0-1	DU-21 (0-1)	09/08/2022	4.94	U	4.94	U	4.94	U	4.94	U	4.94	U	16.0	J	15.9	J	4.94	U	4.94	U	49.2	J
			1-2	DU-21 (1-2)	09/08/2022	4.82	U	4.82	U	4.82	U	4.82	U	4.82	U	6.73	J	12.8	J	4.82	U	4.82	U	36.4	J
			2-3	DU-21 (2-3)	09/08/2022	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U

Please see notes at end of table.

Table 5b
Soil Results - PCB Aroclors - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PCBs by EPA Method 8082A Concentrations in µg/kg																			
						Aroclor 1016		Aroclor 1221		Aroclor 1232		Aroclor 1242		Aroclor 1248		Aroclor 1254		Aroclor 1260		Aroclor 1262		Aroclor 1268		Total PCB Aroclors	
					Human Health ISM PRG	--		--		--		--		--		--		--		--		--		740	
					Human Health ISM Hot Spot	--		--		--		--		--		--		--		--		--		40,000	
Central Parcel	DU-22	ISM	0-1	DU-22 (0-1)A	10/13/2022	4.85	U	4.85	U	4.85	U	4.85	U	4.85	U	4.85	U	4.85	U	4.85	U	4.85	U	4.85	U
			0-1 FR	DU-22 (0-1)B	10/13/2022	4.97	U	4.97	U	4.97	U	4.97	U	4.97	U	15.3	J	9.91	J	4.97	U	4.97	U	42.6	J
			0-1 FR	DU-22 (0-1)C	10/13/2022	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	9.15	J	17.1	J	5.01	U	5.01	U	43.8	J
			1-2	DU-22 (1-2)A	10/14/2022	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U
			1-2 FR	DU-22 (1-2)B	10/14/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	5.92	J	4.98	U	4.98	U	25.8	J
			1-2 FR	DU-22 (1-2)C	10/14/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U
			2-3	DU-22 (2-3)A	10/14/2022	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U
			2-3 FR	DU-22 (2-3)B	10/14/2022	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U
			2-3 FR	DU-22 (2-3)C	10/14/2022	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5.00	U
			0-1	DU-22 (0-1) M	--	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	9.77	J	10.6	J	5.01	U	5.01	U	30.4	J
			1-2	DU-22 (1-2) M	--	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	5.27	J	4.99	U	4.99	U	11.9	J
			2-3	DU-22 (2-3) M	--	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	5.0	U
	DU-23	ISM	0-1	DU-23 (0-1)	10/12/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	22.1	J	19.3	J	5.05	U	5.05	U	59.1	J
			1-2	DU-23 (1-2)	10/12/2022	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	6.63	J	4.96	U	4.96	U	26.5	J
			2-3	DU-23 (2-3)	10/12/2022	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U
	DU-24	ISM	0-1	DU-24 (0-1)	09/21/2022	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	12.5		5.03	U	5.03	U	5.03	U	32.6	
			1-2	DU-24 (1-2)	09/21/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U
			2-3	DU-24 (2-3)	09/21/2022	4.83	U	4.83	U	4.83	U	4.83	U	4.83	U	4.83	U	4.83	U	4.83	U	4.83	U	4.83	U
	DU-25	ISM	0-1	DU-25 (0-1)	09/23/2022	4.95	U	4.95	U	4.95	U	4.95	U	4.95	U	32.1	J	15.9	J	4.95	U	4.95	U	65.3	J
			1-2	DU-25 (1-2)	09/23/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U
			2-3	DU-25 (2-3)	09/23/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U
	DU-26	ISM	0-1	DU-26 (0-1)A	11/09/2022	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	122	J	4.93	U	45.9	J	185	J
			0-1 FR	DU-26 (0-1)B	11/09/2022	4.71	U	4.71	U	4.71	U	4.71	U	4.71	U	20.8	J	46.7	J	4.71	U	4.71	U	84.0	J
			0-1 FR	DU-26 (0-1)C	11/09/2022	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	23.6	J	48.1	J	4.96	U	4.96	U	89.1	J
			1-2	DU-26 (1-2)A	11/10/2022	4.88	U	4.88	U	4.88	U	4.88	U	4.88	U	4.88	U	51		4.88	U	4.88	U	70.5	
			1-2 FR	DU-26 (1-2)B	11/10/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	17.5	J	27.5	J	5.05	U	5.05	U	62.7	J
			1-2 FR	DU-26 (1-2)C	11/10/2022	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	40.2		4.99	U	4.99	U	60.2	
			2-3	DU-26 (2-3)A	11/11/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	14.9		5.05	U	5.05	U	35.1	
			2-3 FR	DU-26 (2-3)B	11/11/2022	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	169		4.93	U	4.93	U	189	
			2-3 FR	DU-26 (2-3)C	11/11/2022	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	5.01	U	21.5		5.01	U	5.01	U	41.5	
			0-1	DU-26 (0-1) M	--	4.96	U	4.96	U	4.96	U	4.96	U	4.96	U	16.4	J	72.3	J	4.96	U	18.5	J	119	J
			1-2	DU-26 (1-2) M	--	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	9.12	J	39.6	J	5.05	U	5.05	U	64.5	J
			2-3	DU-26 (2-3) M	--	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	68.5	J	5.05	U	5.05	U	88.5	J
Central Parcel Concrete Slab	DU-42 (Within DU-16)	Composite	0-1	DU-42 (0-1)	11/30/2022	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
			1-2	DU-42 (1-2)	11/30/2022	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U	5.00	U
			2-3	DU-42 (2-3)	11/30/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U
East Parcel	DU-27	ISM	0-1	DU-27 (0-1)	10/05/2022	4.97	U	4.97	U	4.97	U	27.6	J	4.97	U	124	J	19.9	J	4.97	U	4.97	U	186	J
			1-2	DU-27 (1-2)	10/05/2022	4.88	U	4.88	U	4.88	U	4.88	U	4.88	U	148	JN	4.88	U	4.88	U	4.88	U	168	J
			2-3	DU-27 (2-3)	10/05/2022	4.92	U	4.92	U	4.92	U	4.92	U	4.92	U	158		4.92	U	4.92	U	4.92	U	178	
	DU-28	ISM	0-1	DU-28 (0-1)	09/14/2022	5.10	U	5.10	U	5.10	U	5.10	U	5.10	U	79.9		5.10	U	5.10	U	5.10	U	100	
			1-2	DU-28 (1-2)	09/14/2022	5.09	U	5.09	U	5.09	U	5.09	U	5.09	U	51.4		5.09	U	5.09	U	5.09	U	71.8	
			2-3	DU-28 (2-3)	09/14/2022	5.10	U	5.10	U	5.10	U	5.10	U	5.10	U	16.6		5.10	U	5.10	U	5.10	U	37.0	
	DU-29	ISM	0-1	DU-29 (0-1)	09/15/2022	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	4.91	U	5.34	J	4.91	U	4.91	U	25.0	J
			1-2	DU-29 (1-2)	09/15/2022	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U	4.73	U
			2-3	DU-29 (2-3)	09/15/2022	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U	4.93	U
	DU-30	ISM	0-1	DU-30 (0-1)	09/16/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	5.57	J	9.23	J	5.05	U	5.05	U	32.5	J
			1-2	DU-30 (1-2)	09/16/2022	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U	5.04	U
			2-3	DU-30 (2-3)	09/16/2022	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	5.07	UJ	45.6	UJ
	DU-31	ISM	0-1	DU-31 (0-1)	11/03/2022	4.67	U	4.67	U	4.67	U	4.67	U	4.67	U	7	J	4.67	U	4.67	U	4.67	U	25.7	J
			1-2	DU-31 (1-2)	11/03/2022	4.99	U	4.99	U	4.99	U	4.99	U	4.99	U	9.85	J	4.99	U	4.99	U	4.99	U	29.8	J
			2-3	DU-31 (2-3)	11/03/2022	4.62	U	4.62	U	4.62	U	4.62	U	4.62	U	8.51	J	4.62	U	4.62	U	4.62	U	27.0	J
	DU-32	ISM	0-1	DU-32 (0-1)	09/22/2022	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U	4.84	U
			1-2	DU-32 (1-2)	09/22/2022	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U
			2-3	DU-32 (2-3)	09/22/2022	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U	4.65	U
	DU-33	ISM	0-1	DU-33 (0-1)	09/20/2022	4.98	U	4.98	U	4.98	U	4.98	U	4.98	U	65.3	JN	4.98	U	4.98	U	4.98	U	85.2	J
			1-2	DU-33 (1-2)	09/20/2022	4.77	U	4.77	U	4.77	U	4.77	U	4.77	U	31.0	JN	4.77	U	4.77	U	4.77	U	50.1	J
			2-3	DU-33 (2-3)	09/20/2022	4.66	U	4.66	U	4.66	U	4.66	U	4.66	U	39.3	JN	4.66	U	4.66	U	4.66	U	57.9	J

Please see notes at end of table.

Table 5b
Soil Results - PCB Aroclors - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCB Aroclors
						PCBs by EPA Method 8082A Concentrations in µg/kg									
					Human Health ISM PRG	--	--	--	--	--	--	--	--	--	740
					Human Health ISM Hot Spot	--	--	--	--	--	--	--	--	--	40,000
East Parcel	DU-34	ISM	0-1	DU-34 (0-1)	09/27/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	13.0 JN	5.01 U	5.01 U	5.01 U	33.0 J
			1-2	DU-34 (1-2)	09/27/2022	5.02 U	5.02 U	5.02 U	5.02 U	5.02 U	20.0 JN	5.02 UJ	5.02 UJ	5.02 UJ	47.6 J
			2-3	DU-34 (2-3)	09/27/2022	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U
	DU-35	ISM	0-1	DU-35 (0-1)	10/07/2022	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	4.95 U	8.55 J	4.95 U	4.95 U	28.4 J
			1-2	DU-35 (1-2)	10/07/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	15.1 J	6.97 J	5.01 U	5.01 U	39.6 J
			2-3	DU-35 (2-3)	10/07/2022	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U	5.04 U
	DU-36	ISM	0-1	DU-36 (0-1)	11/01/2022	4.66 U	4.66 U	4.66 U	4.66 U	4.66 U	6.34 J	5.21 J	4.66 U	4.66 U	27.9 J
			1-2	DU-36 (1-2)	11/01/2022	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U
			2-3	DU-36 (2-3)	11/01/2022	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	8.15 J	5.06 U	5.06 U	5.06 U	28.4 J
	DU-38	ISM	0-1	DU-38 (0-1)A	11/14/2022	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	10.3 J	9.57 J	5.03 U	5.03 U	37.5 J
			0-1 FR	DU-38 (0-1)B	11/14/2022	5 U	5 U	5 U	5 U	5 U	10.7 J	13 J	5 U	5 U	41.2 J
			0-1 FR	DU-38 (0-1)C	11/14/2022	4.99 U	4.99 U	4.99 U	4.99 U	4.99 U	10.5 J	13.1 J	4.99 U	4.99 U	41.1 J
			1-2	DU-38 (1-2)A	11/16/2022	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	14 J	12.8 J	5.03 U	5.03 U	44.4 J
			1-2 FR	DU-38 (1-2)B	11/16/2022	5.02 U	5.02 U	5.02 U	5.02 U	5.02 U	13.7 J	5.74 J	5.02 U	5.02 U	37.0 J
			1-2 FR	DU-38 (1-2)C	11/16/2022	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	9.88 J	7.51 J	5.05 U	5.05 U	35.1 J
			2-3	DU-38 (2-3)A	11/17/2022	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	9.82 J	5.05 U	5.05 U	5.05 U	30.0 J
			2-3 FR	DU-38 (2-3)B	11/17/2022	4.96 U	4.96 U	4.96 U	4.96 U	4.96 U	7.88 J	4.96 U	4.96 U	4.96 U	27.7 J
			2-3 FR	DU-38 (2-3)C	11/17/2022	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	6.14 J	5.07 U	5.07 U	5.07 U	26.4 J
			0-1	DU-38 (0-1) M	--	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	10.5 J	11.9 J	5.03 U	5.03 U	39.9 J
			1-2	DU-38 (1-2) M	--	5.05 U	5.05 U	5.05 U	5.05 U	5.05 U	12.5 J	8.7 J	5.05 U	5.05 U	38.8 J
			2-3	DU-38 (2-3) M	--	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	7.95 J	5.1 U	5.07 U	5.07 U	28.1 J
East Parcel Concrete Slab	DU-37	Composite	0-1	DU-37 (0-1)	11/28/2022	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U
			1-2	DU-37 (1-2)	11/28/2022	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U	4.98 U
			2-3	DU-37 (2-3)	11/28/2022	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U	5.06 U
	DU-39	Composite	0-1	DU-39 (0-1)	11/29/2022	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U
			1-2	DU-39 (1-2)	11/29/2022	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U	4.86 U
			2-3	DU-39 (2-3)	11/29/2022	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.9 U	4.90 U
	DU-40	Composite	0-1	DU-40 (0-1)	11/18/2022	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U	4.93 U
			1-2	DU-40 (1-2)	11/18/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U
			2-3	DU-40 (2-3)	11/18/2022	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U	5.01 U
	DU-43 (Within DU-31)	Composite	0-1	DU-43 (0-1)	11/21/2022	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U
			1-2	DU-43 (1-2)	11/21/2022	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U	5.07 U
			2-3	DU-43 (2-3)	11/21/2022	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U	5.03 U
	DU-44 (Within DU-36)	Composite	0-1	DU-44 (0-1)	12/01/2022	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U	4.89 U
			1-2	DU-44 (1-2)	12/01/2022	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U	4.88 U
			2-3	DU-44 (2-3)	12/01/2022	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U	4.81 U

Please see notes at end of table.

Table 5b
Soil Results - PCB Aroclors - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Sample Date	PCBs by EPA Method 8082A Concentrations in µg/kg																	
						Aroclor 1016		Aroclor 1221		Aroclor 1232		Aroclor 1242		Aroclor 1248		Aroclor 1254		Aroclor 1260		Aroclor 1262		Aroclor 1268		Total PCB Aroclors	
					Human Health ISM PRG	--		--		--		--		--		--		--		--		--		740	
					Human Health ISM Hot Spot	--		--		--		--		--		--		--		--		--		40,000	
East Parcel Soil Berms	DU-41	ISM	0-1	DU-41 (0-1)A	10/24/2022	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	14.5	J	12.5	J	5.03	U	5.03	U	44.61	J
			0-1 FR	DU-41 (0-1)B	10/24/2022	4.83	U	4.83	U	4.83	U	4.83	U	4.83	U	40.1	J	12.1	J	4.83	U	4.83	U	69.11	J
			0-1 FR	DU-41 (0-1)C	10/24/2022	4.88	U	4.88	U	4.88	U	4.88	U	4.88	U	21.6	J	17.9	J	4.88	U	4.88	U	56.58	J
			1-2	DU-41 (1-2)A	10/26/2022	4.83	U	4.83	U	4.83	U	4.83	U	4.83	U	58.4	J	17.3	J	4.83	U	4.83	U	92.61	J
			1-2 FR	DU-41 (1-2)B	10/26/2022	4.79	U	4.79	U	4.79	U	4.79	U	4.79	U	12.8	J	10.8	J	4.79	U	4.79	U	40.37	J
			1-2 FR	DU-41 (1-2)C	10/26/2022	4.94	U	4.94	U	4.94	U	4.94	U	4.94	U	46.6	J	12.6	J	4.94	U	4.94	U	76.49	J
			2-3	DU-41 (2-3)A	10/28/2022	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	9.84	J	7.82	J	5.05	U	5.05	U	35.34	J
			2-3 FR	DU-41 (2-3)B	10/28/2022	4.92	U	4.92	U	4.92	U	4.92	U	4.92	U	5.41	J	6.56	J	4.92	U	4.92	U	29.19	J
			2-3 FR	DU-41 (2-3)C	10/28/2022	4.90	U	4.90	U	4.90	U	4.90	U	4.90	U	6.60	J	20.00	J	4.90	U	4.90	U	43.75	J
			0-1	DU-41 (0-1) M	--	5.03	U	5.03	U	5.03	U	5.03	U	5.03	U	25.4	J	14.2	J	5.03	U	5.03	U	56.8	J
			1-2	DU-41 (1-2) M	--	4.94	U	4.94	U	4.94	U	4.94	U	4.94	U	39.3	J	13.6	J	4.94	U	4.94	U	69.8	J
			2-3	DU-41 (2-3) M	--	5.05	U	5.05	U	5.05	U	5.05	U	5.05	U	7.28	J	11.5	J	5.05	U	5.05	U	36.1	J

Notes:

ISM = Incremental Sampling Methodology.

bgs = Below ground surface.

PCBs = Polychlorinated biphenyls.

EPA = United States Environmental Protection Agency.

M = Mean. These results are the mean of the field replicates collected at this decision unit.

FR = Field replicate. Field replicates are collected at different locations within the same ISM cell as the primary sample.

µg/kg = Micrograms per kilogram (parts per billion).

Bolded values exceed the Preliminary Remediation Goal (PRG).

Shaded values exceed the hot spot level.

Italicized values represent a method detection limit that is above one or more applicable screening levels.

U = Analyte was not detected.

J = Result is estimated.

JN = The analyte was tentatively identified and did not meet method criteria for confirmation.

UJ = The analyte was analyzed for but was not detected. However, the detection limit may be inaccurate or imprecise.

PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).

Table 6
Results Summary - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Sample Depth (feet bgs)	Number of Samples That Exceed	Metals									D/F	PAHs			PCBs	Risk Summary	
			Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	Total D/F TEQ	Dibenzofuran	Total HPAHs	Total LPAHs	Total PCBs	PRG	Hot Spot
West Parcel 9 Decision Units (DU-1 through DU-9) 27 Samples 1 Field Replicate (DU-5)	0-1	MDL	4	9	9	9	9	8	9	1	9	9	7	9	9	9	Chromium, Copper, Lead, Mercury, Nickel, Zinc, Total D/F TEQ, Total PCBs	Chromium, Mercury
		PRG	0	0	1	3	4	7	4	0	6	9	0	0	0	4		
		Hot Spot	0	0	1	0	0	4	0	0	0	0	0	0	0	0		
		Max Conc ER	--	--	1.3	4.6	2.9	4.2	1.4	--	1.7	4.3	--	--	--	4.4		
	1-2	MDL	2	9	9	9	9	9	9	1	9	9	5	9	9	8	Chromium, Copper, Lead, Mercury, Nickel, Zinc, Total D/F TEQ, Dibenzofuran, Total HPAHs, Total PCBs	Chromium, Mercury, Total PCBs
		PRG	0	0	2	3	5	7	4	0	4	8	2	1	0	4		
		Hot Spot	0	0	2	0	0	3	0	0	0	0	0	0	0	1		
		Max Conc ER	--	--	1.1	3.2	9.7	2.8	1.7	--	1.4	4.2	3.3	2.1	--	28.1		
	2-3	MDL	1	9	9	9	9	9	9	1	9	9	5	9	9	8	Chromium, Copper, Lead, Mercury, Nickel, Zinc, Total D/F TEQ, Dibenzofuran, Total PCBs	Chromium, Mercury
		PRG	0	0	1	2	4	7	3	0	4	7	1	0	0	4		
		Hot Spot	0	0	1	0	0	2	0	0	0	0	0	0	0	0		
		Max Conc ER	--	--	1.1	2.5	2.4	2.4	1.2	--	1.6	3.8	1.1	--	--	2.0		
	All Depths	MDL	7	27	27	27	27	26	27	3	27	27	17	27	27	25	Chromium, Copper, Lead, Mercury, Nickel, Zinc, Total D/F TEQ, Dibenzofuran, Total HPAHs, Total PCBs	Chromium, Mercury, Total PCBs
		PRG	0	0	4	8	13	21	11	0	14	24	3	1	0	12		
		Hot Spot	0	0	4	0	0	9	0	0	0	0	0	0	0	1		
		Max Conc ER	--	--	1.3	4.6	9.7	4.2	1.7	--	1.7	4.3	3.3	2.1	--	28.1		
Central Parcel 17 Decision Units (DU-10 through DU-26) 51 Samples 6 Field Replicates (DU-11, DU-13, DU-16 (0-1 only), DU-22, DU-26)	0-1	MDL	14	17	17	17	17	17	17	1	17	17	14	17	17	17	Antimony, Copper, Lead, Mercury, Nickel, Selenium, Zinc, Total D/F TEQ, Dibenzofuran, Total HPAHs, Total PCBs	Mercury, Total D/F TEQ
		PRG	5	0	0	12	17	17	5	1	13	17	9	2	0	2		
		Hot Spot	0	0	0	0	0	17	0	0	0	7	0	0	0	0		
		Max Conc ER	1.4	--	-	3.2	9.3	52.2	1.3	1.04	2.8	65.0	5.2	5.3	--	1.5		
	1-2	MDL	9	17	17	17	17	17	17	1	17	17	8	17	17	10	Antimony, Copper, Lead, Mercury, Nickel, Selenium, Zinc, Total D/F TEQ, Dibenzofuran, Total HPAHs	Mercury, Total D/F TEQ
		PRG	1	0	0	4	15	17	4	1	10	11	4	2	0	0		
		Hot Spot	0	0	0	0	0	16	0	0	0	2	0	0	0	0		
		Max Conc ER	2.7	--	--	1.7	4.9	42.5	1.2	1.03	1.7	32.9	4.9	5.1	--	--		
	2-3	MDL	6	17	17	17	17	17	17	2	17	17	5	17	17	5	Antimony, Copper, Lead, Mercury, Nickel, Selenium, Zinc, Total D/F TEQ, Dibenzofuran, Total HPAHs	Mercury, Total D/F TEQ
		PRG	1	0	0	1	15	17	2	1	2	10	3	2	0	0		
		Hot Spot	0	0	0	0	0	13	0	0	0	1	0	0	0	0		
		Max Conc ER	1.1	--	--	2.6	4.9	34.3	1.1	1.04	1.4	24.5	3.9	4.2	--	--		
	All Depths	MDL	29	51	51	51	51	51	51	4	51	51	27	51	51	32	Antimony, Copper, Lead, Mercury, Nickel, Selenium, Zinc, Total D/F TEQ, Dibenzofuran, Total HPAHs, Total PCBs	Mercury, Total D/F TEQ
		PRG	7	0	0	17	47	51	11	3	25	38	16	6	0	2		
		Hot Spot	0	0	0	0	0	46	0	0	0	10	0	0	0	0		
		Max Conc ER	2.7	--	0	3.2	9.3	52.2	1.3	1.04	2.8	65.0	5.2	5.3	--	1.5		
Central Parcel Concrete Slabs 1 Decision Units (DU-42) 3 Samples No Field Replicate	0-1	MDL	0	1	1	1	1	1	1	1	1	1	0	1	1	0	Lead, Mercury, Nickel, Selenium, Zinc, Total D/F TEQ	Mercury
		PRG	--	0	0	0	1	1	1	1	1	1	--	0	0	--		
		Hot Spot	--	0	0	0	0	1	0	0	0	0	--	0	0	--		
		Max Conc ER	--	--	--	--	1.6	3.1	1.01	1.02	1.1	10.0	--	--	--	--		
	1-2	MDL	1	1	1	1	1	1	1	0	1	1	0	1	1	0	Mercury, Total D/F TEQ	Mercury
		PRG	0	0	0	0	0	1	0	--	0	1	--	0	0	--		
		Hot Spot	0	0	0	0	0	1	0	--	0	0	--	0	0	--		
		Max Conc ER	--	--	--	--	--	2.6	--	--	--	3.7	--	--	--	--		
	2-3	MDL	0	1	1	1	1	1	1	0	1	1	0	1	1	0	Mercury, Total D/F TEQ	--
		PRG	--	0	0	0	0	1	0	--	0	1	--	0	0	--		
		Hot Spot	--	0	0	0	0	0	0	--	0	0	--	0	0	--		
		Max Conc ER	--	--	--	--	--	1.7	--	--	--	1.4	--	--	--	--		
	All Depths	MDL	1	3	3	3	3	3	3	1	3	3	0	3	3	0	Lead, Mercury, Nickel, Selenium, Zinc, Total D/F TEQ	Mercury
		PRG	0	0	0	0	1	3	1	1	1	3	0	0	0	0		
		Hot Spot	0	0	0	0	0	2	0	0	0	0	0	0	0	0		
		Max Conc ER	--	--	--	--	1.6	3.1	1.01	1.02	1.1	10.0	--	--	--	--		

Please see notes at end of table

Table 6
Results Summary - Ecological Screening
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Sample Depth (feet bgs)	Number of Samples That Exceed	Metals									D/F	PAHs			PCBs	Risk Summary	
			Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	Total D/F TEQ	Dibenzofuran	Total HPAHs	Total LPAHs	Total PCBs	PRG	Hot Spot
East Parcel 11 Decision Units (DU-27 through DU-36, and DU-38) 33 Samples 1 Field Replicate (DU-38)	0-1	MDL	10	11	11	11	11	9	11	1	11	11	10	11	11	10	Antimony, Copper, Lead, Mercury, Selenium, Zinc, Total D/F TEQ, Dibenzofuran, Total PCBs	Mercury, Total D/F TEQ
		PRG	1	0	0	3	8	3	0	1	8	11	1	0	0	2		
		Hot Spot	0	0	0	0	0	2	0	0	0	1	0	0	0	0		
		Max Conc ER	1.4	0.8	0.5	2.9	4.0	8.9	--	1.1	2.4	16.9	1.8	--	--	1.9		
	1-2	MDL	8	11	11	11	11	6	11	0	12	11	6	11	11	7	Antimony, Copper, Lead, Mercury, Nickel, Zinc, Total D/F TEQ, Dibenzofuran, Total PCBs	Mercury, Total D/F TEQ
		PRG	2	0	0	4	8	1	1	--	8	11	1	0	0	1		
		Hot Spot	0	0	0	0	0	1	0	--	0	1	0	0	0	0		
		Max Conc ER	1.3	0.7	0.4	4.7	6.1	9.7	1.1	--	3.0	11.5	1.0	--	--	1.7		
	2-3	MDL	7	11	11	11	11	4	11	0	11	11	3	11	11	6	Antimony, Copper, Lead, Mercury, Zinc, Total D/F TEQ, Dibenzofuran, Total PCBs	Mercury
		PRG	3	0	0	2	7	2	0	--	7	11	1	0	0	1		
		Hot Spot	0	0	0	0	0	2	0	--	0	0	0	0	0	0		
		Max Conc ER	2.5	0.9	0.4	3.3	6.7	2.8	--	--	2.3	5.0	4.1	--	--	1.8		
	All Depths	MDL	25	33	33	33	33	19	33	1	34	33	19	33	33	23	Antimony, Copper, Lead, Mercury, Nickel, Selenium, Zinc, Total D/F TEQ, Dibenzofuran, Total PCBs	Mercury, Total D/F TEQ
		PRG	6	0	0	9	23	6	1	1	23	33	3	0	0	4		
		Hot Spot	0	0	0	0	0	5	0	0	0	2	0	0	0	0		
		Max Conc ER	2.5	0.9	0.5	4.7	6.7	9.7	1.1	1.1	3.0	16.9	4.1	--	--	1.9		
East Parcel Concrete Slabs 5 Decision Units (DU-37, DU-39, DU-40, DU-43, DU-44) 15 Samples No Field Replicates	0-1	MDL	1	5	5	5	5	0	5	2	5	5	0	5	5	0	Lead, Selenium	--
		PRG	0	0	0	0	1	--	0	2	0	0	--	0	0	--		
		Hot Spot	0	0	0	0	0	--	0	0	0	0	--	0	0	--		
		Max Conc ER	--	--	--	--	1.2	--	--	1.1	--	--	--	--	--	--		
	1-2	MDL	0	5	5	5	5	1	5	2	5	5	0	5	5	0	Selenium	--
		PRG	--	0	0	0	0	0	0	2	0	0	--	0	0	--		
		Hot Spot	--	0	0	0	0	0	0	0	0	0	--	0	0	--		
		Max Conc ER	--	--	--	--	--	--	--	1.2	--	--	--	--	--	--		
	2-3	MDL	0	5	5	5	5	0	5	0	5	5	1	5	5	0	Dibenzofuran	--
		PRG	--	0	0	0	0	--	0	--	0	0	1	0	0	--		
		Hot Spot	--	0	0	0	0	--	0	--	0	0	0	0	0	--		
		Max Conc ER	--	--	--	--	--	--	--	--	--	--	1.2	--	--	--		
	All Depths	MDL	1	15	15	15	15	1	15	4	15	15	1	15	15	0	Lead, Selenium, Dibenzofuran	--
		PRG	0	0	0	0	1	0	0	4	0	0	1	0	0	0		
		Hot Spot	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		Max Conc ER	--	--	--	--	1.19	--	--	1.2	--	--	1.15	--	--	--		
East Parcel Soil Berms 1 Decision Units (DU-41) 3 Samples 1 Field Replicate (DU-41)	0-1	MDL	1	1	1	1	1	1	1	0	1	1	1	1	1	1	Arsenic, Lead, Mercury, Zinc, Total D/F TEQ, Dibenzofuran	Total D/F TEQ
		PRG	0	1	0	0	1	1	0	--	1	1	1	0	0	0		
		Hot Spot	0	0	0	0	0	0	0	--	0	1	0	0	0	0		
		Max Conc ER	--	1.3	--	--	2.4	1.9	--	--	1.1	36.2	1.4	--	--	--		
	1-2	MDL	1	1	1	1	1	1	1	0	1	1	1	1	1	1	Lead, Mercury, Zinc, Total D/F TEQ, Dibenzofuran	Total D/F TEQ
		PRG	0	0	0	0	1	1	0	--	1	1	1	0	0	0		
		Hot Spot	0	0	0	0	0	0	0	--	0	1	0	0	0	0		
		Max Conc ER	--	--	--	--	3.7	1.4	--	--	1.3	36.8	3.4	--	--	--		
	2-3	MDL	1	1	1	1	1	1	1	0	1	1	1	1	1	1	Lead, Zinc, Total D/F TEQ, Dibenzofuran	Total D/F TEQ
		PRG	0	0	0	0	1	0	0	--	1	1	1	0	0	0		
		Hot Spot	0	0	0	0	0	0	0	--	0	1	0	0	0	0		
		Max Conc ER	--	--	--	--	2.7	--	--	--	1.4	21.6	1.1	--	--	--		
	All Depths	MDL	3	3	3	3	3	3	3	0	3	3	3	3	3	3	Arsenic, Lead, Mercury, Zinc, Total D/F TEQ, Dibenzofuran	Total D/F TEQ
		PRG	0	1	0	0	3	2	0	0	3	3	3	0	0	0		
		Hot Spot	0	0	0	0	0	0	0	0	0	3	0	0	0	0		
		Max Conc ER	--	1.3	--	--	3.7	1.9	--	--	1.4	36.8	3.4	--	--	--		

Notes:

bgs = Below ground surface.
D/Fs = Dioxins/furans
Total D/F TEQ = Total 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalent
PAHs = Polycyclic aromatic hydrocarbons.
HPAH = High-molecular-weight polycyclic aromatic hydrocarbon
LPAH = Low-molecular-weight polycyclic aromatic hydrocarbon
PCBs = Polychlorinated biphenyls.

PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
MDL = Method detection limit
Max ER = Maximum exceedace ratio (ER is the sample concentration divided by the PRG)

Please see notes at end of table.

Table 7
Results Summary - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Location	Sample Depth (feet bgs)	Exceeds	Metals				D/F		PCBs	Risk Summary	
			Antimony	Arsenic	Copper	Lead	Total D/F TEQ	cPAHs	Total PCBs	PRG	Hot Spot
West Parcel 9 Decision Units (DU-1 through DU-9) 27 Samples 1 Field Replicate (DU-5)	0-1	MDL	4	9	9	9	9	9	9	Arsenic, Total D/F TEQ	--
		PRG	0	7	0	0	6	0	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	2.0	--	--	1.8	--	--		
	1-2	MDL	2	9	9	9	9	9	8	Arsenic, Total D/F TEQ, cPAHs, Total PCBs	--
		PRG	0	7	0	0	4	1	1		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	1.7	--	--	1.7	3.2	3.7		
	2-3	MDL	1	9	9	9	9	9	8	Arsenic, Total D/F TEQ, cPAHs	--
		PRG	0	7	0	0	2	1	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	1.5	--	--	1.6	1.4	--		
	All Depths	MDL	7	27	27	27	27	27	25	Arsenic, Total D/F TEQ, cPAHs, Total PCBs	--
		PRG	0	21	0	0	12	2	1		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	2.0	--	--	1.8	3.2	3.7		
Central Parcel 17 Decision Units (DU-10 through DU-26) 51 Samples 6 Field Replicates (DU-11, DU-13, DU-16 (0-1 only), DU-22, DU-26)	0-1	MDL	14	17	17	17	17	17	17	Arsenic, Total D/F TEQ, cPAHs	--
		PRG	0	15	0	0	16	3	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	2.4	--	--	14.1	9.4	--		
	1-2	MDL	9	17	17	17	17	17	10	Arsenic, Total D/F TEQ, cPAHs	--
		PRG	0	10	0	0	8	2	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	2.6	--	--	13.4	8.6	--		
	2-3	MDL	6	17	17	17	17	17	5	Arsenic, Total D/F TEQ, cPAHs	--
		PRG	0	5	0	0	4	2	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	1.3	--	--	10.0	7.4	--		
	All Depths	MDL	29	51	51	51	51	51	32	Arsenic, Total D/F TEQ, cPAHs	--
		PRG	0	30	0	0	28	7	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	2.6	--	--	14.1	9.4	--		
Central Parcel Concrete Slabs 1 Decision Units (DU-42) 3 Samples No Field Replicate	0-1	MDL	0	1	1	1	1	1	0	Total D/F TEQ	--
		PRG	--	0	0	0	1	0	--		
		Hot Spot	--	0	0	0	0	0	--		
		Max ER	--	--	--	--	4.1	--	--		
	1-2	MDL	1	1	1	1	1	1	0	Total D/F TEQ	--
		PRG	0	0	0	0	1	0	--		
		Hot Spot	0	0	0	0	0	0	--		
		Max ER	--	--	--	--	1.5	--	--		
	2-3	MDL	0	1	1	1	1	1	0	--	--
		PRG	--	0	0	0	0	0	--		
		Hot Spot	--	0	0	0	0	0	--		
		Max ER	--	--	--	--	--	--	--		
	All Depths	MDL	1	3	3	3	3	3	0	Total D/F TEQ	--
		PRG	0	0	0	0	2	0	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	--	--	--	4.1	--	--		

Please see notes at end of table.

Table 7
Results Summary - Human Health Screening
Willamette Cove Upland Facility
Portland, Oregon

Location	Sample Depth (feet bgs)	Exceeds	Metals				D/F		PCBs	Risk Summary	
			Antimony	Arsenic	Copper	Lead	Total D/F TEQ	cPAHs	Total PCBs	PRG	Hot Spot
East Parcel 11 Decision Units (DU-27 through DU-36, and DU-38) 33 Samples 1 Field Replicate (DU-38)	0-1	MDL	10	11	11	11	11	11	10	Arsenic, Total D/F TEQ	--
		PRG	0	8	0	0	11	0	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	3.3	--	--	6.9	--	--		
	1-2	MDL	8	11	11	11	11	11	7	Arsenic, Total D/F TEQ	--
		PRG	0	7	0	0	8	0	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	3.0	--	--	4.7	--	--		
	2-3	MDL	7	11	11	11	11	1	6	Arsenic, Total D/F TEQ, cPAHs	--
		PRG	0	4	0	0	4	1	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	3.6	--	--	2.0	1.03	--		
	All Depths	MDL	25	33	33	33	33	23	23	Arsenic, Total D/F TEQ, cPAHs	--
		PRG	0	19	0	0	23	1	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	3.6	--	--	6.9	1.03	--		
East Parcel Concrete Slabs 5 Decision Units (DU-37, DU-39, DU-40, DU-43, DU-44) 15 Samples No Field Replicates	0-1	MDL	1	5	5	5	5	5	0	--	--
		PRG	0	0	0	0	0	0	--		
		Hot Spot	0	0	0	0	0	0	--		
		Max ER	--	--	--	--	--	--	--		
	1-2	MDL	0	5	5	5	5	5	0	--	--
		PRG	--	0	0	0	0	0	--		
		Hot Spot	--	0	0	0	0	0	--		
		Max ER	--	--	--	--	--	--	--		
	2-3	MDL	0	5	5	5	5	5	0	--	--
		PRG	--	0	0	0	0	0	--		
		Hot Spot	--	0	0	0	0	0	--		
		Max ER	--	--	--	--	--	--	--		
	All Depths	MDL	1	15	15	15	15	15	0	--	--
		PRG	0	0	0	0	0	0	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	--	--	--	--	--	--		
East Parcel Soil Berms 1 Decision Units (DU-41) 3 Samples 1 Field Replicate (DU-41)	0-1	MDL	1	1	1	1	1	1	1	Arsenic, Total D/F TEQ	--
		PRG	0	1	0	0	1	0	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	5.2	--	--	14.7	--	--		
	1-2	MDL	1	1	1	1	1	1	1	Arsenic, Total D/F TEQ	--
		PRG	0	1	0	0	1	0	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	2.7	--	--	15.0	--	--		
	2-3	MDL	1	1	1	1	1	1	1	Arsenic, Total D/F TEQ	--
		PRG	0	1	0	0	1	0	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	3.2	--	--	8.8	--	--		
	All Depths	MDL	3	3	3	3	3	3	3	Arsenic, Total D/F TEQ	--
		PRG	0	3	0	0	3	0	0		
		Hot Spot	0	0	0	0	0	0	0		
		Max ER	--	5.2	--	--	15.0	--	--		

Notes:

bgs = Below ground surface.
D/Fs = Dioxins/furans
Total D/F TEQ = Total 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalent
PAHs = Polycyclic aromatic hydrocarbons.
cPAHs = carcinogenic polycyclic aromatic hydrocarbon
PCBs = Polychlorinated biphenyls.

PRG = Preliminary Remediation Goal: cleanup level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
Hot spot level adopted from the *Revised Feasibility Study and Source Control Evaluation, Willamette Cove Upland Facility* (Apex, 2019).
MDL = Method detection limit
Max ER = Maximum exceedace ratio (ER is the sample concentration divided by the PRG)

Table 8
Exceedance Summary and Soil Removal
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Metals									D/F	PAHs				PCBs	Risk Summary	Excavation Thickness (ft)			Area		Excavation Volumes (cy)			Preliminary Soil Removal Depth (feet bgs)	Soil Removal Drivers	Leave Surface	
					Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	Total D/F TEQ	Dibenzofuran	Total HPAH	Total LPAH	cPAHs	Total PCBs		Off-Site Disposal	Contingency Remedy[1]	Arsenic-Driven Excavation	Acres	Square Feet	Off-Site Disposal	Contingency Remedy[1]	Arsenic-Driven Excavation			Max Eco ER	Summed Eco ER[2]
West Parcel	DU-1	ISM	0-1	DU-1 (0-1)		HH PRG		Eco PRG	Eco PRG		Eco PRG		Eco PRG	Eco/HH PRG					Eco PRG	Eco/HH PRG									Arsenic, Chromium Total D/F TEQ Total PCBs	Unknown	Unknown
			1-2	DU-1 (1-2)		HH PRG	Eco HS		Eco PRG	Eco PRG	Eco PRG		Eco PRG	Eco/HH PRG	Eco PRG				Eco HS/HH PRG	Eco HS/HH PRG	1	2	1	0.50	21,780	807	1,613	807	3			
			2-3	DU-1 (2-3)		HH PRG			Eco PRG	Eco PRG	Eco PRG		Eco PRG	Eco PRG					Eco PRG	Eco/HH PRG											
	DU-2	ISM	0-1	DU-2 (0-1)		HH PRG		Eco PRG	Eco PRG	Eco PRG				Eco PRG					Eco PRG	Eco/HH PRG											
			1-2	DU-2 (1-2)		HH PRG		Eco PRG	Eco PRG	Eco PRG									Eco PRG	Eco/HH PRG	0	3	2	0.50	21,780	0	2,420	1,613	3	Arsenic	Unknown	Unknown
			2-3	DU-2 (2-3)		HH PRG														HH PRG											
	DU-3	ISM	0-1	DU-3 (0-1)		HH PRG								Eco/HH PRG						Eco/HH PRG											
			1-2	DU-3 (1-2)		HH PRG								Eco PRG						Eco/HH PRG	0	3	3	0.43	18,731	0	2,081	2,081	3	Arsenic Total D/F TEQ	Unknown	Unknown
			2-3	DU-3 (2-3)		HH PRG														HH PRG											
	DU-4	ISM	0-1	DU-4 (0-1)		HH PRG				Eco PRG	Eco PRG			Eco/HH PRG						Eco/HH PRG											
			1-2	DU-4 (1-2)		HH PRG					Eco PRG			Eco/HH PRG	Eco PRG	Eco PRG		HH PRG		Eco/HH PRG	0	3	0	0.42	18,295	0	2,033	0	3	Arsenic Total D/F TEQ cPAHs	Unknown	Unknown
			2-3	DU-4 (2-3)		HH PRG			Eco PRG	Eco PRG				Eco PRG				HH PRG		Eco/HH PRG											
	DU-5	ISM	0-1	DU-5 (0-1) M		HH PRG	Eco HS	Eco PRG	Eco PRG	Eco HS	Eco PRG		Eco PRG	Eco PRG					Eco PRG	Eco HS/HH PRG											
			1-2	DU-5 (1-2) M		HH PRG	Eco HS	Eco PRG	Eco PRG	Eco HS	Eco PRG		Eco PRG	Eco PRG					Eco PRG	Eco HS/HH PRG	3	0	0	0.53	23,087	2,565	0	0	3	Arsenic, Chromium Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-5 (2-3) M		HH PRG	Eco HS	Eco PRG	Eco PRG	Eco HS	Eco PRG		Eco PRG	Eco/HH PRG					Eco PRG	Eco HS/HH PRG											
	DU-6	ISM	0-1	DU-6 (0-1)		HH PRG				Eco PRG			Eco PRG	Eco PRG						Eco/HH PRG											
			1-2	DU-6 (1-2)		HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco/HH PRG					Eco PRG	Eco HS/HH PRG	1	2	2	0.53	23,087	855	1,710	1,710	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-6 (2-3)		HH PRG		Eco PRG	Eco PRG	Eco PRG				Eco PRG	Eco PRG				Eco PRG	Eco/HH PRG											
	DU-7	ISM	0-1	DU-7 (0-1)						Eco HS			Eco PRG	Eco/HH PRG						Eco HS/HH PRG											
			1-2	DU-7 (1-2)						Eco PRG				Eco PRG						Eco PRG	1	0	0	0.49	21,344	791	0	0	1	Mercury Total D/F TEQ	2.03 (Total TEQ)	7.8
			2-3	DU-7 (2-3)						Eco PRG				Eco PRG						Eco PRG											
	DU-8	ISM	0-1	DU-8 (0-1)					Eco PRG	Eco HS			Eco PRG	Eco/HH PRG					Eco PRG	Eco HS/HH PRG											
			1-2	DU-8 (1-2)						Eco HS			Eco PRG	Eco/HH PRG						Eco HS/HH PRG	3	0	0	0.44	19,166	2,130	0	0	3	Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-8 (2-3)						Eco HS			Eco PRG	Eco/HH PRG					Eco PRG	Eco HS/HH PRG											
	DU-9	ISM	0-1	DU-9 (0-1)		HH PRG				Eco HS	Eco PRG		Eco PRG	Eco/HH PRG						Eco HS/HH PRG											
			1-2	DU-9 (1-2)		HH PRG			Eco PRG	Eco PRG	Eco PRG			Eco PRG						Eco/HH PRG	1	2	2	0.43	18,731	694	1,387	1,387	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-9 (2-3)		HH PRG				Eco PRG	Eco PRG		Eco PRG	Eco PRG						Eco/HH PRG											
Central Parcel	DU-10	ISM	0-1	DU-10 (0-1)		HH PRG			Eco PRG	Eco HS	Eco PRG			Eco/HH PRG	Eco PRG	Eco PRG		HH PRG		Eco HS/HH PRG											
			1-2	DU-10 (1-2)		HH PRG			Eco PRG	Eco HS	Eco PRG				Eco PRG	Eco PRG		HH PRG		Eco HS/HH PRG	3	0	0	0.49	21,344	2,372	0	0	3	Arsenic, Mercury Total D/F TEQ cPAHs	Unknown	Unknown
			2-3	DU-10 (2-3)		HH PRG			Eco PRG	Eco HS					Eco PRG	Eco PRG		HH PRG		Eco HS/HH PRG											
	DU-11	ISM	0-1	DU-11 (0-1) M					Eco PRG	Eco HS	Eco PRG			Eco PRG	Eco PRG	Eco PRG		HH PRG		Eco HS/HH PRG											
			1-2	DU-11 (1-2) M					Eco PRG	Eco HS	Eco PRG				Eco PRG	Eco PRG		HH PRG		Eco HS/HH PRG	3	0	0	0.54	23,522	2,614	0	0	3	Mercury cPAHS	Unknown	Unknown
			2-3	DU-11 (2-3) M					Eco PRG	Eco HS	Eco PRG			Eco PRG	Eco PRG	Eco PRG		HH PRG		Eco HS/HH PRG											
	DU-12	ISM	0-1	DU-12 (0-1)		HH PRG		Eco PRG		Eco HS			Eco PRG	Eco/HH PRG						Eco HS/HH PRG											
			1-2	DU-12 (1-2)					Eco PRG	Eco HS										Eco HS	3	0	0	0.44	19,166	2,130	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-12 (2-3)					Eco PRG	Eco HS										Eco HS											
	DU-13	ISM	0-1	DU-13 (0-1) M		HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco HS/HH PRG				HH PRG		Eco HS/HH PRG											
			1-2	DU-13 (1-2) M		HH PRG			Eco PRG	Eco HS				Eco/HH PRG						Eco HS/HH PRG	3	0	0	0.52	22,651	2,517	0	0	3	Arsenic, Mercury Total D/F TEQ cPAHs	Unknown	Unknown
			2-3	DU-13 (2-3) M					Eco PRG	Eco HS				Eco/HH PRG						Eco HS/HH PRG											
	DU-14	ISM	0-1	DU-14 (0-1)	Eco PRG	HH PRG		Eco PRG	Eco PRG	Eco HS	Eco PRG		Eco PRG	Eco HS/HH PRG	Eco PRG					Eco HS/HH PRG											
			1-2	DU-14 (1-2)	Eco PRG	HH PRG		Eco PRG	Eco PRG	Eco HS	Eco PRG		Eco PRG	Eco/HH PRG	Eco PRG					Eco HS/HH PRG	3	0	0	0.44	19,166	2,130	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-14 (2-3)	Eco PRG	HH PRG		Eco PRG	Eco PRG	Eco HS	Eco PRG		Eco PRG	Eco PRG	Eco PRG					Eco HS/HH PRG											
	DU-15	ISM	0-1	DU-15 (0-1)	Eco PRG	HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco HS/HH PRG						Eco HS/HH PRG											
			1-2	DU-15 (1-2)					Eco PRG	Eco HS				Eco HS/HH PRG						Eco HS/HH PRG	3	0	0	0.49	21,344	2,372	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-15 (2-3)					Eco PRG	Eco HS				Eco HS/HH PRG						Eco HS/HH PRG											
	DU-16	ISM	0-1	DU-16 (0-1) M	Eco PRG	HH PRG		Eco PRG	Eco PRG	Eco HS	Eco PRG		Eco PRG	Eco HS/HH PRG	Eco PRG					Eco HS/HH PRG											
			1-2	DU-16 (1-2)		HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco/HH PRG						Eco HS/HH PRG	3	0	0	0.40	17,424	1,936	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-16 (2-3)					Eco PRG	Eco HS		Eco PRG		Eco PRG						Eco HS											
	DU-17	ISM	0-1	DU-17 (0-1)		HH PRG			Eco PRG	Eco HS			Eco PRG	Eco/HH PRG						Eco HS/HH PRG											
			1-2	DU-17 (1-2)					Eco PRG	Eco HS										Eco HS	2	0	0	0.50	21,780	1,613	0	0	2	Arsenic Mercury Total D/F TEQ	1.66 (Mercury)	6.1
			2-3	DU-17 (2-3)					Eco PRG	Eco PRG				Eco PRG						Eco PRG											
	DU-18	ISM	0-1	DU-18 (0-1) M		HH PRG		Eco PRG	Eco PRG	Eco HS	Eco PRG		Eco PRG	Eco/HH PRG						Eco HS/HH PRG											
			1-2	DU-18 (1-2) M		HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco/HH PRG						Eco HS/HH PRG	3	0	0	0.41	17,860	1,984	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-18 (2-3) M		HH PRG			Eco PRG	Eco HS				Eco PRG						Eco HS/HH PRG											
	DU-19	ISM	0-1	DU-19 (0-1)		HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco HS/HH PRG	Eco PRG				Eco PRG	Eco HS/HH PRG											
			1-2	DU-19 (1-2)		HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco HS/HH PRG	Eco PRG					Eco HS/HH PRG	3	0	0	0.51	22,216	2,468	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-19 (2-3)		HH PRG			Eco PRG	Eco HS				Eco/HH PRG						Eco HS/HH PRG											
	DU-20	ISM	0-1	DU-20 (0-1)		HH PRG			Eco PRG	Eco HS				Eco/HH PRG						Eco HS/HH PRG											
			1-2	DU-20 (1-2)						Eco PRG	Eco PRG									Eco PRG	1	0	0	0.68	29,621	1,097	0	0	1	Arsenic Mercury Total D/F TEQ	1.86 (Mercury)	6.2
			2-3	DU-20 (2-3)						Eco PRG										Eco PRG											
	DU-21	ISM	0-1	DU-21 (0-1)	Eco PRG	HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco HS/HH PRG	Eco PRG					Eco HS/HH PRG											
			1-2	DU-21 (1-2)		HH PRG			Eco PRG	Eco HS			Eco PRG	Eco/HH PRG						Eco HS/HH PRG	3	0	0	0.39	16,988	1,888	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-21 (2-3)		HH PRG			Eco PRG	Eco HS				Eco PRG						Eco HS/HH PRG											
	DU-22	ISM	0-1	DU-22 (0-1) M		HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco/HH PRG	Eco PRG					Eco HS/HH PRG											
			1-2	DU-22 (1-2) M		HH PRG			Eco PRG	Eco HS			Eco PRG	Eco PRG						Eco HS/HH PRG	3	0	0	0.62	27,007	3,001	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-22 (2-3) M					Eco PRG	Eco HS										Eco HS											
	DU-23	ISM	0-1	DU-23 (0-1)		HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco/HH PRG						Eco HS/HH PRG											
			1-2	DU-23 (1-2)		HH PRG			Eco PRG	Eco HS			Eco PRG	Eco PRG						Eco HS/HH PRG	3	0	0	0.62	27,007	3,001	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-23 (2-3)					Eco PRG	Eco HS										Eco HS											
	DU-24	ISM	0-1	DU-24 (0-1)					Eco PRG	Eco HS				Eco/HH PRG						Eco HS/HH PRG											
			1-2	DU-24 (1-2)						Eco HS			Eco PRG	Eco PRG						Eco HS	2	0	0	0.44	19,166	1,420	0	0	2	Mercury Total D/F TEQ	1.46 (Total TEQ)	5.3
			2-3	DU-24 (2-3)						Eco PRG				Eco PRG						Eco PRG											

Please see notes at end of table.

Table 8
Exceedance Summary and Soil Removal
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Sample ID	Metals									D/F	PAHs					PCBs	Risk Summary	Excavation Thickness (ft)			Area		Excavation Volumes (cy)			Preliminary Soil Removal Depth (feet bgs)	Soil Removal Drivers	Leave Surface	
					Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	Total D/F TEQ	Dibenzofuran	Total HPAH	Total LPAH	cPAHs	Total PCBs		Off-Site Disposal	Contingency Remedy[1]	Arsenic-Driven Excavation	Acres	Square Feet	Off-Site Disposal	Contingency Remedy[1]	Arsenic-Driven Excavation			Max Eco ER	Summed Eco ER[2]
Central Parcel	DU-25	ISM	0-1	DU-25 (0-1)		HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco HH PRG	Eco PRG						Eco HS/HH PRG												
			1-2	DU-25 (1-2)					Eco PRG	Eco HS			Eco PRG								Eco HS	2	0	0	0.45	19,602	1,452	0	0	2	Arsenic Mercury Total D/F TEQ	Unknown	6.2
			2-3	DU-25 (2-3)					Eco PRG	Eco PRG			Eco PRG								Eco PRG												
	DU-26	ISM	0-1	DU-26 (0-1)	Eco PRG	HH PRG		Eco PRG	Eco PRG	Eco HS		Eco PRG	Eco PRG	Eco HS/HH PRG	Eco PRG					Eco PRG	Eco HS/HH PRG												
			1-2	DU-26 (1-2)		HH PRG			Eco PRG	Eco HS		Eco PRG	Eco PRG	Eco/HH PRG							Eco HS/HH PRG	3	0	0	0.44	19,166	2,130	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-26 (2-3)					Eco PRG	Eco HS				Eco/HH PRG							Eco HS/HH PRG												
Central Parcel Concrete Slab	DU-42 (Within DU-16)	Composite*	0-1	DU-42 (0-1)					Eco PRG	Eco HS	Eco PRG	Eco PRG	Eco PRG	Eco/HH PRG							Eco HS/HH PRG												
			1-2	DU-42 (1-2)						Eco HS				Eco/HH PRG							Eco HS/HH PRG	2	0	0	0.09	3,920	290	0	0	2	Mercury Total D/F TEQ	1.71 (Mercury)	6.3
			2-3	DU-42 (2-3)						Eco PRG				Eco PRG							Eco PRG												
East Parcel	DU-27	ISM	0-1	DU-27 (0-1)		HH PRG		Eco PRG	Eco PRG	Eco HS		Eco PRG	Eco PRG	Eco HS/HH PRG					Eco PRG		Eco HS/HH PRG												
			1-2	DU-27 (1-2)		HH PRG		Eco PRG	Eco PRG				Eco PRG	Eco HS/HH PRG	Eco PRG				Eco PRG		Eco HS/HH PRG	1	2	0	0.40	19,166*	710	1,420	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-27 (2-3)		HH PRG			Eco PRG				Eco PRG	Eco/HH PRG					Eco PRG		Eco/HH PRG												
	DU-28	ISM	0-1	DU-28 (0-1)		HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco/HH PRG					Eco PRG		Eco HS/HH PRG												
			1-2	DU-28 (1-2)	Eco PRG	HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco/HH PRG							Eco HS/HH PRG	3	0	0	0.43	23,087*	2,565	0	0	3	Arsenic Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-28 (2-3)	Eco PRG	HH PRG		Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco PRG							Eco HS/HH PRG												
	DU-29	ISM	0-1	DU-29 (0-1)		HH PRG			Eco PRG				Eco PRG	Eco/HH PRG							Eco/HH PRG												
			1-2	DU-29 (1-2)		HH PRG			Eco PRG					Eco/HH PRG							Eco/HH PRG	0	3	0	0.42	23,522*	0	2,614	0	3	Asenic Total D/F TEQ	Unknown	Unknown
			2-3	DU-29 (2-3)					Eco PRG					Eco/HH PRG							Eco/HH PRG												
	DU-30	ISM	0-1	DU-30 (0-1)					Eco PRG	Eco PRG			Eco PRG	Eco/HH PRG							Eco/HH PRG												
			1-2	DU-30 (1-2)				Eco PRG	Eco PRG				Eco PRG	Eco/HH PRG							Eco/HH PRG	1	2	0	0.42	24,394*	903	1,807	0	3	Mercury Total D/F TEQ	Unknown	Unknown
			2-3	DU-30 (2-3)	Eco PRG			Eco PRG	Eco PRG	Eco HS			Eco PRG	Eco PRG							Eco HS												
	DU-31	ISM	0-1	DU-31 (0-1)		HH PRG			Eco PRG					Eco/HH PRG							Eco/HH PRG												
			1-2	DU-31 (1-2)		HH PRG			Eco PRG				Eco PRG	Eco/HH PRG							Eco/HH PRG	0	3	1	0.29	12,632	0	1,404	468	3	Arsenic Total D/F TEQ	Unknown	Unknown
			2-3	DU-31 (2-3)		HH PRG								Eco PRG							Eco/HH PRG												
	DU-32	ISM	0-1	DU-32 (0-1)		HH PRG								Eco/HH PRG							Eco/HH PRG												
			1-2	DU-32 (1-2)		HH PRG								Eco PRG							Eco/HH PRG	0	3	1	0.46	20,038	0	2,226	742	3	Arsenic Total D/F TEQ cPAHs	Unknown	Unknown
			2-3	DU-32 (2-3)					Eco PRG					Eco PRG	Eco PRG			HH PRG			Eco/HH PRG												
	DU-33	ISM	0-1	DU-33 (0-1)		HH PRG		Eco PRG	Eco PRG				Eco PRG	Eco/HH PRG							Eco/HH PRG												
			1-2	DU-33 (1-2)		HH PRG		Eco PRG	Eco PRG				Eco PRG	Eco/HH PRG							Eco/HH PRG	0	3	1	0.39	16,988	0	1,888	629	3	Arsenic Total D/F TEQ	Unknown	Unknown
			2-3	DU-33 (2-3)		HH PRG			Eco PRG				Eco PRG	Eco PRG							Eco/HH PRG												
	DU-34	ISM	0-1	DU-34 (0-1)		HH PRG			Eco PRG				Eco PRG	Eco/HH PRG	Eco PRG						Eco/HH PRG												
			1-2	DU-34 (1-2)		HH PRG					Eco PRG		Eco PRG	Eco/HH PRG							Eco/HH PRG	0	3	0	0.40	17,424	0	1,936	0	3	Arsenic Total D/F TEQ	Unknown	Unknown
			2-3	DU-34 (2-3)									Eco PRG	Eco/HH PRG							Eco/HH PRG												
	DU-35	ISM	0-1	DU-35 (0-1)									Eco PRG	Eco/HH PRG							Eco/HH PRG												
			1-2	DU-35 (1-2)									Eco PRG	Eco PRG							Eco PRG	0	1	0	0.39	16,988	0	629	0	1	Total D/F TEQ	2.15 (Total TEQ)	6.3
			2-3	DU-35 (2-3)									Eco PRG	Eco PRG							Eco PRG												
	DU-36	ISM	0-1	DU-36 (0-1)	Eco PRG	HH PRG			Eco PRG				Eco PRG	Eco/HH PRG							Eco/HH PRG												
			1-2	DU-36 (1-2)	Eco PRG				Eco PRG				Eco PRG	Eco/HH PRG							Eco/HH PRG	0	3	0	0.26	11,326	0	1,258	0	3	Arsenic Total D/F TEQ	Unknown	Unknown
			2-3	DU-36 (2-3)	Eco PRG				Eco PRG				Eco PRG	Eco/HH PRG							Eco/HH PRG												
	DU-38	ISM	0-1	DU-38 (0-1) M										Eco/HH PRG							Eco/HH PRG												
			1-2	DU-38 (1-2) M					Eco PRG					Eco PRG							Eco PRG	0	1	0	0.47	20,473	0	758	0	1	Total D/F TEQ	2.45 (Total TEQ)	4.3
			2-3	DU-38 (2-3) M										Eco PRG							Eco PRG												
	DU-37	Composite	0-1	DU-37 (0-1)					Eco PRG			Eco PRG									Eco PRG												
			1-2	DU-37 (1-2)								Eco PRG									Eco PRG	0	0	0	0.25	10,890	0	0	0	--	--	1.2 (Lead)	9.9
			2-3	DU-37 (2-3)											Eco PRG						Eco PRG												
	DU-39	Composite	0-1	DU-39 (0-1)																													
			1-2	DU-39 (1-2)								Eco PRG									Eco PRG	0	0	0	0.50	21,780	0	0	0	--	--	<1	2.8
			2-3	DU-39 (2-3)																													
East Parcel Concrete Slabs	DU-40	Composite	0-1	DU-40 (0-1)																													
			1-2	DU-40 (1-2)																		0	0	0	0.49	21,344	0	0	0	--	--	<1	2.0
			2-3	DU-40 (2-3)																													
	DU-43 (Within DU-31)	Composite	0-1	DU-43 (0-1)								Eco PRG									Eco PRG												
			1-2	DU-43 (1-2)																		0	0	0	0.14	6,098	0	0	0	--	--	1.004 (Selenium)	3.7
			2-3	DU-43 (2-3)																													
	DU-44 (Within DU-36)	Composite	0-1	DU-44 (0-1)																													
			1-2	DU-44 (1-2)																		0	0	0	0.20	8,712	0	0	0	--	--	<1	2.9
			2-3	DU-44 (2-3)																													
East Parcel Soil Berms	DU-41	ISM	0-1	DU-41 (0-1) M		Eco/HH PRG			Eco PRG	Eco PRG			Eco PRG	Eco HS/HH PRG	Eco PRG						Eco HS/HH PRG												
			1-2	DU-41 (1-2) M		HH PRG			Eco PRG	Eco PRG			Eco PRG	Eco HS/HH PRG	Eco PRG						Eco HS/HH PRG	0	4	0	0.40	3,915	0	580	0	3	Arsenic Total D/F TEQ	Unknown	Unknown
			2-3	DU-41 (2-3) M		HH PRG			Eco PRG				Eco PRG	Eco HS/HH PRG	Eco PRG						Eco HS/HH PRG												

Excavation Totals	Off-Site Disposal	Contingency Remedy[1]	Arsenic-Driven Excavation	Preliminary Soil Removal Depth (feet bgs)
West Parcel	7,841	11,245	7,599	2.8
Central Parcel	36,413	0	0	2.7
East Parcel	4,179	16,520	1,839	2.0
Total	48,432	27,765	9,438	2.5

Notes:

bgs = Below ground surface.
M = Mean. These results are the mean of the field replicates collected at this decision unit.
Orange shading indicates a ecological non-dioxin hot spot screening level exceedance
Yellow shading indicates a human health PRG exceedance
Grey shading indicates an ecological PRG exceedance
D/F = Dioxin/Furans
Total D/F TEQ = Total 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalent
PAHs = Polycyclic aromatic hydrocarbons.
PCBs = Polychlorinated biphenyls.
ER = Exceedance Ratio
PRG = Preliminary remediation goal
Eco = Ecoloigcal

HH = Human health
HS = Hot spot
Soil Removal Drivers = Analytes that have ecological non-dioxin hot spot or human health PRG exceedances; there are no human health hot spot exceedances
HPAH = High-molecular-weight polycyclic aromatic hydrocarbon
LPAH = Low-molecular-weight polycyclic aromatic hydrocarbon

cPAHs = carcinogenic polycyclic aromatic hydrocarbon
Total D/F TEQ = Total 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalent

1. Off-site disposal
* = Soil removal in DU-41 will be driven by concentrations above grade, additional removal in DU-41 is assumed to be the same as the adjacent DU, the volume of DU-41 adjacent to these DUs is added to this total
2. Summed ER includes Ers for all analytes above the MDL even if they are below the PRG

Table 9
Average Concentrations by Depth
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Sample Depth (feet bgs)	Antimony	Arsenic	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc	Total D/F TEQ	Dibenzofuran	Total HPAH	Total LPAH	cPAH	Total PCB Aroclors
West Parcel	0-1	0.634	5.86	26.1	94.4	43.4	0.133	22.6	0.513	131	17.8	5.65	1,353	174	225	118
	1-2	0.562	5.52	26.0	78.1	74.2	0.123	23.7	0.504	112	15.8	9.25	2,229	533	332	414
	2-3	0.520	5.42	23.6	59.2	36.3	0.108	21.6	0.498	118	11.6	6.78	1,469	219	231	81.7
	Trend	Decreasing	Decreasing	Decreasing	Decreasing	No Trend	Decreasing	No Trend	Decreasing	No Trend	Decreasing	No Trend	No Trend	No Trend	No Trend	No Trend
Central Parcel	0-1	1.70	6.24	17.9	93.0	171	0.984	21.9	0.524	178	88.7	17.1	4,877	858	811	50.5
	1-2	1.20	5.23	15.5	57.7	101	0.779	20.7	0.517	137	28.3	11.2	3,120	655	515	21.2
	2-3	0.707	4.08	14.1	44.7	65.2	0.489	19.1	0.515	102	18.9	8.69	2,839	546	462	17.8
	Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing
Central Parcel Concrete Slab	0-1	0.512 U	4.38	17.8	36.3	53.3	0.226	23.3	0.531	126	60.7	4.96 U	347	67.8	50.7	5.00 U
	1-2	0.667	4.11	18.4	25.4	30.3	0.186	22.6	0.549 U	109	22.7	4.76 U	220	42.9	30.9	5.00 U
	2-3	0.531 U	3.76	17.4	21.1	20.1	0.125	20.7	0.531 U	87.0	8.27	4.96 U	158	29.7	22.9	4.91 U
	Trend	No Trend	Decreasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	No Trend	Decreasing	Decreasing	No Trend	Decreasing	Decreasing	Decreasing	No Trend
East Parcel	0-1	1.52	6.65	14.8	71.8	60.4	0.110	18.3	0.523	176	43.7	7.19	1,040	151	167	49.4
	1-2	1.42	5.99	13.7	72.9	59.5	0.103	17.8	0.518	167	23.1	6.53	943	144	144	39.2
	2-3	1.85	5.30	12.5	57.5	56.5	0.067	16.9	0.518 U	150	14.8	8.78	868	159	134	35.6
	Trend	No Trend	Decreasing	Decreasing	No Trend	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	No Trend	Decreasing	No Trend	Decreasing	Decreasing
East Parcel Concrete Slabs	0-1	0.541	2.90	13.5	18.6	7.07	0.041 U	16.7	0.514	61.2	2.20	4.94 U	78.7	21.9	11.4	4.94 U
	1-2	0.524 U	3.19	14.2	16.9	6.12	0.042 U	17.9	0.538	52.5	1.00	5.00 U	66.5	73.6	8.77	4.96 U
	2-3	0.520 U	3.17	14.2	16.6	5.07	0.042 U	18.0	0.520 U	47.8	0.83	4.96 U	67.3	45.3	10.3	4.94 U
	Trend	Decreasing	No Trend	No Trend	Decreasing	Decreasing	No Trend	Increasing	No Trend	Decreasing	Decreasing	No Trend	No Trend	No Trend	No Trend	No Trend
East Parcel Soil Berms	0-1	1.73	22.7	16.7	66.2	79.2	0.137	16.1	0.531	127	221	14.4	1,980	284	291	56.8
	1-2	1.89	11.9	19.1	61.8	122	0.100	18.1	0.514	156	224	33.8	1,743	470	242	69.8
	2-3	1.49	14.0	21.1	43.6	87.8	0.059	21.4	0.511	168	132	10.6	1,020	199	144	36.1
	Trend	No Trend	No Trend	Increasing	Decreasing	No Trend	Decreasing	Increasing	Decreasing	Increasing	No Trend	No Trend	Decreasing	No Trend	Decreasing	No Trend

Notes:

bgs = Below ground surface.

HPAH = High-molecular-weight polycyclic aromatic hydrocarbon

LPAH = Low-molecular-weight polycyclic aromatic hydrocarbon

cPAHs = carcinogenic polycyclic aromatic hydrocarbon

Total D/F TEQ = Total 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalent

PCBs = Polychlorinated biphenyls.

U = all results used to calculate the average were below the method detection limit

Yellow shading indicates exceedance of human health preliminary remediation goal.

Blue shading indicates exceedance of ecological PRG.

Orange shading indicates exceedance of ecological hot spot.

Table 10
Cumulative Exceedance Ratio
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Cumulative Exceedance Ratio	
				Ecological	Human Health
West Parcel	DU-1	ISM	0-1	19.1	4.5
			1-2	49.7	8.2
			2-3	10.8	2.9
	DU-2	ISM	0-1	12.1	2.5
			1-2	16.4	2.7
			2-3	4.8	1.3
	DU-3	ISM	0-1	7.9	3.6
			1-2	5.1	2.3
			2-3	4.3	2.0
	DU-4	ISM	0-1	9.5	3.7
			1-2	13.0	5.8
			2-3	10.3	4.2
	DU-5	ISM	0-1	19.1	3.7
			1-2	17.4	3.2
			2-3	18.1	3.6
	DU-6	ISM	0-1	9.4	2.2
			1-2	13.9	3.3
			2-3	12.2	2.5
	DU-7	ISM	0-1	11.5	2.4
			1-2	7.7	1.9
			2-3	6.0	1.2
	DU-8	ISM	0-1	12.2	2.9
			1-2	11.7	2.7
			2-3	11.8	2.8
	DU-9	ISM	0-1	11.7	2.7
			1-2	9.1	2.2
			2-3	9.9	2.3
Central Parcel	DU-10	ISM	0-1	31.5	11.8
			1-2	27.8	10.3
			2-3	20.1	6.4
	DU-11	ISM	0-1	26.7	9.9
			1-2	18.3	5.1
			2-3	21.0	8.7
	DU-12	ISM	0-1	19.2	3.9
			1-2	12.6	1.8
			2-3	8.1	1.3

Please see notes at end of table.

Table 10
Cumulative Exceedance Ratio
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Cumulative Exceedance Ratio	
				Ecological	Human Health
Central Parcel	DU-13	ISM	0-1	60.6	17.1
			1-2	20.9	3.5
			2-3	20.9	2.8
	DU-14	ISM	0-1	43.2	7.4
			1-2	66.0	5.2
			2-3	50.2	3.1
	DU-15	ISM	0-1	85.6	28.3
			1-2	55.9	14.4
			2-3	36.7	11.0
	DU-16	ISM	0-1	106.9	17.3
			1-2	36.2	3.6
			2-3	11.6	1.5
	DU-17	ISM	0-1	21.1	4.1
			1-2	9.6	1.2
			2-3	6.0	1.2
	DU-18	ISM	0-1	40.6	6.8
			1-2	24.6	3.0
			2-3	15.8	2.2
	DU-19	ISM	0-1	47.3	12.3
			1-2	41.1	9.1
			2-3	18.1	4.7
	DU-20	ISM	0-1	17.1	4.1
			1-2	6.2	1.2
			2-3	5.1	1.1
	DU-21	ISM	0-1	40.5	8.5
			1-2	16.0	3.1
			2-3	10.0	2.1
	DU-22	ISM	0-1	26.9	4.0
			1-2	10.7	1.7
			2-3	10.0	1.5
	DU-23	ISM	0-1	36.4	4.9
			1-2	15.5	2.1
			2-3	12.3	1.5
	DU-24	ISM	0-1	12.5	2.8
			1-2	7.1	1.4
			2-3	5.3	1.2

Please see notes at end of table.

Table 10
Cumulative Exceedance Ratio
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Cumulative Exceedance Ratio	
				Ecological	Human Health
Central Parcel	DU-25	ISM	0-1	32.2	5.4
			1-2	10.7	1.4
			2-3	6.2	1.1
	DU-26	ISM	0-1	56.5	9.5
			1-2	27.7	4.4
			2-3	16.3	2.6
Central Parcel Concrete Slab	DU-42 (Within DU-16)	Composite	0-1	19.0	5.2
			1-2	10.4	2.4
			2-3	6.3	1.4
East Parcel	DU-27	ISM	0-1	31.2	10.9
			1-2	20.5	7.3
			2-3	12.7	5.7
	DU-28	ISM	0-1	24.0	4.8
			1-2	29.0	6.5
			2-3	19.3	3.8
	DU-29	ISM	0-1	17.6	5.4
			1-2	6.8	2.4
			2-3	6.2	2.1
	DU-30	ISM	0-1	19.2	5.4
			1-2	15.8	3.2
			2-3	17.4	2.9
	DU-31	ISM	0-1	16.1	5.6
			1-2	9.5	2.6
			2-3	6.5	2.3
	DU-32	ISM	0-1	10.6	4.6
			1-2	4.4	2.3
			2-3	9.1	2.3
	DU-33	ISM	0-1	16.7	4.3
			1-2	12.6	3.5
			2-3	8.1	2.2
	DU-34	ISM	0-1	18.1	5.7
			1-2	11.7	3.3
			2-3	10.1	3.0
	DU-35	ISM	0-1	12.4	3.9
			1-2	6.3	2.0
			2-3	4.7	1.4

Please see notes at end of table.

Table 10
Cumulative Exceedance Ratio
Willamette Cove Upland Facility
Portland, Oregon

Sample Location	Decision Unit	Sample Type	Sample Depth (feet bgs)	Cumulative Exceedance Ratio	
				Ecological	Human Health
East Parcel	DU-36	ISM	0-1	16.3	4.4
			1-2	17.2	4.1
			2-3	12.4	3.1
	DU-37	ISM	0-1	9.8	2.9
			1-2	7.4	2.1
			2-3	6.1	1.5
	DU-38	ISM	0-1	4.9	0.8
			1-2	4.3	0.7
			2-3	3.5	0.8
East Parcel Concrete Slabs	DU-39	Composite	0-1	2.8	0.9
			1-2	3.7	0.7
			2-3	2.6	0.8
	DU-40	Composite	0-1	2.0	0.7
			1-2	2.0	0.8
			2-3	1.9	0.7
	DU-43 (Within DU-31)	Composite	0-1	3.6	0.9
			1-2	2.6	0.7
			2-3	2.2	0.7
	DU-44 (Within DU-36)	Composite	0-1	3.1	0.7
			1-2	2.3	0.7
			2-3	2.1	0.7
East Parcel Soil Berms	DU-41	ISM	0-1	47.8	20.6
			1-2	51.1	18.4
			2-3	31.5	12.4

Notes:
bgs = Below ground surface.

Cumulative ER <10 for Eco or <4 for Human Health
Cumulative ER between 10 and 30 for Eco or between 4 and 10 for Human Health
Cumulative ER >30 for Eco or >10 for Human Health

Note: Base map prepared from USGS 7.5-minute quadrangles of Linnton and Portland, OR, dated 2020 as provided by USGS.gov.

0 2,000 4,000

Approximate Scale in Feet

Facility Location Map

Remedial Design Investigation Report
Willamette Cove Upland Facility
Portland, Oregon

Apex Companies, LLC 15618 SW 72nd Avenue Tigard, Oregon 97224	Project Number: 32-22007576	Drawn: JP	Approved: SM	Figure 1
	March 2023			

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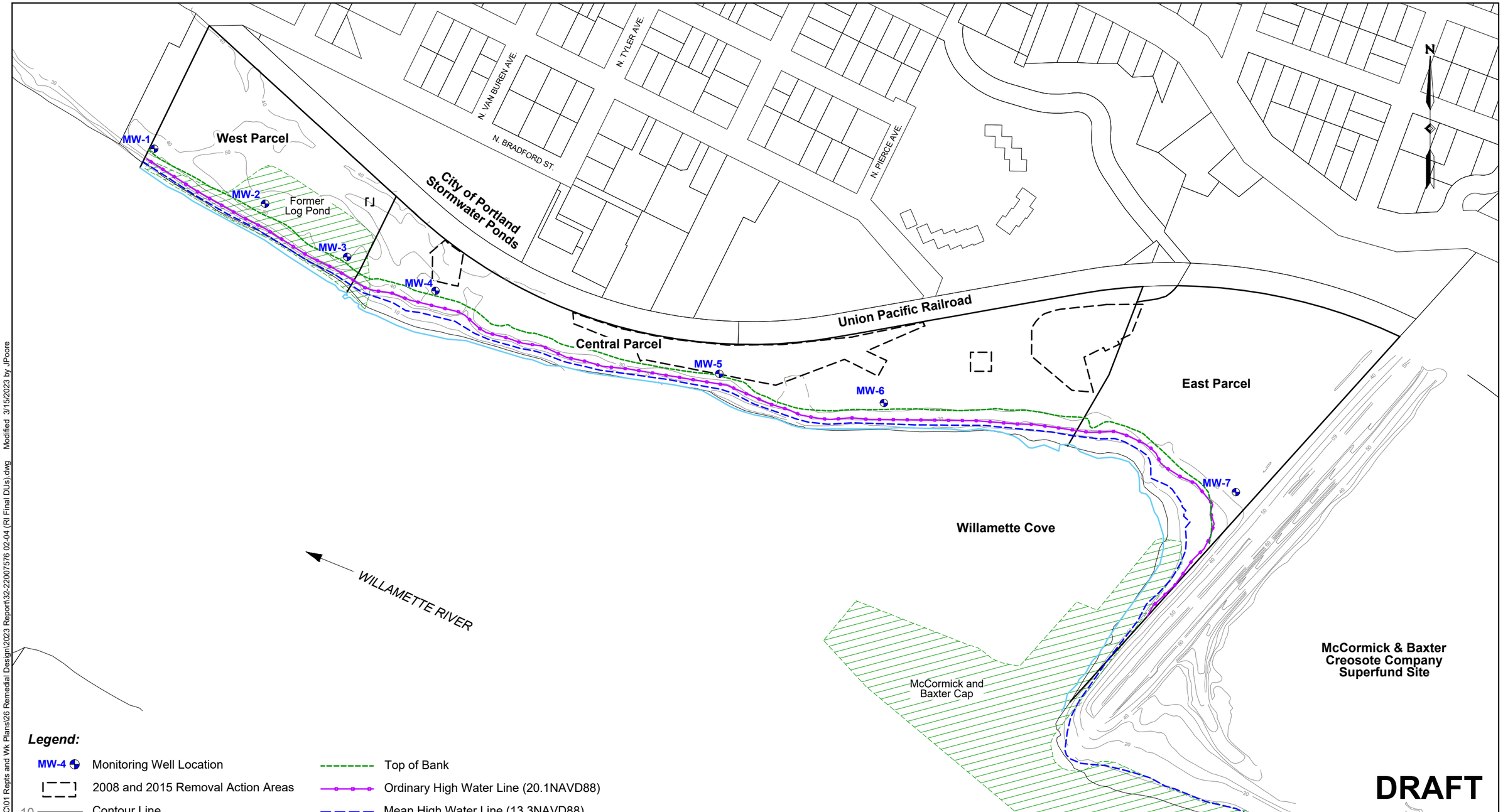

Legend:

- MW-4 — Monitoring Well Location
- 2008 and 2015 Removal Action Areas
- 10 — Contour Line
- Top of Bank
- Ordinary High Water Line (20.1NAVD88)
- Mean High Water Line (13.3NAVD88)
- Ordinary Low Water Line (6.9NAVD88)

NOTE: Base map prepared from Bing Imagery. Tax lot information from ©Oregon Metro www.oregonmetro.gov/rlis (2023). Historical base layer information from an electronic file provided by Hart Crowser.

0 250 500
Scale in Feet

DRAFT

Facility Plan

Remedial Design Investigation Report
Willamette Cove Upland Facility
Portland, Oregon

Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:	Drawn:	Approved:	Figure
32-22007576	JP	SM	2
March 2023			

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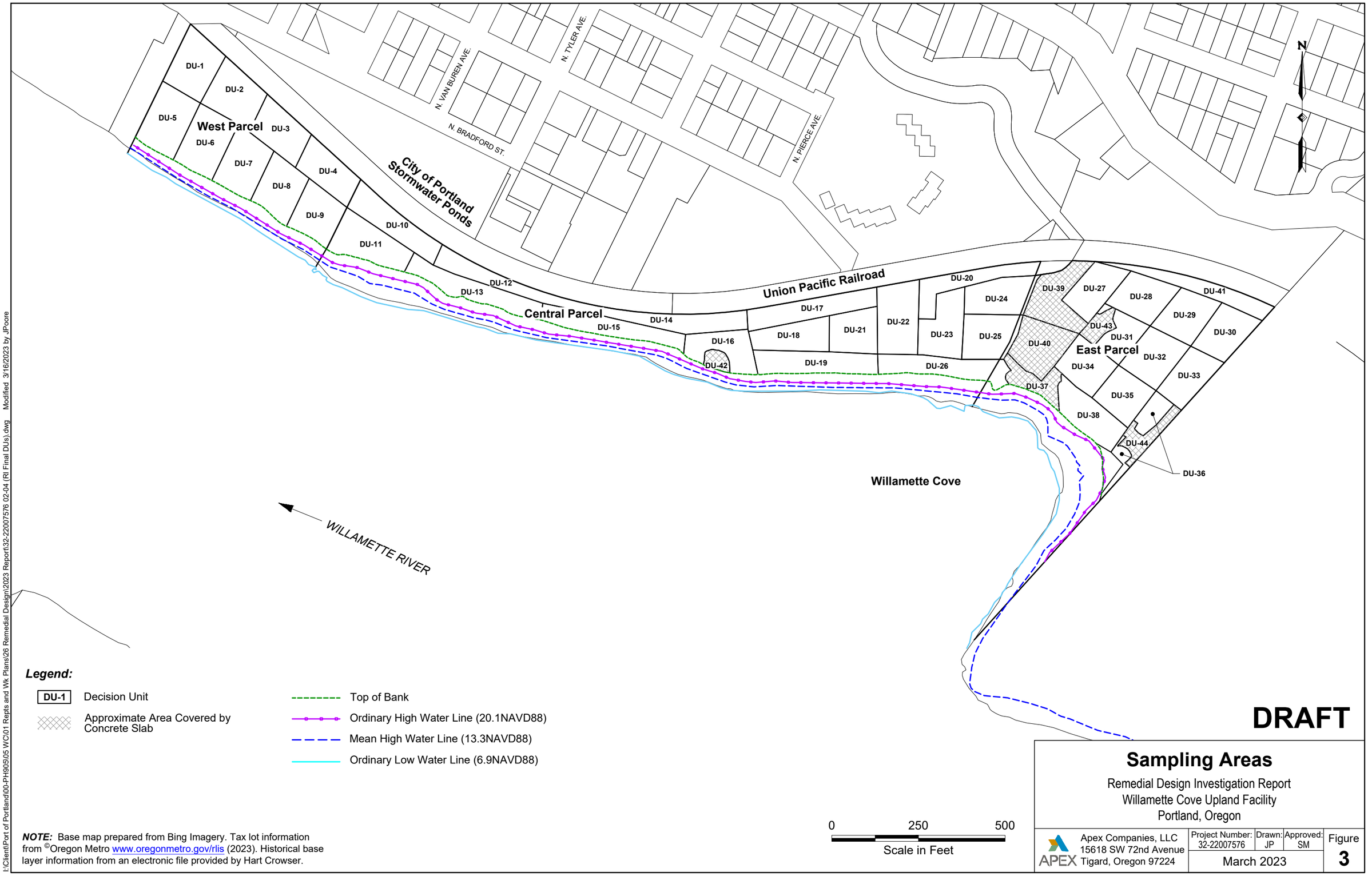

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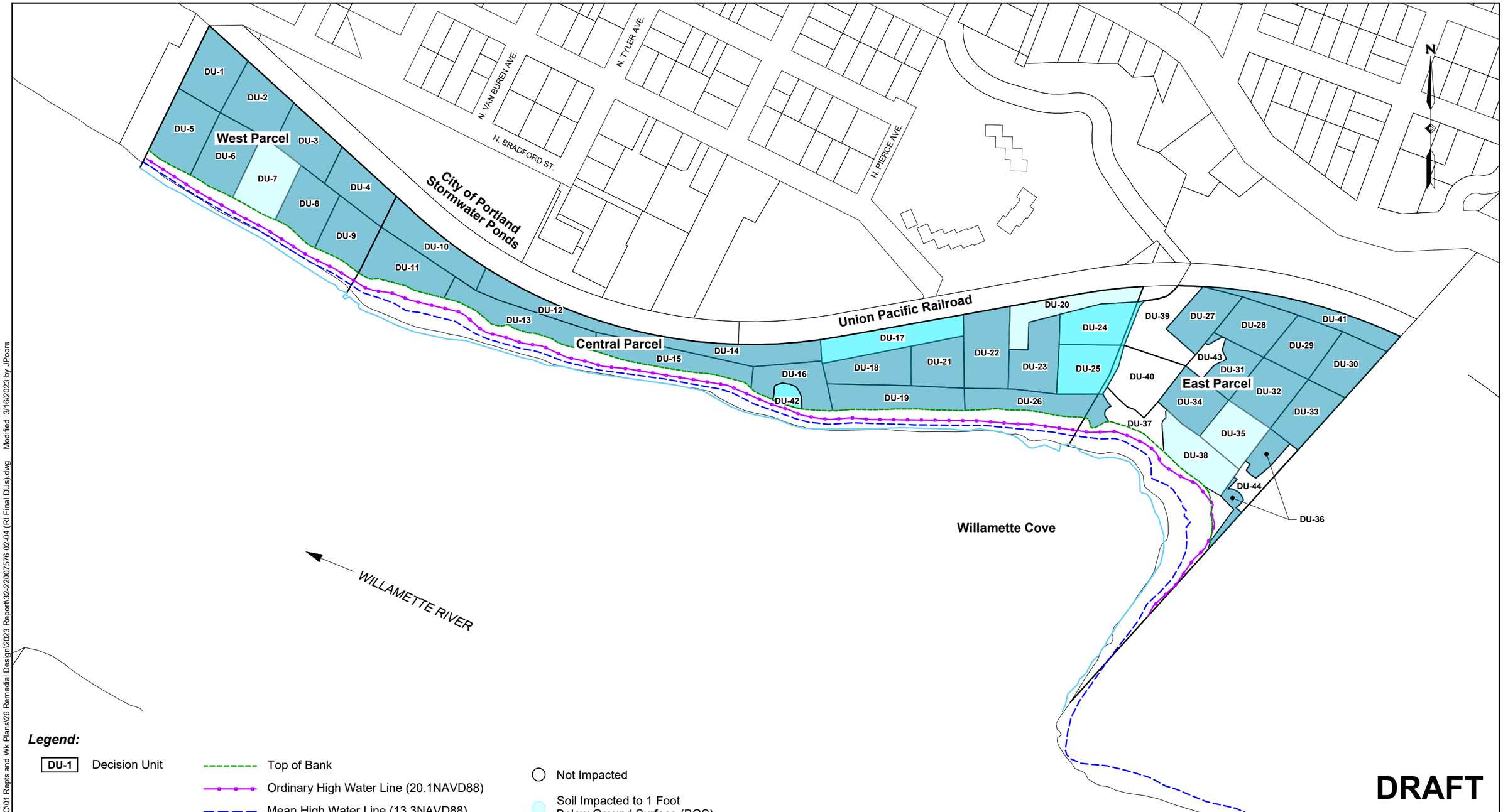

Legend:

DU-1 Decision Unit

Top of Bank

Ordinary High Water Line (20.1NAVD88)

Mean High Water Line (13.3NAVD88)

Ordinary Low Water Line (6.9NAVD88)

Not Impacted

Soil Impacted to 1 Foot Below Ground Surface (BGS)

Soil Impacted to 2 Feet BGS

Soil Impacted to at Least 3 Feet BGS

Impacted = Exceeds Non-Dioxin Ecological Hot Spot or Human Health Preliminary Remediation Goal.

NOTE: Base map prepared from Bing Imagery. Tax lot information from ©Oregon Metro www.oregonmetro.gov/rlis (2023). Historical base layer information from an electronic file provided by Hart Crowser.

0 250 500

Scale in Feet

DRAFT

Depth of Soil Impact

Remedial Design Investigation Report
Willamette Cove Upland Facility
Portland, Oregon

Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:	Drawn:	Approved:	Figure
32-22007576	JP	SM	4
March 2023			

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