EPA Comments and Responses on Draft (dated July 29, 2022) and Revised (dated December 16, 2022) Pre-Design Investigation Work Plan Addendum No. 2
Willbridge Cove Project Area

This is the U.S. Environmental Protection Agency's (EPA's) conditional approval of the Pre-Design Investigation Work Plan Addendum No. 2 (Addendum No. 2) for the Willbridge Cove Project Area (Project Area). This conditional approval is dated January 30, 2023. Addendum No. 2 was prepared by Jacobs Engineering Group, Inc. (Jacobs) on behalf of the Willbridge Cove Group (WBC Group) and dated December 16, 2022. Approval is conditioned on the WBC Group adequately addressing EPA's responses as described below in accordance with the WBC Group's Administrative Settlement Agreement and Order on Consent Statement of Work Section 5.5(b). The WBC Group should consider the comments below as it implements Addendum No. 2 and in future phases of the project.

As previously communicated, this conditional approval does not include the Appendix D Health and Safety Plan (HASP). EPA does not approve HASPs, but reviews for completeness.

EPA Comments on the Addendum No. 2

Unless otherwise noted, the WBC Group's responses to EPA's comments on the Draft and the Revised Addendum No. 2 are acceptable. However, clarification, supplemental information, and/or required revisions are provided below for the following comments: General Comments 1, 2c, 7, and 8.

EPA General Comment 1 (September 1, 2022)

Phase 1 Samples with Pending Results: Analytical results for sample intervals deeper than 5 feet (ft) below mudline for the Phase 1 samples at locations PD05, PD06, PD07, PD08, and PD45 are not presented in the PDIWP Addendum 2, or the *Phase 1 Pre-Design Investigation Data Report* (Phase 1 PDI Data Report) and have not been provided to EPA for review. Therefore, EPA cannot comment on the adequacy of the number and locations of the additional locations in the area of these five stations presented in the PDIWP Addendum 2. Additional data gaps for sediment management area (SMA) refinement (PDI Work Plan data quality objective #1) may exist after collection of the additional Phase 2 surface sediment grab and sediment core stations. EPA will comment on potential data gaps in a future remedial design deliverable that presents the remaining Phase 1 and Phase 2 data.

WBC Group's Response (December 16, 2022)

Validated analytical results for all Phase 1 PDI samples, including the deeper Phase 1 results cited above, are provided as Appendix A and will also be reported in the PDI Evaluation Report. The data quality evaluation (DQE) presented in the draft Phase 1 Data Report has been revised to contain all Phase 1 PDI data and address EPA's comment requiring the data validation to follow the EPA National Functional Guidelines for estimated maximum possible concentration (EMPC) qualified data. The revised Phase 1 PDI DQE is provided as Appendix B. The WC group understands that EPA will comment on potential data gaps upon its review of the PDI Phase 1 and Phase 2 data.

EPA Response (January 30, 2023)

The figures in Addendum No. 2 Appendix A show analytical results for the deeper intervals at PD05, PD06, PD07, PD08, and PD45. Depth of contamination is not delineated at PD05 and PD08, which EPA acknowledges is a potential data gap that the WBC Group will evaluate during remedial design. Additionally, EPA has not received the Phase 1 PDI data in an electronic data deliverable from the Portland Harbor Interim Database. Once received, EPA will perform a quality assurance (QA) review of the Phase 1 PDI data and of the Revised Phase 1 Data Quality Evaluation (Addendum No. 2 Appendix B). EPA will submit data QA comments to the WBC Group after completing that review.

EPA General Comment 2c (September 1, 2022)

Riverbank Delineation: The Willbridge Cove Group should utilize sampling technology, such as limited access direct push or angled borings, which can achieve greater than 5-foot penetration. This technology should also be used to reattempt Phase 1 PDI locations which were not successful with hand augers.

WBC Group's Response (December 16, 2022)

The area of river bank where Phase 1 soil sampling was not successful consists of a steep engineered bank, sheet pile wall, and groundwater recovery system that were designed to stabilize the bank and prevent migration of contaminated groundwater to Willbridge Cove. The system is working as designed to control the upland source(s) and sampling in this area (beyond the attempted hand auguring) could compromise the associated infrastructure. The presence of these structures coupled with the steep engineered bank precludes safe and environmentally protective mechanized collection of soil samples in this area. However, the absence of river bank soil samples in this area is not considered a data gap because the intent of river bank soil sampling in the area was to determine whether known sediment contamination at ROD SMA 4 continues onto the adjacent river bank and would need to be addressed as part of the remedy for the SMA. Phase 1 PDI sampling results for in-water sediment adjacent to the river bank confirmed the presence of Table 21 COCs in sediment at concentrations above the remediation thresholds[1] (RTs), but the Phase 1 PDI results for the sampleable portion of the river bank adjacent to ROD SMA 4 upstream and downstream of the unsampled area demonstrate that soil concentrations do not exceed cleanup levels or Portland Basin background concentrations for those COCs found in the sediment. Therefore, the remedy for the SMA 4 area is unlikely to extend onto the river bank.

EPA Response (January 30, 2023)

In the PDI Evaluation Report, state that the riverbank adjacent to ROD SMA 4 is a potential data gap to be evaluated during remedial design based on the sediment samples collected at PD48, PD49, and PD50 that exceed RALs, PQL thresholds, and/or PTW thresholds. These sample locations are adjacent to the portion of the riverbank that was unsampleable with hand tools.

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[1] Remediation thresholds (RT) refers to the criteria used to delineate SMAs as outlined by EPA in Errata #3 for Portland Harbor Superfund Site Record of Decision, Table 6 and Table 21 (EPA 2022a), which changes the 1,2,3,4,7,8-HxCDF (HxCDF) PTW value, and in an EPA memorandum dated September 16, 2022, Evaluation of consistently and reliably attainable practical quantitation limits for 2,3,7,8-TCDD (TCDD) and 1,2,3,7,8-PeCDD (PeCDD) for use in Sediment Management Area delineation at the Portland Harbor Superfund Site (EPA 2022b).

EPA General Comment 7 (September 1, 2022)

NAPL Delineation: Based on the sampling results presented in the Phase 1 PDI Data Report, it is unclear whether any PTW that is NAPL was observed during the Phase 1 PDI. Revise the PDIWP Addendum 2 to describe how NAPL will be assessed during future sampling, if present, and how the SMA will be delineated in areas with PTW that is NAPL.

WBC Group's Response (December 16, 2022)

Information regarding the procedure for NAPL identification and assessment is included in the PDI Work Plan and applies to both Phase 1 and Phase 2 PDI activities. No NAPL was identified during Phase 1 sampling. A PTW and NAPL evaluation will be presented in the PDI Evaluation Report.

EPA Response (January 30, 2023)

Several sediment core logs in Appendix B1 of the Phase 1 PDI Data Report (e.g., PD12, PD26A, PD27, PD32, PD33, PD35, PD38, PD40, PD41, PD43A, PD46, PD47, PD50, PD52) include descriptions of NAPL and/or blebs that were observed in sediment cores collected during the Phase 1 PDI. If NAPL is observed or suspected in the Phase 2 PDI samples, a jar sheen test/shake test needs to be performed to confirm the presence of NAPL. EPA recommends ASTM International E3281 – 21 for NAPL identification and for performing a shake test. Revise Section 4.3 to state that ASTM International E3281 – 21 will be followed during the Phase 2 PDI. Alternatively, submit a pre-mobilization Field Change Request to implement use of the shake test in accordance with the ASTM standard.

EPA General Comment 8 (September 1, 2022)

Riverbank Erodibility Evaluation: Revise the PDIWP Addendum 2 to state whether the riverbank field observations described in PDIWP Appendix A Section 4.1 are to be collected during the Phase 2 PDI. EPA notes that the Phase 1 PDI Data Report does not include any discussion on the riverbank field observations data being collected during the Phase 1 PDI.

WBC Group's Response (December 16, 2022)

Consistent with the approved PDI Work Plan, field observations relevant to the erodibility of sampled river banks will be presented in the PDI Evaluation Report.

EPA Response (January 30, 2023)

The intent of EPA's September 1, 2022, comment was to confirm whether the riverbank field observations to be collected as part of the PDI as described in PDI Work Plan Appendix A Section 4.1 have already been collected as part of the Phase 1 PDI or will be collected during the Phase 2 PDI. EPA expects that a quantitative erodibility evaluation will be performed for any riverbanks with samples exceeding cleanup levels consistent with EPA's Remedial Design Guidelines and Considerations Appendix D Section 3.1.2.

EPA Comments on Additional Changes to Addendum No. 2

EPA reviewed Addendum No. 2 for revisions not directly in response to EPA's September 1, 2022, comments and has the following comment:

1. **Under-Dock Samples:** Addendum No. 2 Appendix A Figures A-2, A-3, and A-4 show the incorrect sample end depths for the under-dock samples PD12, PD16, PD20, PD26, PD34, and PD43, which all have sample end depths greater than 1 foot below sediment surface (bss). Future deliverables from the WBC Group need to show the correct sample end depths (1.7 feet bss) for these under-dock samples, as shown in the Phase 1 PDI Data Report Figures 4 through 6. As EPA commented previously on these under-dock samples, they are to be considered subsurface sediment during remedial design as their end depth is greater than 1foot bss.

December 16, 2022

Via Electronic Mail

Hunter Young
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Subject: Pre-Design Investigation Work Plan Addendum 2
Willbridge Cove Project Area Remedial Design
Portland Harbor Superfund Site, Portland, Oregon

Dear Mr. Young:

Enclosed for your review is a revised *Pre-Design Investigation (PDI) Work Plan Addendum 2* for the Willbridge Cove Project Area prepared by Jacobs Engineering Group, Inc, (Jacobs). The *PDI Work Plan Addendum 2* was prepared in accordance with Section 3.2(a) of the Statement of Work (SOW) described in the Administrative Settlement Agreement and Order on Consent (ASAOC) for Remedial Design at Willbridge Cove Project Area. The revised *PDI Work Plan Addendum 2* reflects changes made to the PDI sampling approach in response to U.S. Environmental Protection Agency's (USEPA) September 1, 2022 comments on the *PDI Work Plan Addendum 2* submitted on July 29, 2022.

Should you have any questions or need any additional information, please do not hesitate to contact me at (513) 325-2732 or john.lang@ehs-support.com.

Sincerely,
EHS Support LLC

John Lang. P.E.
Project Coordinator

cc (via email):
Jeremy Buck – USFWS
Deirdre Donahue – USDOI
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Willbridge Group

Portland Harbor Superfund Site
Willbridge Cove Project Area Remedial Design

Pre-Design Investigation Work Plan Addendum No. 2

Revised

December 16, 2022

Prepared for the Willbridge Cove Group

Prepared by Jacobs (Willbridge Cove RD Supervising Contractor)
Reviewed by EHS Support (Willbridge Cove RD Project Coordinator)
For Submittal to EPA Region 10

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Acronyms and Abbreviations

ASAOC	Administrative Settlement Agreement and Order on Consent
BEHP	Bis(2-ethylhexyl)phthalate
BODR	basis of design report
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
Chevron	Chevron U.S.A., Inc.
COC	contaminant of concern
CUL	cleanup level
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DDx	sum of six isomers associated with DDT, DDD, and DDE
DEQ	Oregon State Department of Environmental Quality
DSL	Department of State Lands
DQE	data quality evaluation
DQO	data quality objective
EPA	U.S. Environmental Protection Agency
ft	feet
HxCDF	hexachlorodibenzofuran
Jacobs	Jacobs Engineering Group Inc.
KMLT	Kinder Morgan Liquids Terminals, LLC
McCall	McCall Oil and Chemical Corporation
MLW	mean low water
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyls
PDI	Pre-Design Investigation
PeCDD	pentachlorodibenzo-p-dioxin
Phillips 66	Phillips 66 Company
PHSS	Portland Harbor Superfund Site
PTW	principal threat waste
QAPP	Quality Assurance Project Plan
RD	Remedial Design
RM	river mile

RM9W	River Mile 9 West Project Area
ROD	Record of Decision
RT	remediation thresholds
Shell	Shell Oil Company
SMA	sediment management area
TCDD	tetrachlorodibenzo-p-dioxin
TPH-DRO	Total Petroleum Hydrocarbons - Diesel Range Organics
WCPA	Willbridge Cove Project Area

1. Introduction

In 2017, the U.S. Environmental Protection Agency (EPA) issued the Record of Decision (ROD) for the Portland Harbor Superfund Site (PHSS) (EPA 2017). The PHSS covers an area along the Willamette River from approximately river mile (RM) 1.9 to RM 11.8. The EPA has divided the PHSS into multiple areas for Remedial Design. The Willbridge Cove Group, which consists of Chevron U.S.A., Inc. (Chevron), Kinder Morgan Liquids Terminals, LLC (KMLT), McCall Oil and Chemical Corporation (McCall), Phillips 66 Company (Phillips 66), and Shell Oil Company (Shell), entered into an Administrative Settlement Agreement and Order on Consent (ASAOC) for Remedial Design (Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA] Docket No. 10-2020-0053) for the Willbridge Cove Project Area (WCPA) on January 31, 2020 (EPA 2020).

This document presents the Pre-Design Investigation (PDI) Work Plan Addendum No. 2 to the Final Portland Harbor Superfund Site Willbridge Cove Project Area Remedial Design Pre-Design Investigation Work Plan (PDI Work Plan) (Jacobs 2021) for the Willbridge Cove Project Area (WCPA).

1.1 Pre-Design Investigation Purpose

This PDI Work Plan Addendum No. 2 presents the sampling design for Phase 2 of the Willbridge Cove PDI. The Phase 2 PDI sampling effort includes collection of additional surface and subsurface sediment samples from the WCPA and collection of soil samples from the river bank in the vicinity of the KMLT dock. The purpose of this sampling is to further delineate the lateral and vertical extent of the sediment management areas (SMAs) within the WCPA and to delineate the lateral extent of contamination on the river bank in the vicinity of the KMLT dock.

The Phase 2 PDI sampling design is based on review of the Phase 1 PDI field and analytical results, as well as results for historical samples collected within and adjacent to the WCPA.

1.2 PDI Data Quality Objectives

The data gap evaluation process and plans for collection of additional data are based on site characteristics and data quality objectives (DQOs) developed for refinement of preliminary SMAs in the WCPA. In summary, the DQOs for this PDI Work Plan Addendum No. 2 are:

1) Delineate the lateral extent of SMAs in the WCPA based on the remediation thresholds (RT) outlined by EPA in Errata #3 for Portland Harbor Superfund Site Record of Decision, Table 6 and Table 21 (EPA 2022a), which changes the 1,2,3,4,7,8-HxCDF (HxCDF) PTW value, and in an EPA memorandum dated September 16, 2022, *Evaluation of consistently and reliably attainable practical quantitation limits for 2,3,7,8-TCDD* (TCDD) *and 1,2,3,7,8-PeCDD* (PeCDD) *for use in Sediment Management Area delineation at the Portland Harbor Superfund Site* (EPA 2022b).
2) Determine the distribution of contaminants of concern (COCs) in river bank soil in the KMLT dock area near sample location SB-N6.

1.3 Work Plan Organization

This document is organized as follows:

- **Section 1: Introduction** - Summarizes the purpose and DQOs for the WCPA Phase 2 PDI. This section also describes the organization of this document.
- **Section 2: Summary of Available Data and Data Gaps** - Summarizes the existing historical and Phase 1 PDI data within and adjacent to the WCPA and identifies the data gaps that will be addressed by the Phase 2 PDI.
- **Section 3: Phase 2 PDI Sampling Design** - Presents the sampling design for the Phase 2 PDI field effort.
- **Section 4: Sampling and Analysis** - Provides an overview of the sample collection and laboratory analytical methods for the Phase 2 PDI.
- **Section 5: Schedule and Permits** - Presents a preliminary schedule for completing the Phase 2 PDI work and reporting results.
- **Section 6: References** - Lists the references cited.

Table 1, Table 2, and Figures 1 through 6 present the planned sample locations for this PDI Work Plan Addendum No. 2. Figure 7 presents the schedule.

Two appendices support the Phase 2 PDI scope:

- **Appendix A** - Phase 1 PDI and Selected Historical Analytical Results
- **Appendix B** - Revised Phase 1 PDI Data Quality Evaluation[1]

[1] Replaces the data quality evaluation presented in the *Draft Phase 1 Pre-Design Investigation Data Report* (Jacobs 2022), which included only the Phase 1 data that was available at the time and used the Region 10 guidelines rather than national guidelines for validation of dioxin/furan data.

2. Summary of Available Data and Data Gaps

This section summarizes the available data for the WCPA sediments and river bank soil and identifies the data gaps that will be addressed by the sampling design in this PDI Work Plan Addendum No. 2.

2.1 Sediment

During the Phase 1 PDI, a total of 46 grabs, 40 cores and 6 under-dock sample locations were successfully collected. The *Draft Phase 1 Pre-Design Investigation Data Report* (Jacobs 2022) describes the sampling effort and provides the analytical results. Phase 1 analytical results and the historical sample results were evaluated against the RT values for SMA delineation.

2.1.1 ROD SMA 1

Results for samples collected in the vicinity of ROD SMA 1 are shown in Appendix A, Figure A-1 and summarized below:

- In the upstream area of ROD SMA1, concentrations of polychlorinated biphenyls (PCBs) and TCDD exceed the RT in subsurface samples collected from PD07 and PD08. Historical location B257 was a surface grab only with no RT exceedances. Adjacent samples from RM9W (Foth Corporation 2022) identified RT exceedances along the southern project boundary. Sample RM9W-C001 was located just inside the WCPA, near historical sample C413. As a result, data gaps were identified shoreward from PD07 and riverward of PD07 and PD08 along the eastern project area boundary.

- Subsurface RT exceedances for PCBs were identified in samples from PD03, PD05 and PD06, located in the central portion of ROD SMA 1. Exceedances of the RT for TCDD were also identified in samples from PD03 and PD05. Concentrations of PeCDD exceeded the RT in samples from PD01 and PD05. Data gaps for the lateral extent of contamination were identified along this SMA, both towards the shoreline and riverward.

2.1.2 ROD SMA 2

Results for samples collected in the vicinity of ROD SMA 2 are shown in Appendix A, Figure A-2 and summarized below:

- In the downstream end of ROD SMA 2, subsurface PCB RT exceedances were identified in PD09 and PD12/12A. Location PD12/12A also has exceedances for the sum of the six isomers associated with dichlorodiphenyltrichloroethane (DDT), dichlorodiphenyldichloroethane (DDD), and dichlorodiphenyldichloroethylene (DDE) (collectively, DDx). RT exceedances for TCDD were also identified in PD09 and PD12/12A. No other RT exceedances were identified in this area, including PD14 and the under-dock location PD16/16A. A data gap for the extent of RT exceedances was identified around PD09 and PD12/12A, for the lateral extent of contamination.

- Locations PD25, PD26/26A and PD28 are located shoreward from PD12/12A and PD16/16A. These locations had RT exceedances for PCBs, with PD26/26A also having RT exceedances for DDx. A single sample interval at PD28 had a RT exceedance for PeCDD. As a result of the exceedances at PD25, a data gap was identified for the lateral extent of contamination southwest of PD25. RT exceedances are bounded around PD26/26A and PD28, since RT exceedances were not found at PD24 and the extent of subsurface RT exceedances towards the shoreline extends to PD45.

- RT exceedances for PCBs were identified in the area upstream of the Phillips 66 dock, at PD11, PD19 (surface only), PD21, PD22, PD29 and PD30, as well as at under-dock location PD20/20A. PeCDD and/or TCDD RT exceedances were identified in various depths at each of those locations except for PD11 and PD20/20A. DDx exceeded the RT at PD22, but DDx was not identified above the RT in the other locations. Data gaps were identified towards the navigation channel and upstream of this area of SMA 2. Due to the exceedances identified in nearby ROD SMA 3 (Section 2.1.3), a data gap was not identified shoreward of SMA 2 in this area.

2.1.3 ROD SMA 3

Results for samples collected in the vicinity of ROD SMA 3 are shown in Appendix A, Figure A-3 and summarized below:

- Sample locations in the vicinity of ROD SMA 3 include PD31 through PD39. Location PD34/34A is under the Phillips 66 dock. PCBs exceeded the RT in each of these locations with the exception of PD33, which did not have any RT exceedances. PeCDD and/or TCDD RT exceedances were identified in various depths in these locations, again, with no RT exceedances in PD33. DDx exceeded the RT in PD32 and in PD36. In addition, total polycyclic aromatic hydrocarbons (PAHs) exceeded the RT in a single sample from PD35.

- A data gap was identified near PD37, PD38 and PD39 between those locations and the shoreline. A data gap was not identified near PD33, because no RT exceedances were identified at that location, bounding the lateral extent of contamination.

2.1.4 ROD SMA 4/5

Results for samples collected in the vicinity of ROD SMA 4/5 are shown in Appendix A, Figure A-4 and summarized below:

- Sample locations in and around ROD SMA 4/5 include PD40 through PD44, and PD46 through PD53. PCBs RT exceedances were identified in PD40, under-dock location PD43/43A, PD46, PD48, PD49, PD50 and PD52. PeCDD and/or TCDD RT exceedances were identified in various depths in PD43/43A, PD44, PD46, PD48, and in one depth interval at PD52. DDx exceeded the RT in PD42, PD43/43A, PD48 and in PD50. Total PAHs exceeded the RT in under-dock location PD43/43A. No RT exceedances were identified at PD41, PD47, or PD53.

- Based on the results of Phase 1 sampling in this area, combined with the results of sampling around ROD SMAs 2 and 3, no data gaps were identified in the area between the Chevron and Phillips 66 docks or upstream. River bank sampling, discussed below, was conducted near ROD SMA 4/5 during Phase 1. Data gaps were identified for the lateral extent of contamination downstream, and towards ROD SMA 2 near the KMLT dock.

2.1.5 Downstream Area

Results for selected historical samples collected in the downstream area are shown in Appendix A, Figure A-5 and summarized below:

Sediment downstream of the KMLT dock was not investigated during the Phase 1 PDI. The Phase 1 PDI was focused on refinement of the ROD SMAs, which were identified based only on surface sediment result and no ROD SMAs were identified in the downstream area. However, review of historical data indicates that subsurface contamination is present in the downstream area and a data gap is present for the extent of subsurface contamination.

2.2 River Bank Soil

2.2.1 River Bank Adjacent to ROD SMA 4

River bank soil was sampled during the Phase 1 PDI to evaluate the possible presence and extent of river bank contamination contiguous to ROD SMA 4. Soil samples were collected at 8 of the 12 attempted locations, reaching the target depth of 5 feet in 7 of those locations. Refusal was encountered at Station SB09 at a depth of 1-foot below ground surface (ft bgs). No samples were collected at locations SB05, SB06, SB07, or SB08 due to the presence of large riprap and a steep bank that could not be sampled without compromising source control measures that are in place.

Analytical results from the river bank soil samples indicate that arsenic was found at each location at concentrations above the river bank soil cleanup level (CUL), but below the regional background value.[2] Diesel range organics above the river bank soil CUL were initially identified (qualified result) in SB10, however a re-extraction and re-analysis of the sample resulted in concentrations below the CUL. Concentrations of PeCDD and 2,3,4,7,8-pentachlorodibenzofuran exceed CULs in surface soil at one location (SB11).

A data gap for the nature and extent of river bank contamination in this area was not identified. Phase 1 PDI sampling results for in-water sediment adjacent to the river bank confirmed the presence of Table 21 COCs in sediment at concentrations above the RTs, but the Phase 1 PDI results for the sampleable portion of the river bank adjacent to ROD SMA 4 upstream and downstream of the unsampled area demonstrate that soil concentrations do not exceed cleanup levels or Portland Basin background concentrations for those COCs found in the sediment.

2.2.2 River Bank at KMLT Dock

The planned river bank soil investigation is focused on an area that was formerly regulated by Oregon Department of Environmental Quality (DEQ) but is now part of the Willbridge Cove Project Area and regulated by EPA. The transition occurred on August 31, 2022, when EPA notified Kinder Morgan that the DDx contaminated river bank at KMLT would be addressed as part of remedial design for the WCPA and oversight was transferred from DEQ to EPA (email from Benjamin Leake/EPA to Scott Martin/Kinder Morgan). As part of the transition, EPA directed Kinder Morgan to include any further investigation of the known bank soil DDx exceedances under the KMLT dock as part of the WCPA efforts pursuant to the ASAOC. The planned Phase 2 river bank soil samples specifically address this area of DDx contamination.

The river bank beneath the KMLT dock slopes down to the river and is covered with concrete rubble, riprap, and areas of mineral-stained gravel overlying silt. An 8-inch buried pipeline traverses the dock area, running perpendicular to the dock in the vicinity of the planned river bank sampling (Figure 5). Excavation activities were conducted in November 2017 to remove DDT-impacted bank soil under the KMLT dock (Jacobs 2018).

Two Phase 1 PDI river bank soil stations, SB01 and SB02, are located adjacent to and south of the KMLT dock, respectively (Figure 5). While arsenic concentrations in surface soil at SB01 and SB02 are above the PHSS CUL, the concentrations are below the arsenic soil background level for the Portland Basin so further delineation of arsenic in this area is not practical. However, evaluation of existing soil bank data for the KMLT dock area between the top of bank and mean low water (MLW) indicate the need for additional samples to characterize and delineate DDx and other COCs (see Section 3.2).

[2] The regional background level for arsenic is 8.8 mg/kg (DEQ 2013, Table 4).

3. Phase 2 PDI Sampling Design

The Phase 2 PDI field effort consists of 37 co-located surface sediment grab and subsurface sediment core locations, two (2) co-located surface sediment grab and subsurface sediment core locations beneath the KMLT dock, and five (5) river bank soil sample locations in the vicinity of the KMLT dock for a total of 44 sample locations (Tables 1 and 2).

The sediment sample locations were selected because concentrations of one or more PHSS ROD Table 21 contaminants in Phase 1 PDI or historical sediment samples exceeded RTs and the lateral extent of the SMAs requiring possible remedial action is not defined by the existing data set. The river bank soil sample locations were selected to delineate the extent of soil contamination in a portion of the river bank that was formerly regulated by Oregon Department of Environmental Quality but is now part of the WCPA remedial design (RD) and regulated by EPA. The planned Phase 2 sample locations are shown on Figures 1 through 5. Figure 6 provides an overview of the Phase 1 PDI sample locations, historical sediment sample locations, and the planned Phase 2 sampling stations. Phase 1 results and selected historical sediment sample results are depicted on Figures A-1 through A-5 in Appendix A.

3.1 Sediment Sampling Design

Sediment sampling density is generally based on the 150 ft spacing criterion and considers the locations of historical samples and PDI samples. The spacing near ROD SMA 1 also considers the locations of nearby samples collected in the RM9W Project Area. Collectively, the existing and planned Phase 2 sample locations meet the 150 ft spacing criterion and are intended to laterally bound the perimeter of the surface and subsurface SMAs in the WCPA. The need to determine the depth of contamination and the need for increased sample density within the boundary of an SMA will be evaluated during the upcoming basis of design report (BODR) and/or remedial design.

Planned Phase 2 sediment core depths range from 5 ft (under-dock locations) to 15 ft (areas with thicker accumulations of sediment) below mudline. Sediment cores will be advanced to the target core depth, or core refusal, with up to three attempts to locate the core within a 25-foot radius of the planned location. Surface sediment samples will be collected as 3-point composites within a 25-foot target radius of the successful core location or first acceptable grab. All surface grab samples and selected subsurface intervals from each core will be submitted for immediate analysis. Bathymetry, operational elevations for dredged areas, and results from adjacent historical and Phase 1 PDI sample locations were used to determine which subsurface intervals from each boring will be submitted for immediate analysis. The remaining sample intervals will be archived at the laboratory for possible future analysis, if needed. More information about the planned sediment sampling locations, including geographic coordinates, sample depths, and basis for selecting sample intervals for immediate analysis is provided in Table 1.

The sediment samples will be collected following the same data quality objectives, sample collection procedures, general field procedures, testing methods, data validation, and field data management elements described in the EPA-approved PDI Work Plan documents, including the PDI Work Plan (Jacobs 2021), and associated field change requests described in the *Draft Phase 1 Pre-Design Investigation Data Report* (Jacobs 2022). However, a floating platform-mounted Vibracore rig, rather than divers, will be used to obtain the under-dock core samples. The sediment samples will be analyzed for the same ROD Table 21 COC analyses as described in the PDI Work Plan (Jacobs 2021).

3.2 River Bank Sampling Design

The objective of the river bank sampling is to evaluate the lateral extent of COC contamination in bank soil in the vicinity of the KMLT dock, and more specifically bound the lateral extent of DDx contamination near location SB-N6.

The planned river bank soil samples will be collected at 1-foot depth intervals to refusal or a maximum depth of 5 ft bgs. If riprap or other surface obstructions are present at a target location, the location will be moved to the nearest accessible location, within a 25 ft radius. Details regarding the planned river bank sampling locations are provided in Table 2.

The river bank samples will be collected following the same data quality objectives, sample collection procedures, general field procedures, testing methods, data validation, and field data management elements described in the EPA-approved PDI Work Plan documents, including the PDI Work Plan (Jacobs 2021). Samples from the 0- to 1-ft bgs interval will be submitted for chemical analysis for ROD Table 17 COCs. Deeper samples will be archived and analyzed for the ROD Table 21 COCs if needed for determining the vertical extent of contamination, as described in the PDI Work Plan (Jacobs 2021) or to support potential remedial design, if needed.

4. Sampling and Analysis

4.1 Sediment Sampling and Analysis for SMA Refinement

Additional sampling locations are planned during the Phase 2 PDI to address the data gaps identified Section 2.1. The Phase 2 sample locations are discussed below. All 39 locations consist of 3-point surface grabs and single point subsurface cores. Sample locations and planned core depths are listed in Table 1. Grab samples will be centered around the accepted core, per Appendix B of the PDI Work Plan (Jacobs 2021). Note that the Phase 2 PDI locations presented below may be shown on more than one figure.

4.1.1 ROD SMA 1

To address the data gaps in the vicinity of ROD SMA 1, a total of eleven (11) Phase 2 locations are planned (Figure 1); PD54 through PD64, inclusive. Phase 2 locations PD54 through PD59 are along the riverward edge of the project boundary. Locations PD60 through PD63 are between the Phase 1 sample locations and the shoreline (Figure 1). Phase 2 locations are at approximately 150-foot grid spacing. PD64 was added downstream of historical locations G403, C403 and B246 to increase sample density in this area.

4.1.2 ROD SMA 2

A total of eleven (11) Phase 2 locations are planned in the vicinity of ROD SMA 2: PD65 through PD73, PD90, and PD92 (Figure 2). Phase 2 locations PD90, PD92 and PD71 were placed to delineate the extent of contamination identified at PD09. Near the upstream portion of the ROD SMA, six Phase 2 locations (PD65 through PD70) are intended to delineate the contamination identified at PD11, PD21, PD22, PD29 and PD30. Shoreward from PD25, Phase 2 location PD73 is intended to delineate the contamination in that area (Figure 2). Location PD72 was placed under the KMLT dock, closer to shore from PD12/12A (also an under-dock location), to bound that the contamination identified at PD12/12A.

4.1.3 ROD SMA 3

Six (6) Phase 2 locations (PD76 through PD81) are planned in the vicinity of this ROD SMA. These locations (Figure 3) are intended to delineate the boundary of the identified contamination toward the river bank in this area.

4.1.4 ROD SMA 4/5

Two (2) Phase 2 locations are planned downstream of ROD SMA 4/5: PD74 and PD75 (Figure 4). PD74 is intended to delineate the extent of contamination identified at PD40. Phase 2 location PD75, is located under the KMLT dock, and was placed to further evaluate the material under the dock.

4.1.5 Downstream Area

Historical sample results in the downstream area of the WCPA indicate RT exceedances in subsurface sediment. Due to the limited number of existing samples, a total of nine (9) Phase 2 locations are planned (PD82 through PD89, and PD91). Location PD90 is discussed in Section 4.1.2 and is assigned to ROD SMA 2. These locations are spread out across the downstream area, on an approximate 150 ft grid, and with consideration for the existing historical samples and the pipeline buffer zone (Figure 4).

4.2 River Bank Sampling

The river bank sampling design includes five (5) soil boring locations (SB13 through SB17) to determine the extent of COC exceedances in the vicinity of the KMLT dock, including the DDx remedial action level exceedance found in surface soil at location SB-N6. (Figure 5). Two (2) of the locations are located at the ordinary high water (SB16) and mean low water (SB17) transects and three (3) locations are positioned further upland (SB13, SB14, and SB15).

4.3 Analytical Requirements

Sediment cores and grabs, as well as river bank soil samples, will be collected as per the field sampling plan (Appendix B of the PDI Work Plan). The samples will be analyzed and/or archived based on the analytical schedule presented in Table 1 (sediment) and Table 2 (river bank soil). The analysis of soil and sediment samples may include the following chemicals and associated methods:

- ROD Table 17/21 COCs (except chlorobenzene):
    - 16 Priority Pollutant polycyclic aromatic hydrocarbons and 2-methylnaphthalene (EPA Method 8270C or D SIM)
    - PCB Aroclors (EPA Method 8082; sediment and subsurface river bank soil) and PCB congeners (EPA Method E1668; river bank surface soil)
    - Dioxin/furan congeners (EPA Method E1613)
    - Pesticides[3] (EPA Method E1699 or E1699M)
    - Metals, including mercury (Method SW6010B or C, and SW7471A or B)
    - Bis(2-ethylhexyl)phthalate (BEHP) (Method low level SW8270C or D-SIM)
    - Total Petroleum Hydrocarbons - Diesel Range Organics (TPH-DRO) (Method NWTPH-Dx)
- Physical Parameters:
    - Grain size (ASTM International Standard D7928 and D6913)
    - Total Organic Carbon (EPA Method SW9060)

4.4 Quality Assurance and Quality Control

The Quality Assurance Project Plan (QAPP), as provided in Appendix C of the PDI Work Plan, will be followed for Phase 2.

4.5 Health and Safety

The Health and Safety Plan provided as Appendix D in the PDI Work Plan will be followed for Phase 2.

[3] Pesticides to be reported will include the six DDT isomers, Aldrin, alpha-Chlordane, cis-Nonachlor, Dieldrin, gamma-BHC (Lindane), gamma-Chlordane, Oxychlordane, and trans-Nonachlor. Method 1699M will be used for the six DDT isomers in sediments.

5. Schedule and Permits

5.1 Schedule

Field work is currently scheduled for late February/early March of 2023, pending approval of this addendum. Consistent with the Phase 1 PDI work, Gravity Marine Services will provide the sampling vessel and core processing will occur at NRC/US Ecology warehouse located on Swan Island. The *Draft PDI Evaluation Report*, scheduled to be submitted to EPA in September 2023, will include Phase 1 and Phase 2 PDI data and supporting information in Appendices. The revised Phase 1 PDI Data Quality Evaluation (DQE) Report is included as an appendix to this addendum and replaces the draft Phase 1 PDI DQE included in the draft Phase 1 Data Report. A schedule is provided as Figure 7.

5.2 Permits

The Willbridge Cove Group has been issued an Oregon Division of State Lands (DSL) access agreement for sediment sampling (DSL File No: 63166-RAAA Remedial Action Access Agreement) with an effective date of 27 April 2021 and expiring on 31 December 2022. Per Section 4.26 of the Access Agreement, the Willbridge Cove Group will provide notification to DSL five business days prior to start of sampling. An application has been submitted to DSL for renewal of the Access Agreement.

6. References

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Tables

Table 1 - Planned Phase 2 PDI Sediment Sample Location Information
Willbridge Cove Project Area

Location ID	Sample Type (Grab/Core)	Target Easting [a]	Target Northing [a]	General Location	2018 Mudline Elevation [b]	Permitted Dredged Area	Dredging Notes	Target Core Depth (ft)	Proposed Intervals for Immediate Analysis [c]	Core Depth and Sample Interval Notes
PD54	Surface Grab & Core	7630688	699387	Slightly upstream of ROD SMA 1, adjacent to Navigation Channel	-16.4	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD55	Surface Grab & Core	7630548	699546	On river side of ROD SMA 1, adjacent to Navigation Channel	-18.6	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD56	Surface Grab & Core	7630422	699680	On river side of ROD SMA 1, adjacent to Navigation Channel	-24.0	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD57	Surface Grab & Core	7630264	699827	On river side of ROD SMA 1, adjacent to Navigation Channel and within McCall dredge area	-22.4	Yes	Dredged to -32.7 ft NAVD88 in 2020	10	Surface Grab 1-2 2-3 3-4 4-5	Core depth and sample intervals account for 2020 dredged elevation, no need to go deeper to straddle authorized/operational dredge elevation
PD58	Surface Grab & Core	7630165	699942	On river side of ROD SMA 1, adjacent to Navigation Channel and within McCall dredge area	-25.1	Yes	Dredged to -32.7 ft NAVD88 in 2020	10	Surface Grab 1-2 2-3 3-4 4-5	Core depth and sample intervals account for 2020 dredged elevation, no need to go deeper to straddle authorized/operational dredge elevation
PD59	Surface Grab & Core	7630053	700064	On river side of ROD SMA 1, adjacent to Navigation Channel and within McCall dredge area	-27.7	Yes	Dredged to -32.7 ft NAVD88 in 2020	10	Surface Grab 1-2 2-3 3-4 4-5	Core depth and sample intervals account for 2020 dredged elevation, no need to go deeper to straddle authorized/operational dredge elevation
PD60	Surface Grab & Core	7630330	699533	On shore side of ROD SMA1, adjacent to McCall river bank	4.5	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD61	Surface Grab & Core	7630231	699676	On shore side of ROD SMA1, adjacent to McCall river bank	4.2	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD62	Surface Grab & Core	7630100	699818	On shore side of ROD SMA1, adjacent to McCall river bank	4.8	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD63	Surface Grab & Core	7630002	699938	On shore side of ROD SMA1, adjacent to McCall river bank	0.3	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis

Table 1 - Planned Phase 2 PDI Sediment Sample Location Information
Willbridge Cove Project Area

Location ID	Sample Type (Grab/Core)	Target Easting [a]	Target Northing [a]	General Location	2018 Mudline Elevation [b]	Permitted Dredged Area	Dredging Notes	Target Core Depth (ft)	Proposed Intervals for Immediate Analysis [c]	Core Depth and Sample Interval Notes
PD64	Surface Grab & Core	7629760	700236	Downstream of ROD SMA 1	-9.0	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD65	Surface Grab & Core	7629586	700324	Upstream of ROD SMA 2, between ROD SMA 2 and McCall river bank	-16.5	No	Not applicable	15	Surface Grab 1-2 6-7 7-8 10-11 11-12	Core depth and sample intervals account for potentially thicker accumulation of sediment and results for nearby Phase 1 PDI locations
PD66	Surface Grab & Core	7629662	700376	Between ROD SMA 1 and ROD SMA 2	-18.4	No	Not applicable	15	Surface Grab 1-2 6-7 7-8 13-14 14-15	Core depth and sample intervals account for potentially thicker accumulation of sediment and results for nearby Phase 1 PDI locations
PD67	Surface Grab & Core	7629700	700445	Between ROD SMA 1 and ROD SMA2, near Navigation Channel	-24.3	No	Not applicable	15	Surface Grab 1-2 6-7 7-8 10-11 11-12	Core depth and sample intervals account for potentially thicker accumulation of sediment and results for nearby Phase 1 PDI locations
PD68	Surface Grab & Core	7629730	700570	Navigation Channel adjacent to ROD SMA 2	-28.0	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD69	Surface Grab & Core	7629648	700670	Navigation Channel adjacent to ROD SMA 2	-29.7	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD70	Surface Grab & Core	7629545	700651	Adjacent to ROD SMA 2, near Navigation Channel	-28.3	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD71	Surface Grab & Core	7629290	701144	Navigation Channel adjacent to ROD SMA 2	-39.6	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD72	Surface Grab & Core	7628807	700931	Under Kinder Morgan dock, downstream of ROD SMA 2	-20.3	No	Not applicable	5	Surface Grab 1-2 2-3 3-4 4-5	Under-dock, all intervals submitted for immediate analysis

Table 1 - Planned Phase 2 PDI Sediment Sample Location Information
Willbridge Cove Project Area

Location ID	Sample Type (Grab/Core)	Target Easting [a]	Target Northing [a]	General Location	2018 Mudline Elevation [b]	Permitted Dredged Area	Dredging Notes	Target Core Depth (ft)	Proposed Intervals for Immediate Analysis [c]	Core Depth and Sample Interval Notes
PD73	Surface Grab & Core	7628841	700840	Between ROD SMA 2 and ROD SMA 4/5, within permitted dredge area, last dredged in 2011	-34.2	Yes	Dredged to -34 ft NAVD88 in 2011	10	Surface Grab 1-2 2-3 3-4 4-5	Core depth and sample intervals account for 2011 dredged elevation, no need to go deeper to straddle authorized/operational dredge elevation
PD74	Surface Grab & Core	7628729	700768	Between ROD SMA 2 and ROD SMA 4/5, within permitted dredge area, last dredged in 2011	-33.4	Yes	Dredged to -34 ft NAVD88 in 2011	10	Surface Grab 1-2 2-3 3-4 4-5	Core depth and sample intervals account for 2011 dredged elevation, no need to go deeper to straddle authorized/operational dredge elevation
PD75	Surface Grab & Core	7628620	700779	Under Kinder Morgan dock, near shore and downstream of ROD SMA 4/5	-19.8	No	Not applicable	5	Surface Grab 1-2 2-3 3-4 4-5	Under-dock, all intervals submitted for immediate analysis
PD76	Surface Grab & Core	7628984	700197	Upstream of ROD SMA 4 and between ROD SMA 3 and Phillips 66 river bank	-9.6	No	Not applicable	15	Surface Grab 1-2 6-7 7-8 10-11 11-12	Core depth and sample intervals account for nearby C401 results
PD77	Surface Grab & Core	7629018	700092	Between ROD SMA 3 and Phillips 66 river bank	5.9	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD78	Surface Grab & Core	7629124	700030	Between ROD SMA 3 and Phillips 66 river bank, upstream of Phillips 66 dock	2.1	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD79	Surface Grab & Core	7629216	700001	Between ROD SMA 3 and McCall river bank	3.2	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD80	Surface Grab & Core	7629282	700030	Between ROD SMA 3 and McCall river bank	2.9	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD81	Surface Grab & Core	7629408	700128	Between ROD SMA 3 and McCall river bank	0.3	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD82	Surface Grab & Core	7628382	700980	Downstream of Kinder Morgan dock, near Kinder Morgan river bank and C690. Location C690 exceeded the RT for PCBs, TCDD and PeCDD from 8.99 to 15.45 ft.	2.4	No	Not applicable	15	Surface Grab 1-2 6-7 7-8 13-14 14-15	Core depth and sample intervals account for nearby C690 results

Table 1 - Planned Phase 2 PDI Sediment Sample Location Information
Willbridge Cove Project Area

Location ID	Sample Type (Grab/Core)	Target Easting [a]	Target Northing [a]	General Location	2018 Mudline Elevation [b]	Permitted Dredged Area	Dredging Notes	Target Core Depth (ft)	Proposed Intervals for Immediate Analysis [c]	Core Depth and Sample Interval Notes
PD83	Surface Grab & Core	7628568	700841	Downstream Area, within permitted Kinder Morgan dredge area, but not recently dredged	-20.8	Yes	Not recently dredged, authorized/operational elevation is -28.7 ft NAVD88	15	Surface Grab 1-2 6-7 7-8 13-14 14-15	Deeper core and intervals to account for possible deposition since 2018 and to straddle authorized/operational elevation (actual intervals to be be submitted for immediate analysis will be determined in the field based on mudline elevation at time of sampling) Samples are not intended for data replacement.
PD84	Surface Grab & Core	7628497	701102	Downstream Area, near project area boundary and C377. Location C377 exceeded the RT for PCBs (5.02 to 8.96ft) and DDx (12.11 to 15.81 ft).	-5.7	No	Not applicable	15	Surface Grab 1-2 6-7 7-8 13-14 14-15	Core depth and sample intervals account for nearby C377 results
PD85	Surface Grab & Core	7628684	700936	Downstream Area, within permitted Kinder Morgan dredge area, but not recently dredged	-21.1	Yes	Not recently dredged, authorized/operational elevation is -28.7 ft NAVD88	15	Surface Grab 1-2 6-7 7-8 13-14 14-15	Deeper core and intervals to account for possible deposition since 2018 and to straddle authorized/operational elevation (actual intervals to be be submitted for immediate analysis will be determined in the field based on mudline elevation at time of sampling) Samples are not intended for data replacement.
PD86	Surface Grab & Core	7628800	701032	Downstream Area, within permitted Kinder Morgan dredge area, but not recently dredged	-19.8	Yes	Not recently dredged, authorized/operational elevation is -28.7 ft NAVD88	15	Surface Grab 1-2 6-7 7-8 13-14 14-15	Deeper core and intervals to account for possible deposition since 2018 and to straddle authorized/operational elevation (actual intervals to be be submitted for immediate analysis will be determined in the field based on mudline elevation at time of sampling) Samples are not intended for data replacement.
PD87	Surface Grab & Core	7628675	701202	Downstream Area, near project area boundary and for increased data density. Nearby historical samples at SC-S155 do not exceed RTs.	-10.9	No	Not applicable	15	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis.
PD88	Surface Grab & Core	7628915	701127	Downstream Area, within permitted Kinder Morgan dredge area, but not recently dredged	-21.3	Yes	Not recently dredged, authorized/operational elevation is -28.7 ft NAVD88	15	Surface Grab 1-2 6-7 7-8 13-14 14-15	Deeper core and intervals to account for possible deposition since 2018 and to straddle authorized/operational elevation (actual intervals to be be submitted for immediate analysis will be determined in the field based on mudline elevation at time of sampling) Samples are not intended for data replacement.
PD89	Surface Grab & Core	7628821	701316	Downstream Area, near area project boundary and C688. Location C688 exceeded the RT for PCBs and DDx from 7.25 to 9.22 ft.	-14.2	No	Not applicable	15	Surface Grab 1-2 6-7 7-8 10-11 11-12	Core depth and sample intervals account for nearby C688 results

Table 1 - Planned Phase 2 PDI Sediment Sample Location Information
Willbridge Cove Project Area

Location ID	Sample Type (Grab/Core)	Target Easting [a]	Target Northing [a]	General Location	2018 Mudline Elevation [b]	Permitted Dredged Area	Dredging Notes	Target Core Depth (ft)	Proposed Intervals for Immediate Analysis [c]	Core Depth and Sample Interval Notes
PD90	Surface Grab & Core	7629030	701223	Downstream Area, within permitted Kinder Morgan dredge area, but not recently dredged	-24.6	Yes	Not recently dredged, authorized/operational elevation is -28.7 ft NAVD88	15	Surface Grab 1-2 6-7 7-8 13-14 14-15	Deeper core and intervals to account for possible deposition since 2018 and to straddle authorized/operational elevation (actual intervals to be be submitted for immediate analysis will be determined in the field based on mudline elevation at time of sampling) Samples are not intended for data replacement.
PD91	Surface Grab & Core	7628857	701468	Downstream Area, near Navigation Channel	-19.6	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis
PD92	Surface Grab & Core	7629166	701295	Navigation Channel adjacent to ROD SMA 2	-29.4	No	Not applicable	10	Surface Grab 1-2 2-3 3-4 4-5	Upper 5 feet submitted for immediate analysis

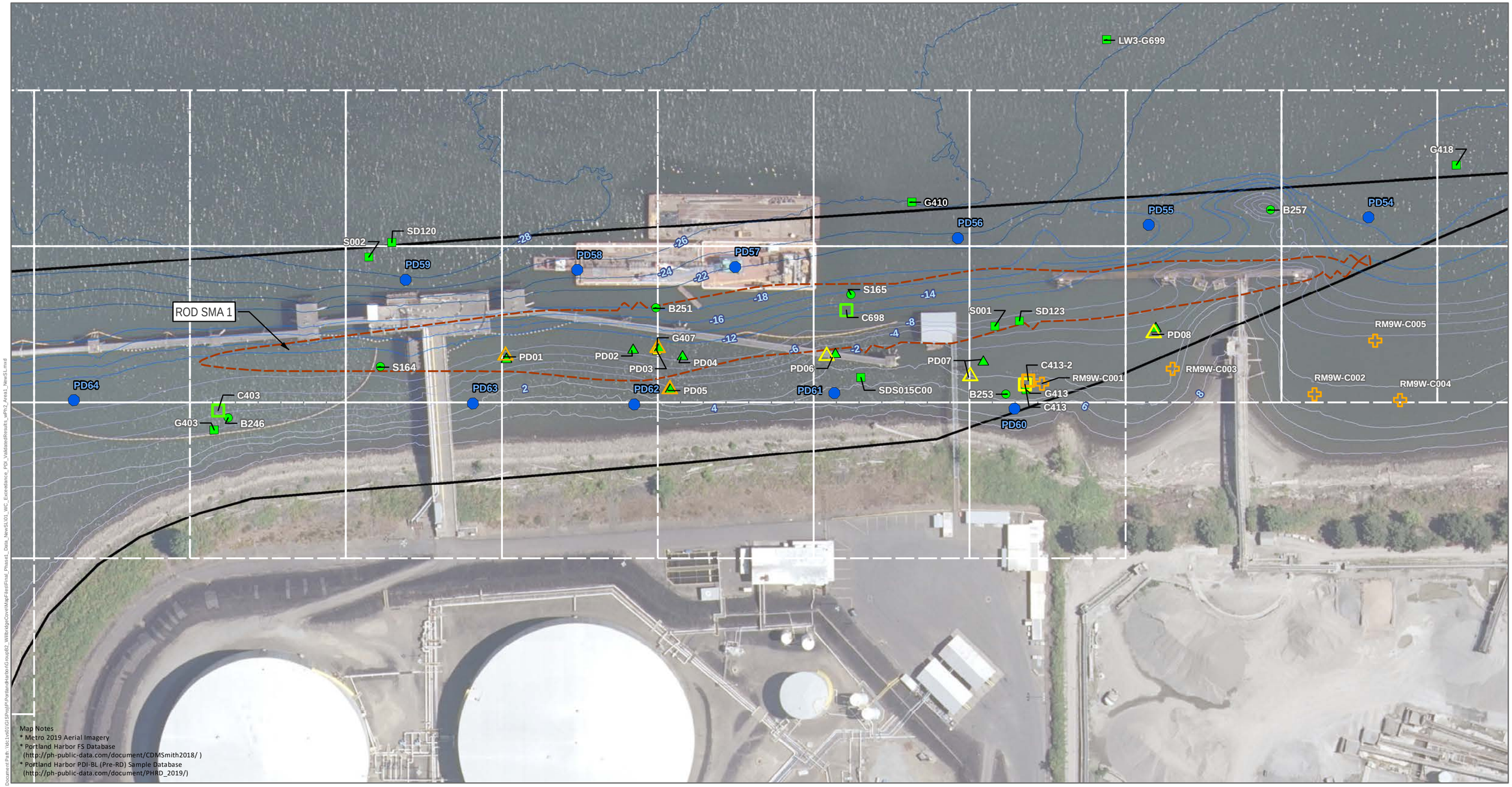
[a] Coordinates are in NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl
[b] Feet North American Vertical Datum of 1988 (NAVD88) per bathymetric survey conducted by David Evans Associates Inc. precision multibeam and single beam survey conducted between March 6, 2018 and June 15, 2018
[c] The following analyses will be conducted on surface grab and subsurface sediment samples submitted for immediate analysis (remaining samples will be archived):
PAHs by SW8270 C or D-SIM
PCB Aroclors by SW8082
DDX isomers by 1699M
Dioxins/Furans by E1613
Grainsize by D7928, D6913
TOC by 9060

Table 2 - Planned Phase 2 PDI River Bank Sample Location Information
Willbridge Cove Project Area

Location ID	Sample Type (Grab/Core)	Target Easting [a]	Target Northing [a]	General Location	Target Core Depth (ft)	Proposed Intervals for Immediate Analysis (feet bgs) [b]
SB13	Core	7628369	700665	Area north of the Kinder Morgan dock at the mean low water transect	5	0-1
SB14	Core	7628396	700585	Area north of the Kinder Morgan dock at the ordinary high water transect	5	0-1
SB15	Core	7628461	700551	Upland location north of the Kinder Morgan dock	5	0-1
SB16	Core	7628422	700699	Upland location under the Kinder Morgan dock	5	0-1
SB17	Core	7628478	700727	Upland location south of the Kinder Morgan dock	5	0-1

[a]Coordinates are in NAD 1983 StatePlane Oregon North FIPS 3601 Feet Intl
[b]Samples from the 0- to 1-foot interval will be submitted for chemical analysis for ROD Table 17 COCs.
Deeper samples will be archived and analyzed for the ROD Table 21 COCs, if needed.
bgs = below ground surface

Figures



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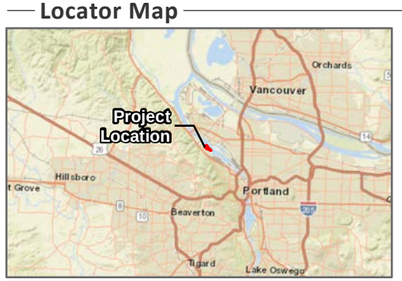
Locator Map



Legend

Maximum detected concentration

- Non-Detect
- Less than PTW and RAL or PQL (if applicable)
- Greater than RAL or PQL (if applicable), Less than PTW
- Greater than PTW
- Surface (Solid Symbol)
- Subsurface (Hollow Symbol)

Symbol Definition

- Phase 1 PDI (Sediment)
- Planned surface sediment grab and sediment core location (10 ft)
- 2018 Pre-RD (Sediment)
- Portland Harbor RI/FS (Sediment)
- RM9W PDI (Sediment)

0 100 200 Feet

- Bathymetry (2ft) Contours
- Willbridge Cove Project Area
- Sediment Management Area (ROD ESD 2018)
- 150 ft Sampling Grid

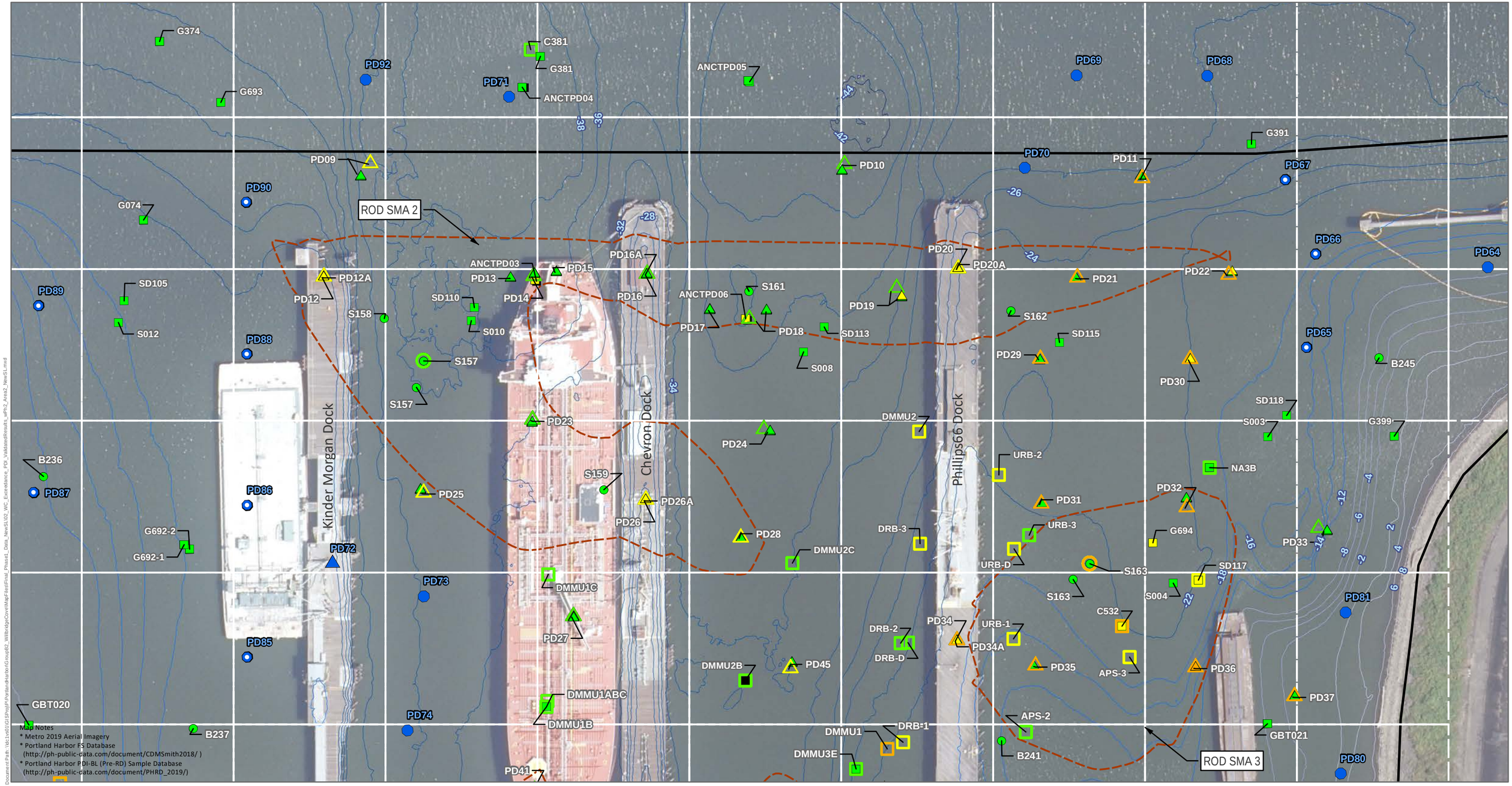
Bathymetric survey conducted by David Evans Associates Inc (DEA)
Precision multibeam and single beam survey conducted between
March 6, 2018 and June 15, 2018
North American Vertical Datum of 1988 (NAVD88)

FIGURE 1

PLANNED PHASE 2 SEDIMENT SAMPLE LOCATIONS
ROD SMA 1

Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Jacobs



Map Notes
* Metro 2019 Aerial Imagery
* Portland Harbor FS Database (http://ph-public-data.com/document/CDMSmith2018/)
* Portland Harbor PDI-BL (Pre-RD) Sample Database (http://ph-public-data.com/document/PHRD_2019/)

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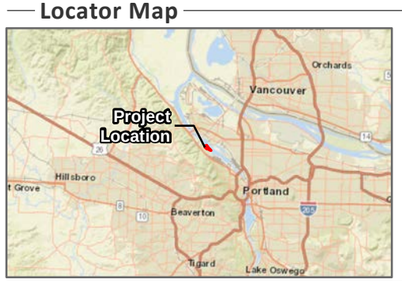
Locator Map



Legend

Maximum detected concentration
- Non-Detect
- Less than PTW and RAL or PQL (if applicable)
- Greater than RAL or PQL (if applicable), Less than PTW
- Greater than PTW
- Surface (Solid Symbol)
- Subsurface (Hollow Symbol)

- Phase 1 PDI (Sediment)
- 2018 Pre-RD (Sediment)
- Portland Harbor RI/FS (Sediment)
- Bathymetry (2ft) Contours
- Willbridge Cove Project Area
- Sediment Management Area (ROD ESD 2018)

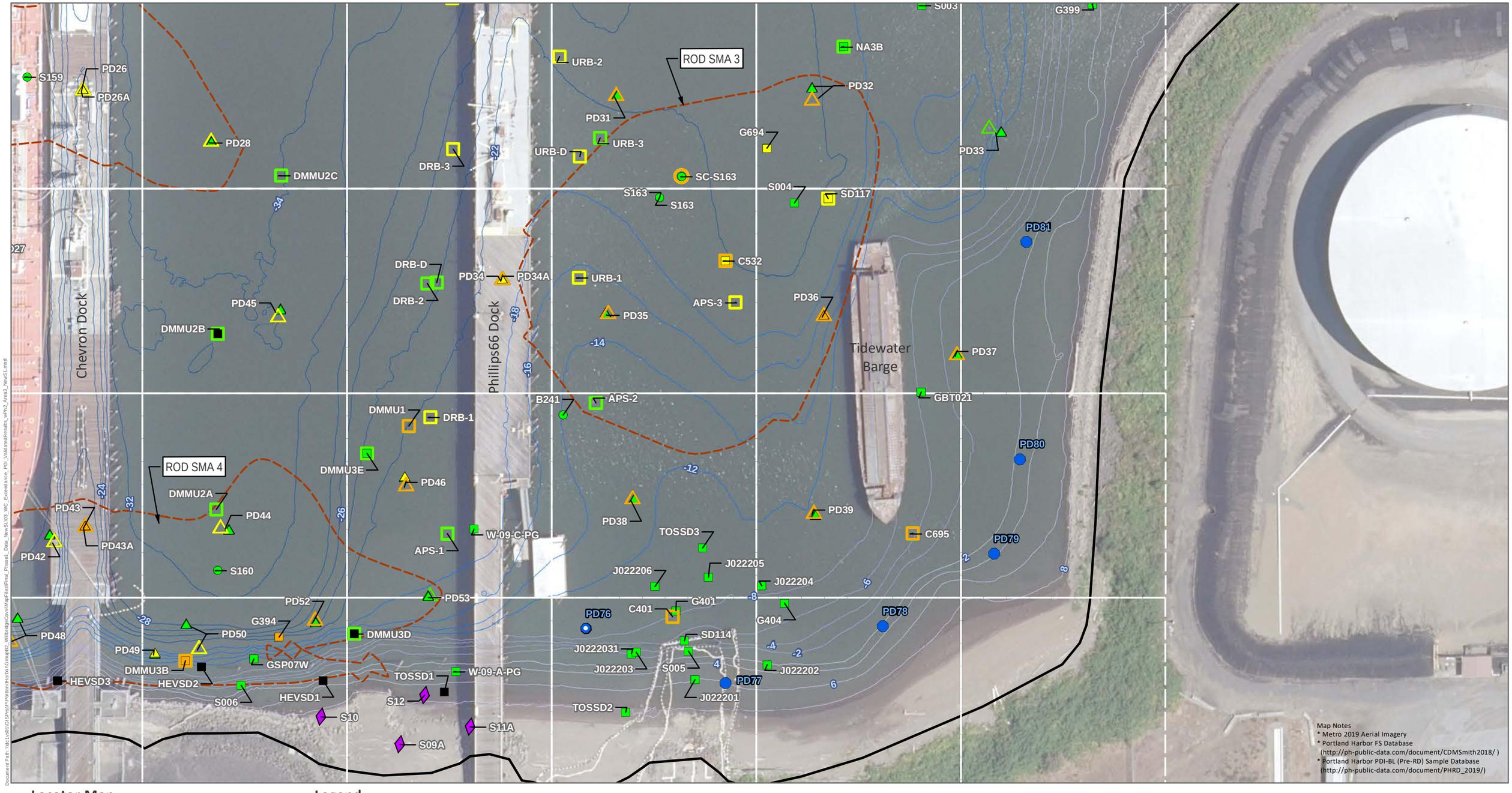
Symbol Definition
- Planned surface sediment grab and sediment core location (10 ft)
- Planned surface sediment grab and sediment core location (15 ft)
- Planned under-dock surface grab and sediment core location (5 ft)
- 150 ft Sampling Grid

0 100 200 Feet

Bathymetric survey conducted by David Evans Associates Inc (DEA)
Precision multibeam and single beam survey conducted between
March 6, 2018 and June 15, 2018
North American Vertical Datum of 1988 (NAVD88)

FIGURE 2
PLANNED PHASE 2 SEDIMENT SAMPLE LOCATIONS
ROD SMA 2
Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Jacobs



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Locator Map

Legend

Maximum detected concentration

- Non-Detect
- Less than PTW and RAL or PQL (if applicable)
- Greater than RAL or PQL (if applicable), Less than PTW
- Greater than PTW
- Surface (Solid Symbol)
- Subsurface (Hollow Symbol)

Symbol Definition

- Phase 1 PDI (Sediment)
- 2018 Pre-RD (Sediment)
- Portland Harbor RI/FS (Sediment)
- Phase 1 PDI Soil Boring
- Planned surface sediment grab and sediment core location (10 ft)
- Planned surface sediment grab and sediment core location (15 ft)
- Bathymetry (2ft) Contours
- Willbridge Cove Project Area
- Sediment Management Area (ROD ESD 2018)
- 150 ft Sampling Grid

0 75 150 Feet

Bathymetric survey conducted by David Evans Associates Inc (DEA)
Precision multibeam and single beam survey conducted between March 6, 2018 and June 15, 2018
North American Vertical Datum of 1988 (NAVD88)

FIGURE 3

PLANNED PHASE 2 SEDIMENT SAMPLE LOCATIONS
ROD SMA 3
Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Jacobs

FIGURE 4

PLANNED PHASE 2 SEDIMENT SAMPLE LOCATIONS
ROD SMA 4/5 AND DOWNSTREAM AREA
Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Legend

Maximum detected concentration

- Non-Detect
- Less than PTW and RAL or PQL (if applicable)
- Greater than RAL or PQL (if applicable), Less than PTW
- Greater than PTW
- Surface (Solid Symbol)
- Subsurface (Hollow Symbol)

Symbol Definition

- Planned surface sediment grab and sediment core location (10 ft)
- Planned surface sediment grab and sediment core location (15 ft)
- Planned under-dock surface grab and sediment core location (5 ft)
- Planned River Bank Sample Location

- Bathymetry (2ft) Contours
- Willbridge Cove Project Area
- Sediment Management Area (ROD ESD 2018)
- KM Pipeline Area (Approximate)
- 150 ft Sampling Grid
- Phase 1 PDI (Sediment)
- 2018 Pre-RD (Sediment)
- Portland Harbor RI/FS (Sediment)
- Phase 1 PDI Soil Boring

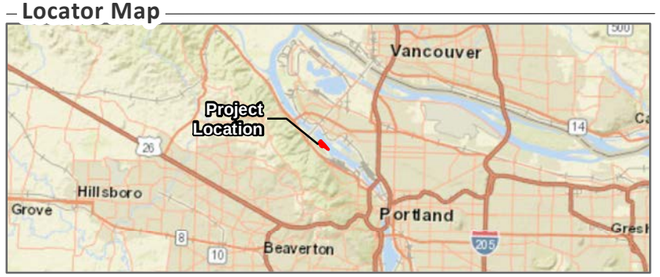
0 125 250 Feet

Map Notes
* Metro 2019 Aerial Imagery
* Portland Harbor FS Database (http://ph-public-data.com/document/CDMSmith2018/)
* Portland Harbor PDI-BL (Pre-RD) Sample Database (http://ph-public-data.com/document/PHRD_2019/)

Bathymetric survey conducted by David Evans Associates Inc (DEA)
Precision multibeam and single beam survey conducted between
March 6, 2018 and June 15, 2018
North American Vertical Datum of 1988 (NAVD88)

Jacobs

Locator Map



MLW
OHW
Top of Bank
SB17
SS-N
SS-NE
SB01
SS-E
SB02
SB04
SB03
S-1
SS-C
S-2
KM-S-3
SS-NW2
SS-S1
SS-S3
S-3
SS-NW1
SS-SW1
SB-S1
KM-S-4
SB16
KM-S-5
SB-N1
SS-S2
NBTP-7
SS-SW2
SB-N6
SB-N5
SB15
SB-N4
SB-S4
SB13
SB14

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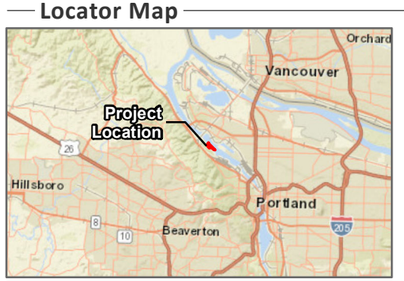
Locator Map



Legend

- 2008 Sample Location (Jacobs 2018)
- 2012 Sample Location (Jacobs 2018)
- 2017 Sample Location (Jacobs 2018)
- Planned River Bank Sample Location
- 2018 Sample Location (Jacobs 2020)
- 2021 Phase 1 PDI Soil Boring Location
- Ordinary High Water Level OHWL (20.08 ft NAVD88)
- Mean Low Water Level MLW (7.28 ft NAVD88)
- Top of Bank
- KM Pipeline Area (Approximate)
- Nov 2017 DDT Removal Area (Jacobs 2018)
- Willbridge Cove Project Area

Map Notes
* Metro 2019 Aerial Imagery

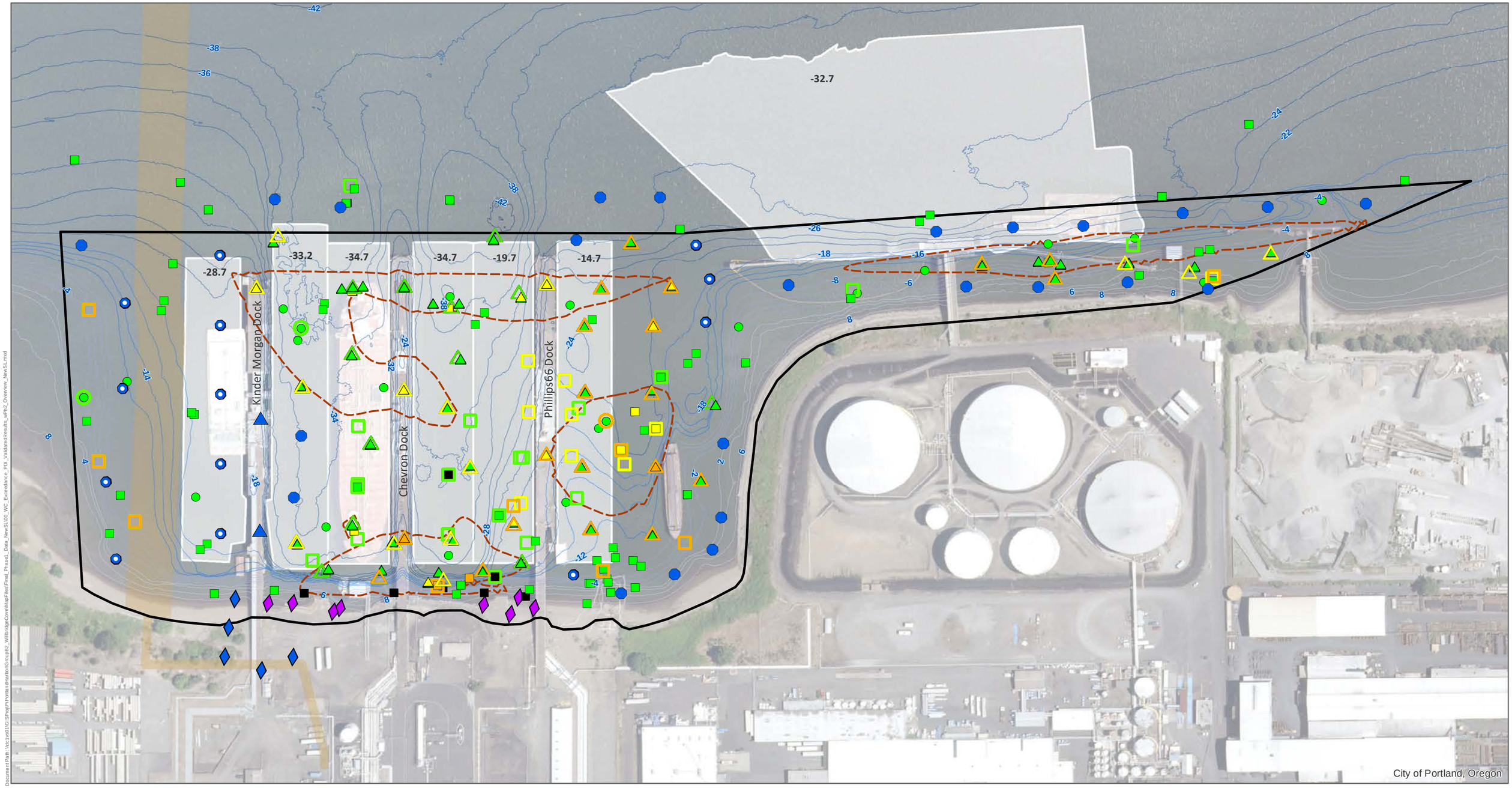
0 40 80 Feet

FIGURE 5

PLANNED PHASE 2 RIVER BANK SAMPLE LOCATIONS

Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Jacobs



Legend

Maximum detected concentration

- Non-Detect
- Less than PTW and RAL or PQL (if applicable)
- Greater than RAL or PQL (if applicable), Less than PTW
- Greater than PTW
- Surface (Solid Symbol)
- Subsurface (Hollow Symbol)

Symbol Definition

- Phase 1 PDI (Sediment)
- 2018 Pre-RD (Sediment)
- Portland Harbor RI/FS (Sediment)
- Phase 1 PDI Soil Boring
- Planned surface sediment grab and sediment core location (10 ft)
- Planned surface sediment grab and sediment core location (15 ft)
- Planned under-dock surface grab and sediment core location (5 ft)
- Planned River Bank Sample Location

- Bathymetry (2ft) Contours
- Willbridge Cove Project Area
- Sediment Management Area (ROD ESD 2018)
- KM Pipeline Area (Approximate)
- Authorized or Operational Dredge Areas/Future Maintenance Dredge (FMD) Areas
  *Authorized Dredge Depths are labeled in each area (ft NAVD88) (Jacobs 2021 PDI Work Plan, Table 1-1)

Bathymetric survey conducted by David Evans Associates Inc (DEA)
Precision multibeam and single beam survey conducted between March 6, 2018 and June 15, 2018
North American Vertical Datum of 1988 (NAVD88)

0 75 150 300 450 Feet

FIGURE 6

PHASE 1 PDI AND PLANNED PHASE 2 PDI SAMPLE LOCATIONS

Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Jacobs

ID	Task Mode	Task Name	Duration	Start	Finish
1		PDI Work Plan Addendum	130 days	Thu 7/28/22	Tue 1/31/23
2		Submit RTCs and Revised Addendum to EPA	0 days	Fri 12/16/22	Fri 12/16/22
3		EPA Review	30 days	Fri 12/16/22	Mon 1/30/23
4		EPA Approval	0 days	Tue 1/31/23	Tue 1/31/23
5		Phase 2 Investigation	124 days	Wed 11/23/22	Fri 5/19/23
6		Contracting and field preparation	60 days	Wed 11/23/22	Mon 2/20/23
7		Field Effort -In water	24 days	Mon 2/20/23	Thu 3/23/23
8		Field Effort - River bank	5 days	Fri 3/24/23	Thu 3/30/23
9		Laboratory analysis	21 days	Fri 3/31/23	Fri 4/28/23
10		Data QA/QC; Validation	15 days	Mon 5/1/23	Fri 5/19/23
11		Prepare PDI Data Evaluation Report	165 days	Mon 5/22/23	Fri 1/5/24
12		Prepare text, tables, figures, appendices	53 days	Mon 5/22/23	Wed 8/2/23
13		Assemble/Edit Document	42 days	Thu 8/3/23	Fri 9/29/23
14		Draft PDI Evaluation to EPA	0 days	Fri 9/29/23	Fri 9/29/23
15		EPA review of Draft PDI Evaluation Report	40 days	Mon 10/2/23	Fri 11/24/23
16		Comment Resolution / Finalize Text	30 days	Mon 11/27/23	Fri 1/5/24
17		Finalize PDI Evaluaton Report - Submittal to EPA	0 days	Fri 1/5/24	Fri 1/5/24

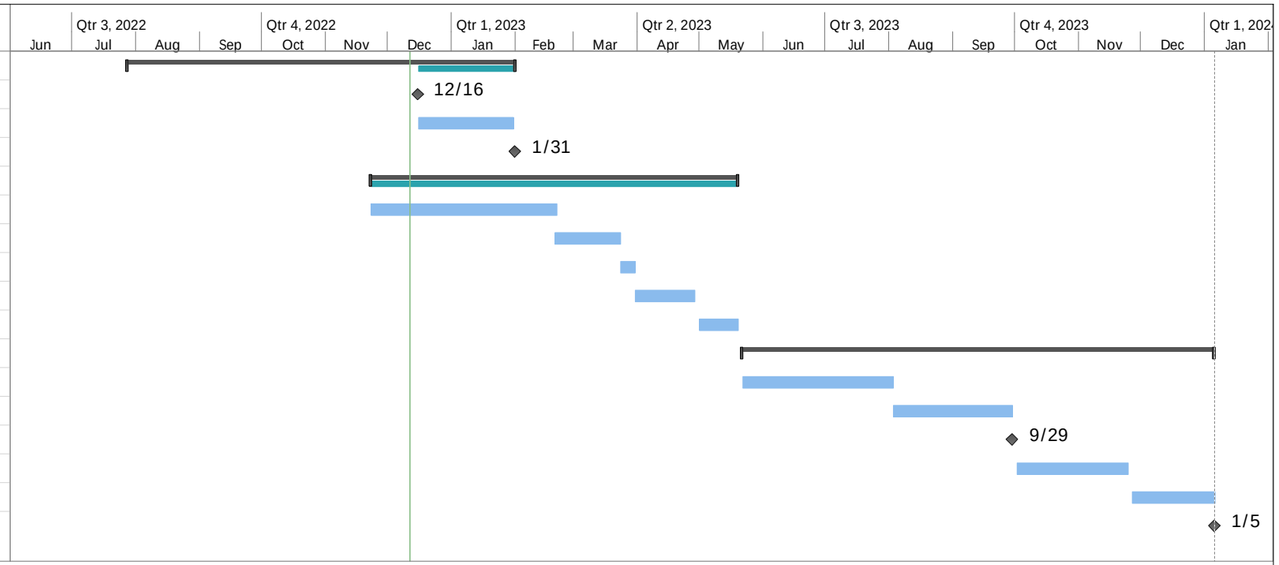


FIGURE 7

Project: WC Schedule
Date: 12/16/22

Task | Project Summary | Manual Task | Start-only | Deadline
Split | Inactive Task | Duration-only | Finish-only | Progress
Milestone | Inactive Milestone | Manual Summary Rollup | External Tasks | Manual Progress
Summary | Inactive Summary | Manual Summary | External Milestone

SCHEDULE – WILLBRIDGE COVE PROJECT AREA PDI

Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Appendix A

Phase 1 PDI and Selected Historical Analytical Results

FIGURE A-1

FIGURE A-2

FIGURE A-3

FIGURE A-4

FIGURE A-5

PD91 PD90 PD89 PD88 PD87 PD86 PD85 PD84 PD82 PD83 PD92 PD71 PD72 PD73 PD74 PD75 PD70 PD69 PD68 PD67 PD66 PD65 PD64 PD63 PD62 PD61 PD60 PD59 PD58 PD57 PD56 PD55 PD54 PD81 PD80 PD79 PD78 PD77 PD76

ROD SMA 1

ROD SMA 2

ROD SMA 3

ROD SMA 4

ROD SMA 5

Kinder Morgan Dock

Chevron Dock

Phillips66 Dock

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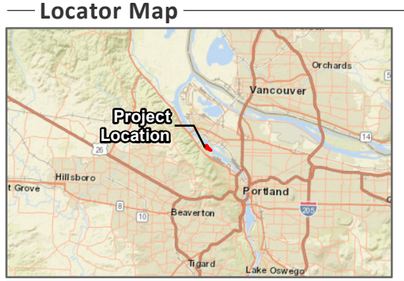
Locator Map



Legend

Symbol Definition

Sediment Management Area (ROD ESD 2018)

Willbridge Cove Project Area

Figure Index

All results in are concentrations in ug/kg (micrograms per kilogram dry weight)
Depths listed are as-recovered depths (not in situ depths)
(A) = result based on Aroclor analyses
(C) = result based on Congener analyses

Map Notes
* Metro 2019 Aerial Imagery

Symbol Definition

Planned surface sediment grab and sediment core location (10 ft)

Planned surface sediment grab and sediment core location (15 ft)

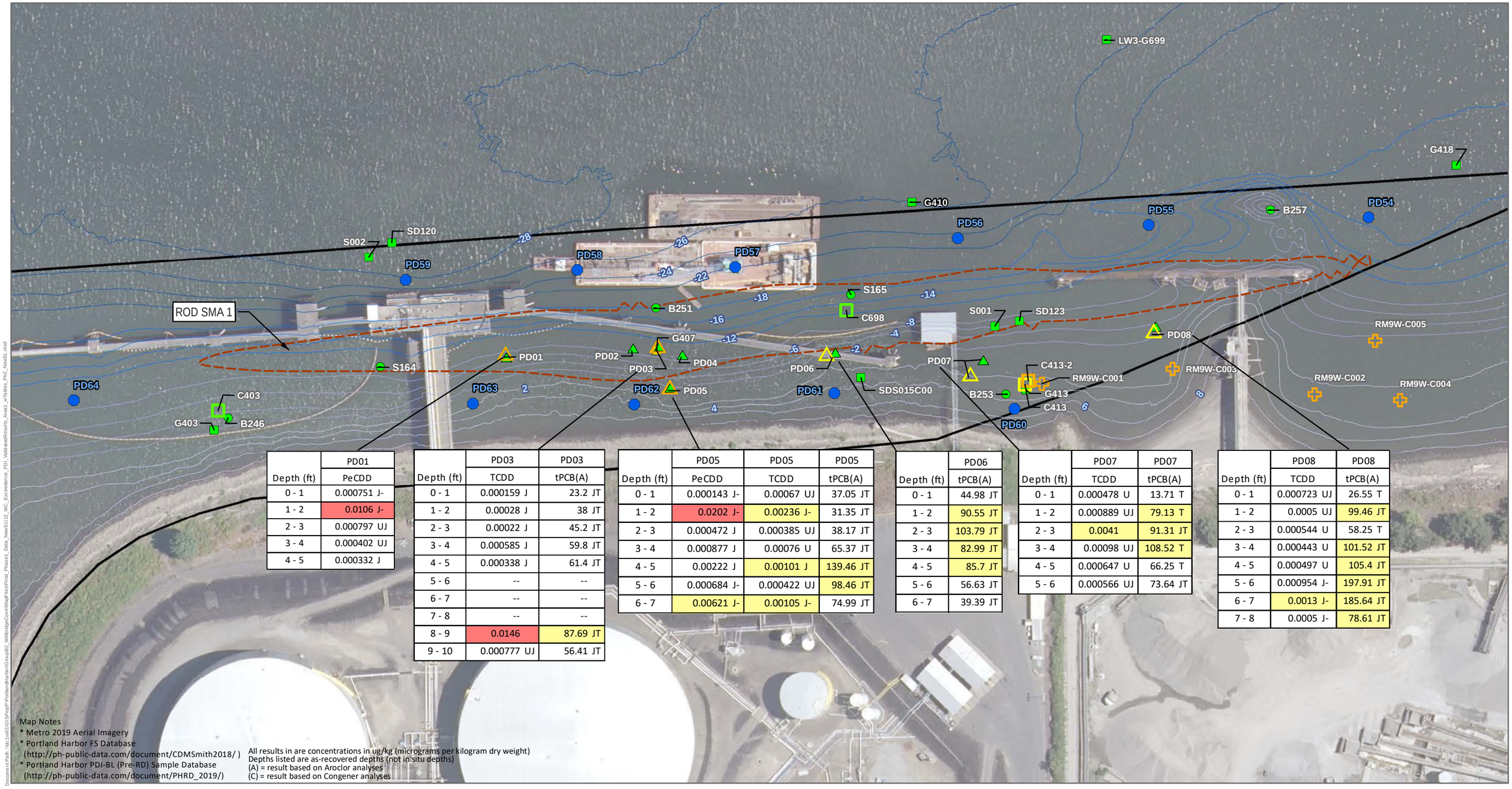
Planned under-dock surface grab and sediment core location (5 ft)

0 200 400 Feet

PHASE 1 PDI RESULTS – MAP ORIENTATION

Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Jacobs



Depth (ft)	PD01 PeCDD
0 - 1	0.000751 J-
1 - 2	0.0106 J-
2 - 3	0.000797 UJ
3 - 4	0.000402 UJ
4 - 5	0.000332 J

Depth (ft)	PD03 TCDD	PD03 tPCB(A)
0 - 1	0.000159 J	23.2 JT
1 - 2	0.00028 J	38 JT
2 - 3	0.00022 J	45.2 JT
3 - 4	0.000585 J	59.8 JT
4 - 5	0.000338 J	61.4 JT
5 - 6	--	--
6 - 7	--	--
7 - 8	--	--
8 - 9	0.0146	87.69 JT
9 - 10	0.000777 UJ	56.41 JT

Depth (ft)	PD05 PeCDD	PD05 TCDD	PD05 tPCB(A)
0 - 1	0.000143 J-	0.00067 UJ	37.05 JT
1 - 2	0.0202 J-	0.00236 J-	31.35 JT
2 - 3	0.000472 J	0.000385 UJ	38.17 JT
3 - 4	0.000877 J	0.00076 U	65.37 JT
4 - 5	0.00222 J	0.00101 J	139.46 JT
5 - 6	0.000684 J-	0.000422 UJ	98.46 JT
6 - 7	0.00621 J-	0.00105 J-	74.99 JT

Depth (ft)	PD06 tPCB(A)
0 - 1	44.98 JT
1 - 2	90.55 JT
2 - 3	103.79 JT
3 - 4	82.99 JT
4 - 5	85.7 JT
5 - 6	56.63 JT
6 - 7	39.39 JT

Depth (ft)	PD07 TCDD	PD07 tPCB(A)
0 - 1	0.000478 U	13.71 T
1 - 2	0.000889 UJ	79.13 T
2 - 3	0.0041	91.31 JT
3 - 4	0.00098 UJ	108.52 T
4 - 5	0.000647 U	66.25 T
5 - 6	0.000566 UJ	73.64 JT

Depth (ft)	PD08 TCDD	PD08 tPCB(A)
0 - 1	0.000723 UJ	26.55 T
1 - 2	0.0005 UJ	99.46 JT
2 - 3	0.000544 U	58.25 T
3 - 4	0.000443 U	101.52 JT
4 - 5	0.000497 U	105.4 JT
5 - 6	0.000954 J-	197.91 JT
6 - 7	0.0013 J-	185.64 JT
7 - 8	0.0005 J-	78.61 JT

Map Notes
* Metro 2019 Aerial Imagery
* Portland Harbor FS Database (http://ph-public-data.com/document/CDMSmith2018/)
* Portland Harbor PDI-BL (Pre-RD) Sample Database (http://ph-public-data.com/document/PHRD_2019/)

All results in are concentrations in ug/kg (micrograms per kilogram dry weight)
Depths listed are as-recovered depths (not in situ depths)
(A) = result based on Aroclor analyses
(C) = result based on Congener analyses

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Locator Map

Legend

Maximum detected concentration
- Non-Detect
- Less than PTW and RAL or PQL (if applicable)
- Greater than RAL or PQL (if applicable), Less than PTW
- Greater than PTW
- Surface (Solid Symbol)
- Subsurface (Hollow Symbol)

Symbol Definition
- Phase 1 PDI (Sediment)
- 2018 Pre-RD (Sediment)
- Portland Harbor RI/FS (Sediment)
- RM9W PDI (Sediment)
- Planned surface sediment grab and sediment core location (10 ft)
- Bathymetry (2ft) Contours
- Willbridge Cove Project Area
- Sediment Management Area (ROD ESD 2018)

Table Definition
- Greater than RAL or PQL (if applicable)
- Greater than PTW

Bathymetric survey conducted by David Evans Associates Inc (DEA)
Precision multibeam and single beam survey conducted between
March 6, 2018 and June 15, 2018
North American Vertical Datum of 1988 (NAVD88)

0 100 200 Feet

FIGURE A-1
PHASE 1 PDI RESULTS
ROD SMA 1
Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Jacobs

Depth (ft)	PD09 TCDD	PD09 tPCB(A)
0 - 1	0.000616 U	57.03 JT
1 - 2	0.00209	143.55 JT
2 - 3	0.000407 UJ	25.37 JT
3 - 4	0.00038 U	0.64 UT
4 - 5	0.000374 U	0.68 UT

Depth (ft)	PD20A tPCB(A)
0 - 1	67.9 JT
1 - 2	56.22 T
2 - 3	66.955 T
3 - 4	78.13 JT

Depth (ft)	PD20 PeCDD	PD20 DDx	PD20 tPCB(A)	PD20 tPCB(C)
0 - 1	0.00257 J	244.76 T	84.85 T	148.138 JT

Depth (ft)	PD11 tPCB(A)
0 - 1	21 JT
1 - 2	28.07 JT
2 - 3	129.49 T
3 - 4	204.4 T
4 - 5	103.64 T
5 - 6	68.64 JT
6 - 7	62.46 T
7 - 8	68.25 JT

Depth (ft)	PD21 PeCDD	PD21 TCDD	PD21 tPCB(A)
0 - 1	0.000792 J	0.00029 U	43.55 T
1 - 2	0.00094 J	0.00029 J	86.34 JT
2 - 3	0.00907	0.0033 J	241.49 JT
3 - 4	0.00455	0.0019 J	124.34 JT
4 - 5	0.0021 J	0.00112	106.92 T
5 - 6	0.00111 J	0.000977 J	69.81 T
6 - 7	0.0017 J	0.00139 J	314.37 T
7 - 8	0.000432 J	0.000244 U	77.4 T
8 - 9	0.00103 J-	0.000513 J	113.49 T

Depth (ft)	PD19 PeCDD	PD19 tPCB(A)
0 - 1	0.00333 J	115.49 T
1 - 2	0.000038 U	0.74 UT
2 - 3	0.000169 J	0.76 UT
3 - 4	0.00012 J	0.71 UT
4 - 5	0.000053 U	0.69 UT

Depth (ft)	PD12 DDx	PD12 tPCB(A)	PD12 tPCB(C)
0 - 1	2623 T	80.16 T	84.8178 JT

Depth (ft)	PD12A PeCDD	PD12A TCDD	PD12A DDx	PD12A tPCB(A)
0 - 1	0.00103 J-	0.000165 J	38.98 JT	23.3 T
1 - 2	0.00064 J-	0.00024 UJ	7.99 JT	99.05 T
2 - 3	0.00084 J-	0.00048 U	173.855 JT	128.92 T
3 - 4	0.0029 J-	0.00121 J	1837.37 JT	121.85 T
4 - 5	0.00203 J-	0.0004 UJ	1.7 JT	76.86 JT

Depth (ft)	PD22 PeCDD	PD22 TCDD	PD22 DDx	PD22 tPCB(A)
0 - 1	0.0015 J	0.000883 J	6.135 T	151.97 T
1 - 2	0.00227 J	0.00171 J	12.705 T	175.46 T
2 - 3	0.00229 J	0.0015 J	8.67 T	175.46 T
3 - 4	0.00807 J	0.00366	27.185 T	295.55 T
4 - 5	0.00524 J	0.00258	33.67 T	305.52 T
5 - 6	--	--	--	--
6 - 7	--	--	--	--
7 - 8	0.000982 J	0.000605	89.22 JT	195.31 T
8 - 9	0.00158 J	0.000558	233.71 T	37.56 T

Depth (ft)	PD29 PeCDD	PD29 TCDD	PD29 tPCB(A)
0 - 1	0.000821 J	0.00021 J	16 UT
1 - 2	0.00182 J	0.000972 J	53.49 T
2 - 3	0.00442 J-	0.0016 J-	152.61 T
3 - 4	0.00586 J	0.00293	253.61 T
4 - 5	0.0037 J	0.00242	175.26 T
5 - 6	0.000468 J	0.000357 J	109.8 T
6 - 7	0.00044 J	0.000206 J	53.64 T
7 - 8	0.000106 J	0.000108 U	15 UJT

Depth (ft)	PD30 PeCDD	PD30 TCDD	PD30 tPCB(A)
0 - 1	0.0011 J	0.00116 J	86.94 T
1 - 2	0.00209 J	0.00157 J	109.79 JT
2 - 3	0.00246 J	0.00168 J	131.58 T
3 - 4	0.00327 J	0.00179 J	121.67 T
4 - 5	0.00822 J	0.00368	377.67 T
5 - 6	--	--	--
6 - 7	--	--	--
7 - 8	--	--	--
8 - 9	0.0009 J	0.000236 U	33.15 T
9 - 10	0.00074 J	0.0000817 U	49.905 T

Depth (ft)	PD25 tPCB(A)
0 - 1	15.8 JT
1 - 2	83.43 JT
2 - 3	4.94 JT
3 - 4	0.67 UT
4 - 5	0.64 UT

Depth (ft)	PD26A DDx	PD26A tPCB(A)
0 - 1	331.54 T	156.98 JT
1 - 2	421.36 JT	101.115 JT
2 - 3	84.505 T	58.73 JT
3 - 4	1.635 JT	59.31 JT

Depth (ft)	PD28 PeCDD	PD28 tPCB(A)
0 - 1	0.000581 J	33.35 T
1 - 2	0.00268 J	111.58 JT
2 - 3	0.00074 J	128.43 JT
3 - 4	0.000478 J	30.1 JT
4 - 5	0.000082 U	0.79 UJT

Depth (ft)	PD45 PeCDD	PD45 TCDD	PD45 tPCB(A)
0 - 1	0.001 J	0.00027 J	20.9 JT
1 - 2	0.000783 J	0.00018 J	24.01 JT
2 - 3	0.00299 J	0.0011 J	161.4 T
3 - 4	0.000945 J	0.000428 J	35.28 JT
4 - 5	0.000032 U	0.000041 U	0.81 UT
5 - 6	0.000133 UJ	0.000495 UJ	0.93 UJT

Map Notes
* Metro 2019 Aerial Imagery
* Portland Harbor FS Database (http://ph-public-data.com/document/CDMSmith2018/)
* Portland Harbor PDI-BL (Pre-RD) Sample Database (http://ph-public-data.com/document/PHRD_2019/)

All results in are concentrations in ug/kg (micrograms per kilogram dry weight)
Depths listed are as-recovered depths (not in situ depths)
(A) = result based on Aroclor analyses
(C) = result based on Congener analyses

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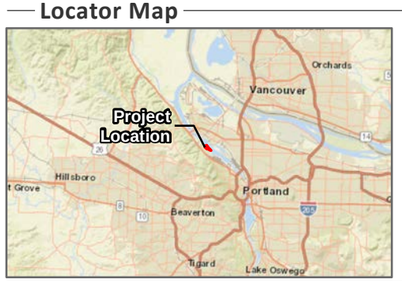
Locator Map



Legend

Maximum detected concentration
- Non-Detect
- Less than PTW and RAL or PQL (if applicable)
- Greater than RAL or PQL (if applicable), Less than PTW
- Greater than PTW
- Surface (Solid Symbol)
- Subsurface (Hollow Symbol)

Symbol Definition
- Phase 1 PDI (Sediment)
- 2018 Pre-RD (Sediment)
- Portland Harbor RI/FS (Sediment)
- Bathymetry (2ft) Contours
- Willbridge Cove Project Area
- Sediment Management Area (ROD ESD 2018)
- Planned surface sediment grab and sediment core location (10 ft)
- Planned surface sediment grab and sediment core location (15 ft)
- Planned under-dock surface grab and sediment core location (5 ft)

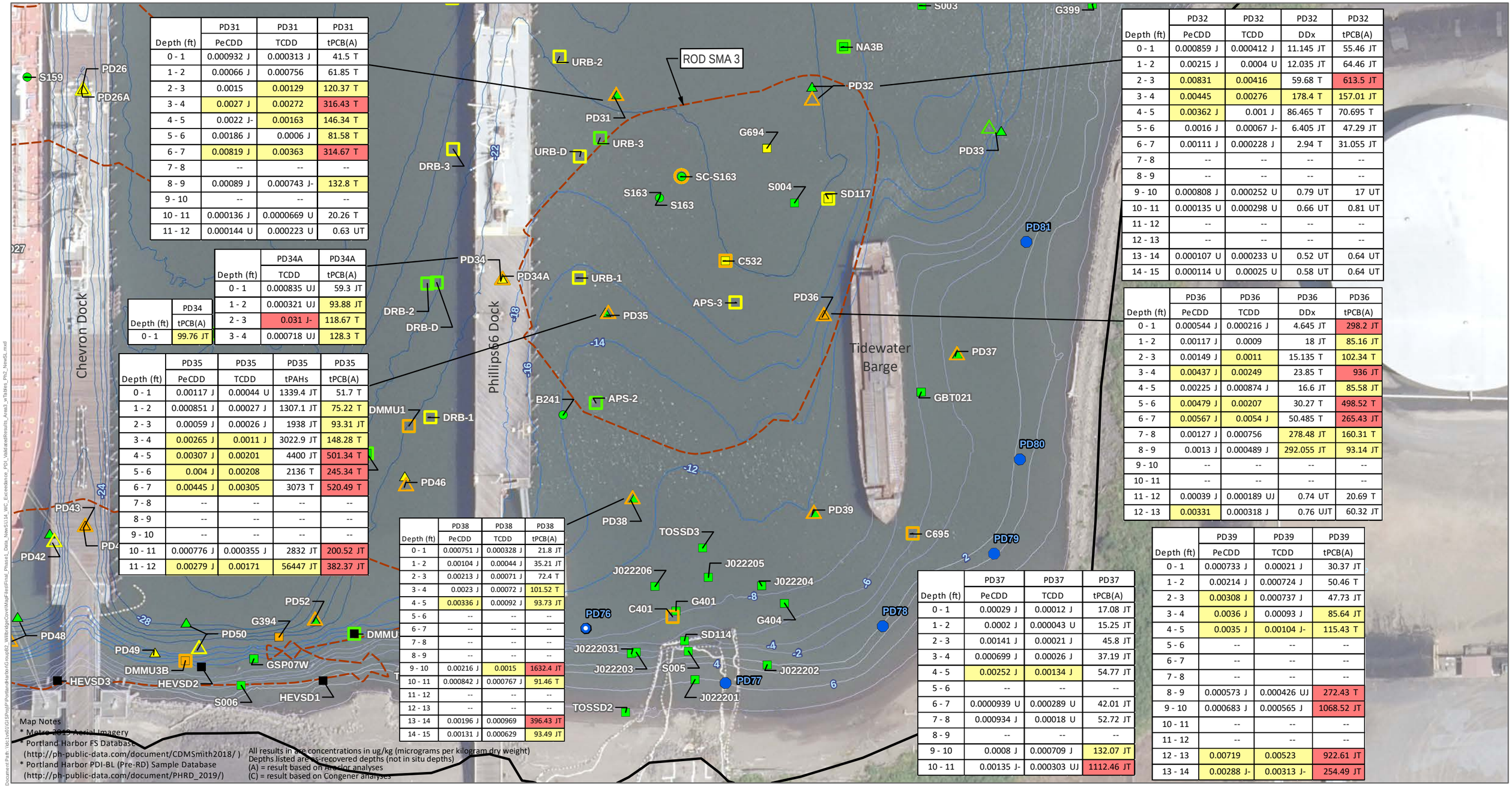
Table Definition
- Greater than RAL or PQL (if applicable)
- Greater than PTW

Bathymetric survey conducted by David Evans Associates Inc (DEA)
Precision multibeam and single beam survey conducted between March 6, 2018 and June 15, 2018
North American Vertical Datum of 1988 (NAVD88)

0 100 200 Feet

FIGURE A-2
PHASE 1 PDI RESULTS
ROD SMA 2
Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Jacobs



Depth (ft)	PD31 PeCDD	PD31 TCDD	PD31 tPCB(A)
0 - 1	0.000932 J	0.000313 J	41.5 T
1 - 2	0.00066 J	0.000756	61.85 T
2 - 3	0.0015	0.00129	120.37 T
3 - 4	0.0027 J	0.00272	316.43 T
4 - 5	0.0022 J-	0.00163	146.34 T
5 - 6	0.00186 J	0.0006 J	81.58 T
6 - 7	0.00819 J	0.00363	314.67 T
7 - 8	--	--	--
8 - 9	0.00089 J	0.000743 J-	132.8 T
9 - 10	--	--	--
10 - 11	0.000136 J	0.0000669 U	20.26 T
11 - 12	0.000144 U	0.000223 U	0.63 UT

Depth (ft)	PD34 tPCB(A)
0 - 1	99.76 JT

Depth (ft)	PD34A TCDD	PD34A tPCB(A)
0 - 1	0.000835 UJ	59.3 JT
1 - 2	0.000321 UJ	93.88 JT
2 - 3	0.031 J-	118.67 T
3 - 4	0.000718 UJ	128.3 T

Depth (ft)	PD35 PeCDD	PD35 TCDD	PD35 tPAHs	PD35 tPCB(A)
0 - 1	0.00117 J	0.00044 U	1339.4 JT	51.7 T
1 - 2	0.000851 J	0.00027 J	1307.1 JT	75.22 T
2 - 3	0.00059 J	0.00026 J	1938 JT	93.31 JT
3 - 4	0.00265 J	0.0011 J	3022.9 JT	148.28 T
4 - 5	0.00307 J	0.00201	4400 JT	501.34 T
5 - 6	0.004 J	0.00208	2136 T	245.34 T
6 - 7	0.00445 J	0.00305	3073 T	520.49 T
7 - 8	--	--	--	--
8 - 9	--	--	--	--
9 - 10	--	--	--	--
10 - 11	0.000776 J	0.000355 J	2832 JT	200.52 JT
11 - 12	0.00279 J	0.00171	56447 JT	382.37 JT

Depth (ft)	PD38 PeCDD	PD38 TCDD	PD38 tPCB(A)
0 - 1	0.000751 J	0.000328 J	21.8 JT
1 - 2	0.00104 J	0.00044 J	35.21 JT
2 - 3	0.00213 J	0.00071 J	72.4 T
3 - 4	0.0023 J	0.00072 J	101.52 T
4 - 5	0.00336 J	0.00092 J	93.73 JT
5 - 6	--	--	--
6 - 7	--	--	--
7 - 8	--	--	--
8 - 9	--	--	--
9 - 10	0.00216 J	0.0015	1632.4 JT
10 - 11	0.000842 J	0.000767 J	91.46 T
11 - 12	--	--	--
12 - 13	--	--	--
13 - 14	0.00196 J	0.000969	396.43 JT
14 - 15	0.00131 J	0.000629	93.49 JT

Depth (ft)	PD32 PeCDD	PD32 TCDD	PD32 DDx	PD32 tPCB(A)
0 - 1	0.000859 J	0.000412 J	11.145 JT	55.46 JT
1 - 2	0.00215 J	0.0004 U	12.035 JT	64.46 JT
2 - 3	0.00831	0.00416	59.68 T	613.5 JT
3 - 4	0.00445	0.00276	178.4 T	157.01 JT
4 - 5	0.00362 J	0.001 J	86.465 T	70.695 T
5 - 6	0.0016 J	0.00067 J-	6.405 JT	47.29 JT
6 - 7	0.00111 J	0.000228 J	2.94 T	31.055 JT
7 - 8	--	--	--	--
8 - 9	--	--	--	--
9 - 10	0.000808 J	0.000252 U	0.79 UT	17 UT
10 - 11	0.000135 U	0.000298 U	0.66 UT	0.81 UT
11 - 12	--	--	--	--
12 - 13	--	--	--	--
13 - 14	0.000107 U	0.000233 U	0.52 UT	0.64 UT
14 - 15	0.000114 U	0.00025 U	0.58 UT	0.64 UT

Depth (ft)	PD36 PeCDD	PD36 TCDD	PD36 DDx	PD36 tPCB(A)
0 - 1	0.000544 J	0.000216 J	4.645 JT	298.2 JT
1 - 2	0.00117 J	0.0009	18 JT	85.16 JT
2 - 3	0.00149 J	0.0011	15.135 T	102.34 T
3 - 4	0.00437 J	0.00249	23.85 T	936 JT
4 - 5	0.00225 J	0.000874 J	16.6 JT	85.58 JT
5 - 6	0.00479 J	0.00207	30.27 T	498.52 T
6 - 7	0.00567 J	0.0054 J	50.485 T	265.43 JT
7 - 8	0.00127 J	0.000756	278.48 JT	160.31 T
8 - 9	0.0013 J	0.000489 J	292.055 JT	93.14 JT
9 - 10	--	--	--	--
10 - 11	--	--	--	--
11 - 12	0.00039 J	0.000189 UJ	0.74 UT	20.69 T
12 - 13	0.00331	0.000318 J	0.76 UJT	60.32 JT

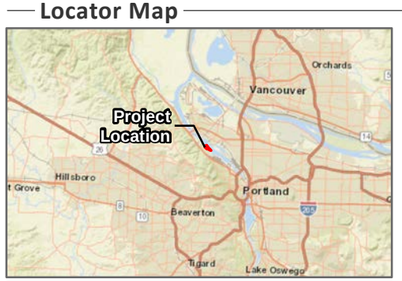
Depth (ft)	PD37 PeCDD	PD37 TCDD	PD37 tPCB(A)
0 - 1	0.00029 J	0.00012 J	17.08 JT
1 - 2	0.0002 J	0.000043 U	15.25 JT
2 - 3	0.00141 J	0.00021 J	45.8 JT
3 - 4	0.000699 J	0.00026 J	37.19 JT
4 - 5	0.00252 J	0.00134 J	54.77 JT
5 - 6	--	--	--
6 - 7	0.0000939 U	0.000289 U	42.01 JT
7 - 8	0.000934 J	0.00018 U	52.72 JT
8 - 9	--	--	--
9 - 10	0.0008 J	0.000709 J	132.07 JT
10 - 11	0.00135 J-	0.000303 UJ	1112.46 JT

Depth (ft)	PD39 PeCDD	PD39 TCDD	PD39 tPCB(A)
0 - 1	0.000733 J	0.00021 J	30.37 JT
1 - 2	0.00214 J	0.000724 J	50.46 T
2 - 3	0.00308 J	0.000737 J	47.73 JT
3 - 4	0.0036 J	0.00093 J	85.64 JT
4 - 5	0.0035 J	0.00104 J-	115.43 T
5 - 6	--	--	--
6 - 7	--	--	--
7 - 8	--	--	--
8 - 9	0.000573 J	0.000426 UJ	272.43 T
9 - 10	0.000683 J	0.000565 J	1068.52 JT
10 - 11	--	--	--
11 - 12	--	--	--
12 - 13	0.00719	0.00523	922.61 JT
13 - 14	0.00288 J-	0.00313 J-	254.49 JT

Map Notes
* Metro 2019 Aerial Imagery
* Portland Harbor FS Database (http://ph-public-data.com/document/CDMSmith2018/)
* Portland Harbor PDI-BL (Pre-RD) Sample Database (http://ph-public-data.com/document/PHRD_2019/)

All results in are concentrations in ug/kg (micrograms per kilogram dry weight)
Depths listed are as-recovered depths (not in situ depths)
(A) = result based on Aroclor analyses
(C) = result based on Congener analyses

Locator Map



Legend

Maximum detected concentration
- Non-Detect
- Less than PTW and RAL or PQL (if applicable)
- Greater than RAL or PQL (if applicable), Less than PTW
- Greater than PTW
- Surface (Solid Symbol)
- Subsurface (Hollow Symbol)

Symbol Definition
- Phase 1 PDI (Sediment)
- 2018 Pre-RD (Sediment)
- Portland Harbor RI/FS (Sediment)
- Bathymetry (2ft) Contours
- Willbridge Cove Project Area
- Sediment Management Area (ROD ESD 2018)
- Planned surface sediment grab and sediment core location (10 ft)
- Planned surface sediment grab and sediment core location (15 ft)

Table Definition
- Greater than RAL or PQL (if applicable)
- Greater than PTW

Bathymetric survey conducted by David Evans Associates Inc (DEA)
Precision multibeam and single beam survey conducted between
March 6, 2018 and June 15, 2018
North American Vertical Datum of 1988 (NAVD88)

0 75 150 Feet

FIGURE A-3
PHASE 1 PDI RESULTS
ROD SMA 3
Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Jacobs

Depth (ft)	PD40 tPCB(A)
0 - 1	30.31 JT
1 - 2	17.09 JT
2 - 3	78.55 JT
3 - 4	159.61 JT
4 - 5	121.52 JT
5 - 6	--
6 - 7	--
7 - 8	--
8 - 9	0.65 UT
9 - 10	0.67 UT

Depth (ft)	PD43 PeCDD	PD43 TCDD	PD43 DDx	PD43 tPAHs	PD43 tPCB(A)
0 - 1	0.00494	0.00414	336.555 JT	60280 JT	422.55 JT

Depth (ft)	PD43A PeCDD	PD43A TCDD	PD43A DDx	PD43A tPCB(A)
0 - 1	0.000572 J-	0.000446 UJ	146.44 T	796.73 JT
1 - 2	0.00339 J-	0.00323 J-	144.725 T	356.61 T
2 - 3	0.00225 J	0.000833 J	545.52 JT	85.87 T
3 - 4	0.0016 J	0.000614 J	511.505 T	98.695 T

Depth (ft)	PD44 PeCDD	PD44 TCDD
0 - 1	0.000696 J	0.000208 J
1 - 2	0.000803 J	0.00031 J
2 - 3	0.00132 J	0.00039 J
3 - 4	0.00288 J	0.0011
4 - 5	0.00058 J	0.000067 J
5 - 6	--	--
6 - 7	--	--
7 - 8	0.000133 UJ	0.000562 UJ
8 - 9	0.000145 U	0.000297 U

Depth (ft)	PD46 PeCDD	PD46 TCDD	PD46 tPCB(A)
0 - 1	0.00537 J	0.000223 J	29 JT
1 - 2	0.00121 J	0.00046 J	48.52 T
2 - 3	0.001 J	0.00038 J-	42.28 JT
3 - 4	0.0011 J	0.000593 J	127.28 T
4 - 5	0.00118 J	0.00045 J	77.73 T
5 - 6	0.00211 J	0.00099 J	62.52 JT
6 - 7	0.00277 J	0.001 J	49.91 JT
7 - 8	--	--	--
8 - 9	0.000259 J-	0.000704 UJ	198.37 JT
9 - 10	0.000598 J	0.00064 J	650.22 JT
10 - 11	0.000865 J	0.000413 UJ	216.04 JT
11 - 12	0.00175 U	0.00139	96.04 JT

Depth (ft)	PD42 DDx
0 - 1	20.07 JT
1 - 2	--
2 - 3	--
3 - 4	342.46 T
4 - 5	1.595 JT
5 - 6	0.6 UJT
6 - 7	0.51 UJT

Depth (ft)	PD48 PeCDD	PD48 TCDD	PD48 DDx	PD48 tPCB(A)
0 - 1	0.000279 J	0.0000969 J	5.655 JT	31.6 T
1 - 2	0.00438	0.00277	20.565 JT	833.7 JT
2 - 3	0.00348 J	0.00292	39.695 JT	561.1 JT
3 - 4	0.00294 J	0.00393	75.605 T	431.1 T
4 - 5	0.00584	0.00733	166.3 T	606.8 JT
5 - 6	0.00211 J	0.00364	93.79 T	115.01 JT
6 - 7	0.00157 J	0.00214	79.365 T	126.92 JT
7 - 8	0.0007 J	0.00102	33.685 JT	51.13 JT
8 - 9	0.000176 J	0.000362 J	7.2 JT	13.8 JT
9 - 10	0.0000859 U	0.000106 U	1.59 JT	0.62 UT

Depth (ft)	PD49 tPCB(A)
0 - 1	89.18 T

Depth (ft)	PD50 DDx	PD50 tPCB(A)
0 - 1	137.435 JT	67.74 JT
1 - 2	245.445 JT	97.35 JT
2 - 3	11.02 T	21.58 JT
3 - 4	7.595 JT	7.05 JT
4 - 5	2.385 JT	0.71 UT

Depth (ft)	PD52 TCDD	PD52 tPCB(A)
0 - 1	0.00014 J	28.13 JT
1 - 2	0.00024 U	35.9 JT
2 - 3	0.000341 J	53.4 T
3 - 4	0.000378 J	104.01 T
4 - 5	0.000585 J	633.83 T
5 - 6	0.00157	1303.92 T
6 - 7	0.00021 J	153.04 JT
7 - 8	0.000441 J	194.95 JT
8 - 9	0.00066	106.89 JT
9 - 10	0.000302 U	9.78 JT

Map Notes
* Metro 2019 Aerial Imagery
* Portland Harbor FS Database (http://ph-public-data.com/document/CDMSmith2018/)
* Portland Harbor PDI-BL (Pre-RD) Sample Database (http://ph-public-data.com/document/PHRD_2019/)

All results in are concentrations in ug/kg (micrograms per kilogram dry weight)
Depths listed are as-recovered depths (not in situ depths)
(A) = result based on Aroclor analyses
(C) = result based on Congener analyses

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Locator Map

Legend

Maximum detected concentration (Table 21 COCs)
- Non-Detect
- Less than PTW and RAL
- Greater than RAL, Less than PTW
- Greater than PTW
- Surface (Solid Symbol)
- Subsurface (Hollow Symbol)

Symbol Definition
- Phase 1 PDI (Sediment)
- 2018 Pre-RD (Sediment)
- Portland Harbor RI/FS (Sediment)
- Phase 1 Successful PDI Soil Boring
- Phase 1 Attempted PDI Soil Boring
- Planned surface sediment grab and sediment core location (10 ft)
- Planned surface sediment grab and sediment core location (15 ft)
- Planned under-dock surface grab and sediment core location (5 ft)
- Bathymetry (2ft) Contours
- Willbridge Cove Project Area
- Sediment Management Area (ROD ESD 2018)

Table Definition
- Greater than RAL or PQL (if applicable)
- Greater than PTW

Bathymetric survey conducted by David Evans Associates Inc (DEA)
Precision multibeam and single beam survey conducted between
March 6, 2018 and June 15, 2018
North American Vertical Datum of 1988 (NAVD88)

0 50 100 Feet

FIGURE A-4
PHASE 1 PDI RESULTS
ROD SMA 4 & 5
Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Jacobs

FIGURE A-5

HISTORICAL RESULTS DOWNSTREAM AREA

Portland Harbor Superfund Site
Willbridge Cove Project Area
Portland, Oregon

Legend

Maximum detected concentration

- Non-Detect
- Less than PTW and RAL or PQL (if applicable)
- Greater than RAL or PQL (if applicable), Less than PTW
- Greater than PTW
- Surface (Solid Symbol)
- Subsurface (Hollow Symbol)

Table Definition

- Greater than RAL or PQL (if applicable)
- Greater than PTW

Symbol Definition

- Planned surface sediment grab and sediment core location (10 ft)
- Planned surface sediment grab and sediment core location (15 ft)
- Planned under-dock surface grab and sediment core location (5 ft)
- Planned River Bank Sample Location
- Bathymetry (2ft) Contours
- Willbridge Cove Project Area
- Sediment Management Area (ROD ESD 2018)
- KM Pipeline Area (Approximate)
- Phase 1 PDI (Sediment)
- 2018 Pre-RD (Sediment)
- Portland Harbor RI/FS (Sediment)
- Phase 1 PDI Soil Boring

0 125 250 Feet

Map Notes
* Metro 2019 Aerial Imagery
* Portland Harbor FS Database (http://ph-public-data.com/document/CDMSmith2018/)
* Portland Harbor PDI-BL (Pre-RD) Sample Database (http://ph-public-data.com/document/PHRD_2019/)

Bathymetric survey conducted by David Evans Associates Inc (DEA)
Precision multibeam and single beam survey conducted between March 6, 2018 and June 15, 2018
North American Vertical Datum of 1988 (NAVD88)

Jacobs

Locator Map

LW3-688		
	DDx	tPCB (C)
0.98 - 3.74	15 JNT	13 JT
3.74 - 7.25	30 T	71 JT
7.25 - 9.22	1300 JT	230 JT
13.25 - 14.99	81 T	54 JT

LW2-C377		
	DDx	tPCB (C)
0.98 - 5.02	62 JNT	39.6 JNT
5.02 - 8.96	99 JNT	280 T
8.96 - 12.11		
12.11-15.81	260 JNT	

LW3-C690			
	PeCDD	TCDD	tPCB (C)
0.98 - 4.95	0.0000146 U	0.00000801 U	17 T
4.95-8.99	0.000412 J	0.000174 J	48 T
8.99-11.35	0.000809 J	0.000441 J	220 T
11.35-15.45	0.00741	0.00117	450 JT

Appendix B

Revised Phase 1 PDI Data Quality Evaluation

Revised Data Quality Evaluation

Phase 1 Pre-Design Investigation, Portland Harbor Superfund Site,
Willbridge Cove Project Area, Portland, Oregon
Willbridge Cove Group

December 2022

Contents

Tables

Acronyms and Abbreviations

CCV	continuing calibration verification
DQE	data quality evaluation
DQO	data quality objective
EB	equipment blank
EMPC	estimated maximum possible concentration
FD	field duplicate
LCS	laboratory control sample
MDL	method detection limit
MS	matrix spike
MSD	matrix spike duplicate
QAPP	quality assurance project plan
QC	quality control
RL	reporting limit
RPD	relative percent difference
SDG	sample delivery group

1. Introduction

The objective of this revised data quality evaluation (DQE) report is to assess the data quality of analytical results for sediment and soil samples collected during the Phase 1 Pre-Design Investigation at the Willbridge Cove Project Area within the Portland Harbor Superfund Site in Portland, Oregon. The revised DQE report replaces the data quality evaluation presented in the *Draft Phase 1 Pre-Design Investigation Data Report* (Jacobs 2022), which included only the Phase 1 data that was available at the time and used the Region 10 guidelines rather than national guidelines for validation of dioxin/furan data. Individual method requirements and guidelines from the *Portland Harbor Superfund Site Willbridge Cove Area Remedial Design, Pre-Design Investigation Quality Assurance Project Plan* (Jacobs 2021 [QAPP]) were used in this assessment.

This report is intended as a general data quality assessment designed to summarize data issues.

2. Analytical Data

This DQE report covers 321 primary (also referred to as "normal") sediment samples, 12 primary soil samples, 7 sediment field duplicates (FDs), one soil FD, 3 soil matrix spike/matrix spike duplicate (MS/MSD) sets, 1 soil MS, 32 sediment MS/MSD sets, and 16 equipment blanks (EBs). A list of samples and collection dates is included in Table H-1. Samples were collected between June 14 and March 30, 2022. These sample results were reported as 40 sample delivery groups (SDGs) listed in Table H-2. The analyses were performed by ALS Laboratory in Kelso, Washington, ALS Laboratory in Saskatoon, Saskatchewan, Canada, ALS Laboratory in Burlington, Ontario, Canada, and ALS Laboratory in Houston, Texas. Fourteen methods were used to analyze the environmental samples. One or more of the samples were analyzed for the analytes/methods presented in Table H-3.

Ninety percent of the data were validated per Stage 2A data validation requirements. Ten percent of the data for U.S. Environmental Protection Agency Methods E1613B, SW8270D-SIM, E1699M, SW8082A, and E1668 data were validated per Stage 4 data validation requirements. A description of what is included in the validation levels is included in Section 7.2 of the QAPP.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of FDs, MS/MSDs, and EBs.

Data flags were assigned according to the QAPP. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there is only one final flag. The final flag assigned to the result is the most conservative of the applied validation flags as outlined in Section 7.2.2 of the QAPP. For purposes of reporting data to the Portland Harbor Interim Database, nondetected results are reported at the method detection limit (MDL); for the following definitions listed, the specified detection limit refers to the MDL.

The data flags are those listed in the QAPP and are defined as follows:

- J = Analyte was present but reported value may not be accurate or precise.
- J+ = Analyte was present but reported value may not be accurate or precise, high bias.
- J- = Analyte was present but reported value may not be accurate or precise, low bias.
- R = This result has been rejected.
- U = This analyte was analyzed for but not detected at the specified detection limit.
- UJ = The analyte was not detected above the detection limit; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

3. Findings

Table H-4 shows all final validation flags based on the most conservative of the applied validation flags as outlined in Section 7.2.2 of the QAPP. The following sections and Tables H-5 through H-17 summarize the data qualifiers applied for each element of quality control in Section 5.3 of the QAPP.

3.1 Calibration

Initial and continuing calibration information were not reviewed as part of the Stage 2A validation. However, the case narratives were reviewed for comments on initial and continuing calibration exceedances that would affect sample results. The following exceedances were noted in the case narratives and reviewed in the summary calibration forms; associated results were qualified as estimated:

- OCDD was reported greater than the initial calibration range in seven samples for Method E1613B. Seven detected results were flagged "J."
- The recovery of diesel-range organics was greater than criteria in a continuing calibration verification (CCV) for Method NWTPH-Dx. Four detected results were flagged "J+."
- The recoveries of anthracene, benzo(a)pyrene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene and pyrene were greater than criteria in the CCVs for Method SW8270DSIM. One hundred and eight detected results were flagged "J+."
- The recovery of anthracene was less than criteria in the CCVs for Method SW8270DSIM. Seventeen detected results were flagged "J-" and one nondetected result was flagged "UJ."

The samples and analytes affected by CCV exceedances are shown in Table H-5.

Initial and continuing calibration information was reviewed as part of the Stage 4 validation discussed in Section 3.16.

3.2 Holding Times

All holding-time criteria were met with the following exceptions:

Nine sediment samples were released from archive after the one-year frozen archive holding time was expired, results are possibly biased low. All results for Methods E1613B, E1699M, SW8082 and SW8270DSIM were qualified as estimated; 404 detected results were flagged "J-" and 100 nondetected results were flagged "UJ". The samples and analytes affected by CCV exceedances are shown in Table H-6.

3.3 Method Blanks

Method blanks were analyzed at the required frequency and were free of contamination that would affect the sample results with the following exceptions:

- Diesel-range organics and residual-range organics were detected at concentrations lower than the reporting limit (RL) in a method blank for Method NWTPH-Dx. Associated results less than five times the blank concentrations were qualified as not detected and flagged "U;" 13 results were affected.
- Bis (2-ethylhexyl) phthalate was detected at a concentration lower than the RL in a method blank for Method SW8270D-LL. Associated results less than five times the blank concentrations were qualified as not detected and flagged "U;" 3 results were affected.
- Twenty-three analytes were detected at concentrations lower than the RL in the method blanks for Method E1613B. Associated results less than five times the blank concentrations were qualified as not detected and flagged "U;" 195 results were affected.

- Eighteen analytes were detected at concentrations lower than the RL in the method blanks for Method SW8270DSIM. Associated results less than five times the blank concentrations were qualified as not detected and flagged "U;" 256 results were affected.

The samples and analytes affected by method blank detections are shown in Table H-7.

3.4 Equipment Blanks

Sixteen EBs were collected and analyzed and were free of contamination that would affect the sample results.

3.5 Field Duplicates

Seven FD sets were collected. The precision criteria of 25 percent for Methods SW8270D-SIM and SW8082A; 20 percent for Methods SW6020B, SW7471A, E1613B, SW9060A, ASTM International (ASTM) D6913/D7928, and E1668A; 40 percent for Method SW8270D-LL; and 50 percent for Method E1699M were met with the exceptions listed as follows. Where precision criteria were exceeded, associated results were qualified as estimated.

- Four analytes in one FD set for Method ASTM D6913/D7928; Eight detected results were flagged "J."
- Twenty-five analytes in one or more of eight FD sets for Method E1613B; six nondetected results were flagged "UJ" and 214 detected results were flagged "J."
- Two analytes in one or more of two FD sets for Method E1699M; Four detected results were flagged "J."
- Three analytes in one or more of three FD sets for Method SW8082A; twelve detected results were flagged "J."
- Seventeen analytes in one or more of five FD sets for Method SW8270DSIM; Six nondetected results were flagged "UJ" and 100 detected results were flagged "J."
- Thirty-five analytes in one FD set for Method E1668; One nondetected result was flagged "UJ" and 69 detected results were flagged "J."
- Total organic carbon in two FD sets for Method SW9060A; Four detected results were flagged "J."

The samples and analytes affected by FD relative percent differences (RPD) exceedances are shown in Table H-8.

3.6 Laboratory Duplicates

Laboratory duplicates were analyzed for Methods ASTM D6913/ASTM D7928, E1668, SW6020B, NWTPH-Dx, SW7471A, and SW9060. All precision criteria were met with the exceptions listed as follows. Where precision criteria were exceeded, associated results were qualified as estimated.

- Twenty-five analytes in one or more of nine laboratory duplicates for Method E1613B; one hundred three detected results were flagged "J."
- Forty-seven analytes in one laboratory duplicate for Method E1668; Forty-seven detected results were flagged "J."
- Two analytes in one laboratory duplicate for Method NWTPH-Dx; Two detected results were flagged "J."
- Three analytes in one laboratory duplicate for Method SW6020B; Three detected results were flagged "J."
- One analyte in two laboratory duplicates for Method ASTM D6913/ASTM D7928; Two detected results were flagged "J."

- One analyte in one laboratory duplicate for Method SW9060; One detected result was flagged "J."

The samples and analytes affected by laboratory duplicate RPD exceedances are shown in Table H-9.

3.7 Laboratory Control Samples

Laboratory control samples (LCSs)/laboratory control sample duplicates were analyzed for all methods as required. All acceptance criteria were met with the exceptions listed as follows. Where criteria were exceeded, associated results were qualified as estimated:

- The recovery of 1,2,3,7,8,9-HxCDD was greater than the upper control limit for Method E1613B in one SDG. Nineteen associated detected results were flagged "J+."
- The recovery of aldrin was less than the lower control limit for Method E1699M from multiple SDGs. Nine associated nondetected results were flagged "UJ."
- The recoveries of two analytes were greater than the upper control limit for Method E1699M from multiple SDGs. Twenty-five associated detected results were flagged "J+."
- The recoveries of two analytes were less than the lower control limit for Method SW8082A from multiple SDGs. Six associated detected results were flagged "J-;" 23 associated nondetected results were flagged "UJ."
- The recovery of mercury was less than the lower control limit for Method SW7471A from one SDG. Three associated detected results were flagged "J-."

The samples and analytes affected by laboratory duplicate RPD exceedances are shown in Table H-10, with the affected SDGs identified.

3.8 Matrix Spike Samples

The results of MS/MSD analyses provide information about the possible influence of the matrix on either accuracy or precision of the measurements. Twenty-nine MS/MSD sets and one MS were submitted by the field team or selected by the laboratory. All acceptance criteria were met with the exceptions listed as follows. Where criteria were exceeded, associated results were qualified as estimated.

- The recoveries and/or RPD of 12 analytes were outside of the control limits in 1 or more of 5 MS/MSD sets for Method E1613B. Twelve associated detected results were flagged "J," seven associated detected results were flagged "J-," and three associated detected results were flagged "J+."
- The recoveries and/or RPDs of six analytes were outside of the control limits in one or more of nine MS/MSD sets for Method E1699M. One associated detected result was flagged "J," seven associated detected results were flagged "J-," three associated detected results were flagged "J+," and two associated nondetected results were flagged "UJ."
- The recoveries of two analytes were outside of the control limits in one or more of seven MS/MSD sets for Method SW8082A. Six associated detected results were flagged "J-", one associated detected result was flagged "J+" and one associated nondetected result was flagged "UJ".
- The recoveries and/or RPDs of 17 analytes were outside of the control limits in one or more of 15 MS/MSD sets for Method SW8270DSIM. Twenty associated detected results were flagged "J," 42 associated detected results were flagged "J-," and 5 associated detected results were flagged "J+."
- The recovery and RPD of total organic carbon were outside of the control limits in one MS/MSD set for Method SW9060A. One associated detected result was flagged "J+."

The samples and analytes affected by MS/MSD recovery and RPD exceedances are shown in Table H-11.

3.9 Surrogates

Surrogates were analyzed for all required methods. All acceptance criteria were met with the exceptions listed as follows. Where criteria were exceeded, associated results were qualified as estimated. Additional laboratory surrogates used that were not listed in the QAPP were evaluated using the sample quality control (QC) criteria for the QAPP-listed surrogates.

- Surrogate recoveries were outside of the control limits in 157 samples for Method E1613B. Three associated detected results were flagged "J+," 190 nondetected results were flagged "UJ," and 744 associated detected results were flagged "J-."
- Surrogate recoveries were outside of the control limits in 68 samples for Method E1699M. Fifty-seven associated detected results were flagged "J+," 177 nondetected results were flagged "UJ," and 106 associated detected results were flagged "J-."
- Surrogate recoveries were outside of the control limits in 35 samples for Method SW8082A. Thirty-seven associated detected results were flagged "J+," 130 nondetected results were flagged "UJ," and 29 associated detected results were flagged "J-."
- Surrogate recoveries were outside of the control limits in nine samples for Method SW8270D-SIM. Thirty-eight associated detected results were flagged "J+," 26 nondetected results were flagged "UJ," and 82 associated detected results were flagged "J-."
- Surrogate recoveries were outside of the control limits in 11 samples for Method E1668. One associated detected result was flagged "J+," 829 nondetected results were flagged "UJ," and 418 associated detected results were flagged "J-."
- The samples and analytes affected by surrogate recovery exceedances are shown in Table H-12.

3.10 Internal Standards

Internal standards were analyzed for all required methods. All acceptance criteria were met with the exception listed as follows. Where criteria were exceeded, associated results were qualified as estimated.

- Internal standard recoveries were outside of criteria in 57 samples for Method E1699M. One hundred forty-one associated detected results were flagged "J-," and 194 associated nondetected results were flagged "UJ."
- Internal standard recoveries were outside of criteria in one sample for Method SW8270DSIM. Eighteen associated detected results were flagged "J+."

The samples and analytes affected by internal standard exceedances are shown in Table H-13.

3.11 Matrix Interferences

Matrix interference for Methods E1613B, E1668, and SW8270DSIM may cause a potential bias in results. The following samples showed evidence of matrix interference and high bias:

- One analyte in six samples for Method E1613B; six associated detected results were flagged "J+."
- Two analytes in one or more of ten samples for Method SW8270DSIM; 13 associated detected results were flagged "J+."
- Four analytes in one or more of two samples for Method E1668; seven associated detected results were flagged "J+."

The samples and analytes affected by matrix interferences are shown in Table H-14.

3.12 Coelution

Coelution due to matrix interference was observed for Method E1613B, indicating associated sample results are possibly biased.

- Four analytes in 1 or more of 60 samples exhibited coelution with nontarget compounds, 59 associated results were flagged “J.”

The samples and analyte affected by coelution are shown in Table H-15.

3.13 Estimated Maximum Possible Concentrations

Estimated maximum possible concentration (EMPC) values were qualified as estimated detected results for Methods E1613B, E1699M and E1668.

EMPCs were reported for Method E1613B where ion abundance ratio criteria were not met. Seventeen analytes in one or more of 262 samples did not meet ion abundance ratio criteria; 848 results were qualified as estimated and flagged “J”.

EMPCs were reported for Method E1668 where ion abundance ratio criteria were not met. One hundred analytes in 1 or more of 11 samples did not meet ion abundance ratio criteria; 212 results were qualified as estimated and flagged “J”.

EMPCs were reported for Method E1699M where analyte identification was affected by matrix. One analyte in two samples did not meet analyte identification criteria; two results were qualified as estimated and flagged "J".

The samples and analytes where EMPCs are reported are shown in Table H-16.

3.14 Confirmation

The confirmation RPD criteria of 40 percent was exceeded for 4 analytes in 1 or more of 122 samples for Method SW8082A. Associated detected results were qualified as estimated; 173 associated detected results were flagged “J.”

The samples and analytes affected by confirmation exceedances are shown in Table H-17.

3.15 Chain of Custody

Samples were documented in a completed chain of custody and received at the laboratory within temperature criteria with the following exceptions:

- Eleven samples were received at the laboratory over the temperature criterion for Methods E1613B, E1668, and E1699M. Associated results are possibly biased low; 460 associated detected results were qualified as estimated and flagged “J-” and 555 associated nondetected results were qualified as estimated and flagged “UJ.” The samples and analytes affected by temperature exceedances are shown in Table H-18.
- Samples received at the laboratory for archive storage were logged under cumulative archive SDGs for holding. Samples released from archive for analysis via email notification from the Jacobs team were logged under new SDGs for reporting.

3.16 Stage 4 Validation

Ten percent of the data for Methods E1613B, SW8270D-SIM, E1699M, SW8082A, and E1668 data were validated per Stage 4 data validation requirements. A description of what is included in the Stage 4

validation is provided in Section 7.2 of the QAPP. Table H-19 documents the samples and analytical results that were recalculated during Stage 4 validation. Table H-20 documents the number of samples by method within each SDG chosen for Stage 4 validation. Table H-21 shows the overall percent of analytical results covered by the Stage 4 validation (Jacobs 2021). The samples and analytes selected for recalculation were those with detected concentrations of representative analytes in each of the analyte groups with remediation action levels or principal threat waste thresholds.

- Six SDGs were selected for Stage 4 validation: K2106883/L2603308, K2107598/L2611545, K2108076/L2615164, K2111070/L2645716, K2111955/L2658841, and K2200743.
  - For Method E1613B, the recalculation of the sample results focused only on the analytes with remediation action levels or principal threat waste thresholds: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 2,3,4,7,8-PeCDF, 2,3,7,8-TCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,4,7,8-HxCDF.
  - For Method SW8270D-SIM, the recalculation of the sample results included one analyte for each internal standard in the calibration: naphthalene, acenaphthene, fluoranthene, benzo(a)anthracene and benzo(a)pyrene.
  - For Method E1699M, the recalculation of the sample results focused on detected results reported in the SDGs and included: 4,4'-DDD, 4,4'-DDT, and 4,4'-DDE.
  - For Method SW8082A, the recalculation of the sample results focused on detected results reported in the SDGs and included: Aroclor-1260.
  - For Method E1668, recalculation of the sample results was performed for PCB-003 and PCB-118.
- For each of the six SDGs selected for Stage 4 validation, the following elements were reviewed as outlined in Section 7.2 of the QAPP:
  - At least one sample, the LCS and the MS/MSD (if analyzed) were recalculated for select analytes as listed above.
  - At least one point in the initial calibration, and the associated continuing calibration results were recalculated.
    - Initial calibration data were reviewed for all analytes, including initial calibration verification criteria.
  - Continuing calibration data, including CCVs and continuing calibration blanks, were reviewed.
  - Method-specific instrument performance checks such as tunes and breakdown checks were reviewed.
  - Frequency of instrument QC samples was reviewed.
  - Instrument response data were reviewed:
    - Reported target analyte instrument responses associated with appropriate internal standard
    - Comparison of instrument response to the minimum response requirements
    - Recalculation of percent ratios for each tune from the instrument response, as appropriate
    - Compliance check of recalculated percent ratio for each tune from the instrument response
  - Recalculation and compliance check of retention time were reviewed for select analytes listed in Table H-19.
  - Chromatograms, mass spectra, atomic emission spectra, instrument background corrections, and interference corrections were evaluated for select analytes listed in Table H-19.
- No additional validation qualifiers were applied as a result of the Stage 4 validation.

3.17 Sample Processing

To facilitate the processing of the large volume of samples through the laboratory, a communication plan was developed before the start of sample collection to meet project data quality objectives (DQOs) while streamlining sample throughput at the laboratory.

The laboratory-reported QC limits were used to process samples through the laboratory per the laboratory communication plan. The tighter QC limits listed in the QAPP were used to qualify the data for potential biases.

The laboratories performed cleanup procedures on the initial sample extracts as outlined in the laboratory standard operating procedures to reduce the number of re-extractions required, maintain sample processing and reporting, and reduce the risk of missed holding times.

3.18 Equipment Blank Associations

Section 5.3.2.1 of the QAPP documents the collection frequency of EBs. The required frequency of one per week was met. Table H-22 lists the EBs collected and their associated field samples. Table H-23 lists the analytes detected in the EBs.

3.19 Sample Quantitation

The samples listed in Table H-24 exhibited matrix interference that the laboratory was unable to resolve with cleanup procedures for Method SW8082A. The resulting elevated RLs for nondetected analytes in these samples contributed to total PCB results that were greater than project remediation action levels. An archived aliquot of each sediment sample was submitted for polychlorinated biphenyl congener analysis by Method E1668 to achieve lower detection limits for non-detect results used in the calculation of total PCB values.

3.20 Overall Assessment

The final activity in the DQE is an assessment of whether the data meet the DQOs. The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decision-making process. The following summary highlights the data evaluation findings in this DQE:

1. No data were rejected and the completeness goal of 95 percent was met for all method/analyte combinations.
2. Less than 2 percent of the data were qualified due to associated method blank contamination.
3. Approximately 17 percent of the data were qualified due to QC exceedances that included: FD and laboratory RPD exceedances, LCS recovery exceedances, surrogate and internal standard recovery exceedances, MS/MSD recovery and RPD exceedances, matrix interferences, ion ratio exceedances resulting in EMPC, calibration check exceedances, results reported greater than initial calibration range, confirmation RPD exceedances, sample receipt temperature exceedances, holding time exceedances and coelution biases.
4. Overall, the precision and accuracy of the data, as measured by laboratory and field QC indicators, confirm that the DQOs were met. Data are usable for project decision-making, considering the biases outlined in this DQE.
5. Representativeness and comparability of the data were achieved through adherence to the sampling plan. Consistent sample collection procedures, project laboratories, and analytical methodologies were used throughout the sampling event. Data were reported in consistent methods and units for the sampling event and with historical data.

6. Adequate sensitivity of the data was generally maintained. There were instances where matrix interference resulted in elevated detection limits. Each instance was reviewed by the team to determine if the elevated detection limits might indicate a data gap and a decision was made to accept the data or request additional analyses. One sample (WC-SB10-0.0-1.0) was re-extracted for diesel range organics analysis.

7. Field QC sample frequencies for soil and sediment samples collected and submitted for analysis between June 14, 2021, and March 30, 2022, were met. For sediment samples, at least one EB per week was collected per the field sampling plan; FDs were collected at a frequency of 6.7 percent which meets the requirements that one FD is collected per 20 primary samples and MS/MSDs were collected by the field team or selected by the laboratory at a frequency of 10 percent. For soil sampling, one EB per week was collected per the field sampling plan; one FD was collected (for a frequency of 8.3 percent) and MS/MSDs were collected by the field team or selected by the laboratory at a frequency of 42 percent.

4. References

Jacobs. 2021. *Portland Harbor Superfund Site Willbridge Cove Area Remedial Design, Pre-Design Investigation Quality Assurance Project Plan*. May.

Jacobs. 2022. *Draft Phase 1 Pre-Design Investigation Data Report*. July 29.

Tables

Table H-1. Sample Identifications
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Sample Type	Matrix	Date Sampled
EB-061721-01	EB	Water	6/17/2021
EB-061721-02	EB	Water	6/17/2021
EB-062421-01	EB	Water	6/24/2021
EB-063021-01	EB	Water	6/30/2021
EB-070121-01	EB	Water	7/1/2021
EB-070121-02	EB	Water	7/1/2021
EB-070921-01	EB	Water	7/9/2021
EB-070921-02	EB	Water	7/9/2021
EB-071221-01	EB	Water	7/12/2021
EB-071221-02	EB	Water	7/12/2021
EB-071321-01	EB	Water	7/13/2021
EB-071321-02	EB	Water	7/13/2021
EB-092221-01	EB	Water	9/22/2021
EB-092321-01	EB	Water	9/23/2021
WC-EB01-030922	EB	Water	3/9/2022
WC-EB01-03302022	EB	Water	3/30/2022
WC-SB11-0.0-1.0FD	FD	Soil	9/20/2021
WC-SCPD18-1.0-2.0FD	FD	Sediment	6/30/2021
WC-SCPD28-4.0-5.0FD	FD	Sediment	6/22/2021
WC-SCPD35-2.0-3.0FD	FD	Sediment	6/25/2021
WC-SCPD48-3.0-4.0FD	FD	Sediment	6/18/2021
WC-SGPD17FD	FD	Sediment	7/9/2021
WC-SGPD36FD	FD	Sediment	7/2/2021
WC-SGPD20AFD	FD	Sediment	3/8/2022
WC-SB01-0.0-1.0	N	Soil	9/23/2021
WC-SB02-0.0-1.0	N	Soil	9/21/2021
WC-SB03-0.0-1.0	N	Soil	9/22/2021
WC-SB04-0.0-1.0	N	Soil	9/22/2021
WC-SB09-0.0-1.0	N	Soil	9/22/2021
WC-SB10-0.0-1.0	N	Soil	9/21/2021
WC-SB11-0.0-1.0	N	Soil	9/20/2021
WC-SB11-1.0-2.0	N	Soil	9/20/2021
WC-SB11-2.0-3.0	N	Soil	9/20/2021
WC-SB11-3.0-4.0	N	Soil	9/20/2021
WC-SB11-4.0-5.0	N	Soil	9/20/2021
WC-SB12-0.0-1.0	N	Soil	9/20/2021
WC-SCPD01-1.0-2.0	N	Sediment	6/14/2021
WC-SCPD01-2.0-3.0	N	Sediment	6/14/2021
WC-SCPD01-3.0-4.0	N	Sediment	6/14/2021
WC-SCPD01-4.0-5.0	N	Sediment	6/14/2021
WC-SCPD03-1.0-2.0	N	Sediment	6/14/2021
WC-SCPD03-2.0-3.0	N	Sediment	6/14/2021
WC-SCPD03-3.0-4.0	N	Sediment	6/14/2021
WC-SCPD03-4.0-5.0	N	Sediment	6/14/2021
WC-SCPD03-8.0-9.0	N	Sediment	6/14/2021
WC-SCPD03-9.0-9.8	N	Sediment	6/14/2021
WC-SCPD05-1.0-2.0	N	Sediment	6/14/2021
WC-SCPD05-2.0-3.0	N	Sediment	6/14/2021
WC-SCPD05-3.0-4.0	N	Sediment	6/14/2021
WC-SCPD05-5.0-6.0	N	Sediment	6/14/2021
WC-SCPD05-6.0-7.0	N	Sediment	6/14/2021
WC-SCPD05-4.0-5.0	N	Sediment	6/14/2021
WC-SCPD06-1.0-2.0	N	Sediment	6/15/2021
WC-SCPD06-2.0-3.0	N	Sediment	6/15/2021

Table H-1. Sample Identifications
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Sample ID	Sample Type	Matrix	Date Sampled
WC-SCPD06-3.0-4.0	N	Sediment	6/15/2021
WC-SCPD06-4.0-5.0	N	Sediment	6/15/2021
WC-SCPD06-5.0-6.0	N	Sediment	6/15/2021
WC-SCPD06-6.0-7.0	N	Sediment	6/15/2021
WC-SCPD07-1.0-2.0	N	Sediment	6/15/2021
WC-SCPD07-2.0-3.0	N	Sediment	6/15/2021
WC-SCPD07-3.0-4.0	N	Sediment	6/15/2021
WC-SCPD07-4.0-5.0	N	Sediment	6/15/2021
WC-SCPD07-5.0-6.0	N	Sediment	6/15/2021
WC-SCPD08-1.0-2.0	N	Sediment	6/15/2021
WC-SCPD08-2.0-3.0	N	Sediment	6/15/2021
WC-SCPD08-3.0-4.0	N	Sediment	6/15/2021
WC-SCPD08-4.0-5.0	N	Sediment	6/15/2021
WC-SCPD08-5.0-6.0	N	Sediment	6/15/2021
WC-SCPD08-6.0-7.0	N	Sediment	6/15/2021
WC-SCPD08-7.0-8.0	N	Sediment	6/15/2021
WC-SCPD09-1.0-2.0	N	Sediment	6/30/2021
WC-SCPD09-2.0-3.0	N	Sediment	6/30/2021
WC-SCPD09-3.0-4.0	N	Sediment	6/30/2021
WC-SCPD09-4.0-5.0	N	Sediment	6/30/2021
WC-SCPD10-1.0-2.0	N	Sediment	6/18/2021
WC-SCPD10-2.0-3.0	N	Sediment	6/18/2021
WC-SCPD10-3.0-4.0	N	Sediment	6/18/2021
WC-SCPD10-4.0-5.0	N	Sediment	6/18/2021
WC-SCPD11-1.0-2.0	N	Sediment	6/16/2021
WC-SCPD11-2.0-3.0	N	Sediment	6/16/2021
WC-SCPD11-3.0-4.0	N	Sediment	6/16/2021
WC-SCPD11-4.0-5.0	N	Sediment	6/16/2021
WC-SCPD11-5.0-6.0	N	Sediment	6/16/2021
WC-SCPD11-6.0-7.0	N	Sediment	6/16/2021
WC-SCPD11-7.0-8.0	N	Sediment	6/16/2021
WC-SCPD12A-1.0-2.0	N	Sediment	3/8/2022
WC-SCPD12A-2.0-3.0	N	Sediment	3/8/2022
WC-SCPD12A-3.0-4.0	N	Sediment	3/8/2022
WC-SCPD12A-4.0-4.8	N	Sediment	3/8/2022
WC-SCPD14-1.0-2.0	N	Sediment	6/23/2021
WC-SCPD14-2.0-3.0	N	Sediment	6/23/2021
WC-SCPD14-3.0-4.0	N	Sediment	6/23/2021
WC-SCPD14-4.0-5.0	N	Sediment	6/23/2021
WC-SCPD16A-1.0-2.0	N	Sediment	3/30/2022
WC-SCPD16A-2.0-3.0	N	Sediment	3/30/2022
WC-SCPD16A-3.0-4.0	N	Sediment	3/30/2022
WC-SCPD16A-4.0-4.3	N	Sediment	3/30/2022
WC-SCPD18-1.0-2.0	N	Sediment	6/30/2021
WC-SCPD18-2.0-3.0	N	Sediment	6/30/2021
WC-SCPD18-3.0-4.0	N	Sediment	6/30/2021
WC-SCPD18-4.0-5.0	N	Sediment	6/30/2021
WC-SCPD19-1.0-2.0	N	Sediment	6/16/2021
WC-SCPD19-2.0-3.0	N	Sediment	6/16/2021
WC-SCPD19-3.0-4.0	N	Sediment	6/16/2021
WC-SCPD19-4.0-5.0	N	Sediment	6/16/2021
WC-SCPD20A-1.0-2.0	N	Sediment	3/8/2022
WC-SCPD20A-2.0-3.0	N	Sediment	3/8/2022
WC-SCPD20A-3.0-4.0	N	Sediment	3/8/2022

Table H-1. Sample Identifications
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Sample ID	Sample Type	Matrix	Date Sampled
WC-SCPD21-1.0-2.0	N	Sediment	6/17/2021
WC-SCPD21-2.0-3.0	N	Sediment	6/17/2021
WC-SCPD21-3.0-4.0	N	Sediment	6/17/2021
WC-SCPD21-4.0-5.0	N	Sediment	6/17/2021
WC-SCPD21-5.0-6.0	N	Sediment	6/17/2021
WC-SCPD21-6.0-7.0	N	Sediment	6/17/2021
WC-SCPD21-7.0-8.0	N	Sediment	6/17/2021
WC-SCPD21-8.0-8.8	N	Sediment	6/17/2021
WC-SCPD22-1.0-2.0	N	Sediment	6/16/2021
WC-SCPD22-2.0-3.0	N	Sediment	6/16/2021
WC-SCPD22-3.0-4.0	N	Sediment	6/16/2021
WC-SCPD22-4.0-5.0	N	Sediment	6/16/2021
WC-SCPD22-7.0-8.0	N	Sediment	6/16/2021
WC-SCPD22-8.0-8.7	N	Sediment	6/16/2021
WC-SCPD23-1.0-2.0	N	Sediment	6/23/2021
WC-SCPD23-2.0-3.0	N	Sediment	6/23/2021
WC-SCPD23-3.0-4.0	N	Sediment	6/23/2021
WC-SCPD23-4.0-5.0	N	Sediment	6/23/2021
WC-SCPD24-1.0-2.0	N	Sediment	6/22/2021
WC-SCPD24-2.0-3.0	N	Sediment	6/22/2021
WC-SCPD24-3.0-4.0	N	Sediment	6/22/2021
WC-SCPD24-4.0-5.0	N	Sediment	6/22/2021
WC-SCPD25-1.0-2.0	N	Sediment	6/23/2021
WC-SCPD25-2.0-3.0	N	Sediment	6/23/2021
WC-SCPD25-3.0-4.0	N	Sediment	6/23/2021
WC-SCPD25-4.0-5.0	N	Sediment	6/23/2021
WC-SCPD26A-1.0-2.0	N	Sediment	3/30/2022
WC-SCPD26A-2.0-3.0	N	Sediment	3/30/2022
WC-SCPD26A-3.0-4.0	N	Sediment	3/30/2022
WC-SCPD27-1.0-2.0	N	Sediment	6/24/2021
WC-SCPD27-2.0-3.0	N	Sediment	6/24/2021
WC-SCPD27-3.0-4.0	N	Sediment	6/24/2021
WC-SCPD27-4.0-5.0	N	Sediment	6/24/2021
WC-SCPD28-1.0-2.0	N	Sediment	6/22/2021
WC-SCPD28-2.0-3.0	N	Sediment	6/22/2021
WC-SCPD28-3.0-4.0	N	Sediment	6/22/2021
WC-SCPD28-4.0-5.0	N	Sediment	6/22/2021
WC-SCPD29-1.0-2.0	N	Sediment	6/15/2021
WC-SCPD29-2.0-3.0	N	Sediment	6/15/2021
WC-SCPD29-3.0-4.0	N	Sediment	6/15/2021
WC-SCPD29-4.0-5.0	N	Sediment	6/15/2021
WC-SCPD29-5.0-6.0	N	Sediment	6/15/2021
WC-SCPD29-6.0-7.0	N	Sediment	6/15/2021
WC-SCPD29-7.0-8.0	N	Sediment	6/15/2021
WC-SCPD30-1.0-2.0	N	Sediment	6/15/2021
WC-SCPD30-2.0-3.0	N	Sediment	6/15/2021
WC-SCPD30-3.0-4.0	N	Sediment	6/15/2021
WC-SCPD30-4.0-5.0	N	Sediment	6/15/2021
WC-SCPD30-7.0-8.0	N	Sediment	6/15/2021
WC-SCPD30-8.0-9.0	N	Sediment	6/15/2021
WC-SCPD30-9.0-9.8	N	Sediment	6/15/2021
WC-SCPD31-1.0-2.0	N	Sediment	6/18/2021
WC-SCPD31-10.0-11.0	N	Sediment	6/18/2021
WC-SCPD31-11.0-12.0	N	Sediment	6/18/2021

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Sample ID	Sample Type	Matrix	Date Sampled
WC-SCPD31-2.0-3.0	N	Sediment	6/18/2021
WC-SCPD31-3.0-4.0	N	Sediment	6/18/2021
WC-SCPD31-4.0-5.0	N	Sediment	6/18/2021
WC-SCPD31-5.0-6.0	N	Sediment	6/18/2021
WC-SCPD31-6.0-7.0	N	Sediment	6/18/2021
WC-SCPD31-8.0-9.0	N	Sediment	6/18/2021
WC-SCPD32-1.0-2.0	N	Sediment	6/17/2021
WC-SCPD32-2.0-3.0	N	Sediment	6/17/2021
WC-SCPD32-3.0-4.0	N	Sediment	6/17/2021
WC-SCPD32-4.0-5.0	N	Sediment	6/17/2021
WC-SCPD32-5.0-6.0	N	Sediment	6/17/2021
WC-SCPD32-6.0-7.0	N	Sediment	6/17/2021
WC-SCPD32-10.0-11.0	N	Sediment	6/17/2021
WC-SCPD32-13.0-14.0	N	Sediment	6/17/2021
WC-SCPD32-14.0-14.8	N	Sediment	6/17/2021
WC-SCPD32-9.0-10.0	N	Sediment	6/17/2021
WC-SCPD33-1.0-2.0	N	Sediment	6/16/2021
WC-SCPD33-2.0-3.0	N	Sediment	6/16/2021
WC-SCPD33-3.0-4.0	N	Sediment	6/16/2021
WC-SCPD33-4.0-5.0	N	Sediment	6/16/2021
WC-SCPD34A-1.0-2.0	N	Sediment	3/9/2022
WC-SCPD34A-2.0-3.0	N	Sediment	3/9/2022
WC-SCPD34A-3.0-3.3	N	Sediment	3/9/2022
WC-SCPD35-1.0-2.0	N	Sediment	6/25/2021
WC-SCPD35-10.0-11.0	N	Sediment	6/25/2021
WC-SCPD35-11.0-12.0	N	Sediment	6/25/2021
WC-SCPD35-2.0-3.0	N	Sediment	6/25/2021
WC-SCPD35-3.0-4.0	N	Sediment	6/25/2021
WC-SCPD35-4.0-5.0	N	Sediment	6/25/2021
WC-SCPD35-5.0-6.0	N	Sediment	6/25/2021
WC-SCPD35-6.0-7.0	N	Sediment	6/25/2021
WC-SCPD36-1.0-2.0	N	Sediment	6/21/2021
WC-SCPD36-11.0-12.0	N	Sediment	6/21/2021
WC-SCPD36-12.0-12.9	N	Sediment	6/21/2021
WC-SCPD36-2.0-3.0	N	Sediment	6/21/2021
WC-SCPD36-3.0-4.0	N	Sediment	6/21/2021
WC-SCPD36-4.0-5.0	N	Sediment	6/21/2021
WC-SCPD36-5.0-6.0	N	Sediment	6/21/2021
WC-SCPD36-6.0-7.0	N	Sediment	6/21/2021
WC-SCPD36-7.0-8.0	N	Sediment	6/21/2021
WC-SCPD36-8.0-9.0	N	Sediment	6/21/2021
WC-SCPD37-1.0-2.0	N	Sediment	6/22/2021
WC-SCPD37-2.0-3.0	N	Sediment	6/22/2021
WC-SCPD37-3.0-4.0	N	Sediment	6/22/2021
WC-SCPD37-4.0-5.0	N	Sediment	6/22/2021
WC-SCPD37-10.0-10.9	N	Sediment	6/22/2021
WC-SCPD37-6.0-7.0	N	Sediment	6/22/2021
WC-SCPD37-7.0-8.0	N	Sediment	6/22/2021
WC-SCPD37-9.0-10.0	N	Sediment	6/22/2021
WC-SCPD38-1.0-2.0	N	Sediment	6/25/2021
WC-SCPD38-10.0-11.0	N	Sediment	6/25/2021
WC-SCPD38-13.0-14.0	N	Sediment	6/25/2021
WC-SCPD38-14.0-14.3	N	Sediment	6/25/2021
WC-SCPD38-2.0-3.0	N	Sediment	6/25/2021

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Sample ID	Sample Type	Matrix	Date Sampled
WC-SCPD38-3.0-4.0	N	Sediment	6/25/2021
WC-SCPD38-4.0-5.0	N	Sediment	6/25/2021
WC-SCPD38-9.0-10.0	N	Sediment	6/25/2021
WC-SCPD39-1.0-2.0	N	Sediment	6/24/2021
WC-SCPD39-12.0-13.0	N	Sediment	6/24/2021
WC-SCPD39-13.0-13.9	N	Sediment	6/24/2021
WC-SCPD39-2.0-3.0	N	Sediment	6/24/2021
WC-SCPD39-3.0-4.0	N	Sediment	6/24/2021
WC-SCPD39-4.0-5.0	N	Sediment	6/24/2021
WC-SCPD39-8.0-9.0	N	Sediment	6/24/2021
WC-SCPD39-9.0-10.0	N	Sediment	6/24/2021
WC-SCPD40-1.0-2.0	N	Sediment	6/23/2021
WC-SCPD40-2.0-3.0	N	Sediment	6/23/2021
WC-SCPD40-3.0-4.0	N	Sediment	6/23/2021
WC-SCPD40-4.0-5.0	N	Sediment	6/23/2021
WC-SCPD40-8.0-9.0	N	Sediment	6/23/2021
WC-SCPD40-9.0-9.5	N	Sediment	6/23/2021
WC-SCPD41-1.0-2.0	N	Sediment	6/23/2021
WC-SCPD41-2.0-3.0	N	Sediment	6/23/2021
WC-SCPD41-3.0-4.0	N	Sediment	6/23/2021
WC-SCPD41-4.0-5.0	N	Sediment	6/23/2021
WC-SCPD41-7.0-8.0	N	Sediment	6/23/2021
WC-SCPD41-8.0-8.8	N	Sediment	6/23/2021
WC-SCPD42-3.0-4.0	N	Sediment	6/18/2021
WC-SCPD42-4.0-5.0	N	Sediment	6/18/2021
WC-SCPD42-5.0-6.0	N	Sediment	6/18/2021
WC-SCPD42-6.0-7.0	N	Sediment	6/18/2021
WC-SCPD43A-1.0-2.0	N	Sediment	3/30/2022
WC-SCPD43A-2.0-3.0	N	Sediment	3/30/2022
WC-SCPD43A-3.0-4.0	N	Sediment	3/30/2022
WC-SCPD44-1.0-2.0	N	Sediment	6/21/2021
WC-SCPD44-2.0-3.0	N	Sediment	6/21/2021
WC-SCPD44-3.0-4.0	N	Sediment	6/21/2021
WC-SCPD44-4.0-5.0	N	Sediment	6/21/2021
WC-SCPD44-7.0-8.0	N	Sediment	6/21/2021
WC-SCPD44-8.0-8.9	N	Sediment	6/21/2021
WC-SCPD45-1.0-2.0	N	Sediment	6/22/2021
WC-SCPD45-2.0-3.0	N	Sediment	6/22/2021
WC-SCPD45-3.0-4.0	N	Sediment	6/22/2021
WC-SCPD45-4.0-5.0	N	Sediment	6/22/2021
WC-SCPD45-5.0-6.0	N	Sediment	6/22/2021
WC-SCPD46-1.0-2.0	N	Sediment	6/24/2021
WC-SCPD46-2.0-3.0	N	Sediment	6/24/2021
WC-SCPD46-3.0-4.0	N	Sediment	6/24/2021
WC-SCPD46-4.0-5.0	N	Sediment	6/24/2021
WC-SCPD46-5.0-6.0	N	Sediment	6/24/2021
WC-SCPD46-6.0-7.0	N	Sediment	6/24/2021
WC-SCPD46-12.0-13.0	N	Sediment	6/24/2021
WC-SCPD46-13.0-14.0	N	Sediment	6/24/2021
WC-SCPD46-8.0-9.0	N	Sediment	6/24/2021
WC-SCPD46-9.0-10.0	N	Sediment	6/24/2021
WC-SCPD47-1.0-2.0	N	Sediment	6/29/2021
WC-SCPD47-2.0-3.0	N	Sediment	6/29/2021
WC-SCPD47-3.0-4.0	N	Sediment	6/29/2021

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WC-SCPD47-4.0-5.0	N	Sediment	6/29/2021
WC-SCPD48-1.0-2.0	N	Sediment	6/18/2021
WC-SCPD48-2.0-3.0	N	Sediment	6/18/2021
WC-SCPD48-3.0-4.0	N	Sediment	6/18/2021
WC-SCPD48-4.0-5.0	N	Sediment	6/18/2021
WC-SCPD48-5.0-6.0	N	Sediment	6/18/2021
WC-SCPD48-6.0-7.0	N	Sediment	6/18/2021
WC-SCPD48-7.0-8.0	N	Sediment	6/18/2021
WC-SCPD48-8.0-9.0	N	Sediment	6/18/2021
WC-SCPD48-9.0-9.5	N	Sediment	6/18/2021
WC-SCPD50-1.0-2.0	N	Sediment	6/24/2021
WC-SCPD50-2.0-3.0	N	Sediment	6/24/2021
WC-SCPD50-3.0-4.0	N	Sediment	6/24/2021
WC-SCPD50-4.0-5.0	N	Sediment	6/24/2021
WC-SCPD52-1.0-2.0	N	Sediment	6/25/2021
WC-SCPD52-2.0-3.0	N	Sediment	6/25/2021
WC-SCPD52-3.0-4.0	N	Sediment	6/25/2021
WC-SCPD52-4.0-5.0	N	Sediment	6/25/2021
WC-SCPD52-5.0-6.0	N	Sediment	6/25/2021
WC-SCPD52-6.0-7.0	N	Sediment	6/25/2021
WC-SCPD52-7.0-8.0	N	Sediment	6/25/2021
WC-SCPD52-8.0-9.0	N	Sediment	6/25/2021
WC-SCPD52-9.0-9.2	N	Sediment	6/25/2021
WC-SCPD53A-1.0-2.0	N	Sediment	6/29/2021
WC-SCPD53A-2.0-3.0	N	Sediment	6/29/2021
WC-SCPD53A-3.0-4.0	N	Sediment	6/29/2021
WC-SCPD53A-4.0-5.0	N	Sediment	6/29/2021
WC-SCPD53A-8.0-9.0	N	Sediment	6/29/2021
WC-SCPD53A-9.0-9.4	N	Sediment	6/29/2021
WC-SGPD01	N	Sediment	7/1/2021
WC-SGPD02	N	Sediment	7/1/2021
WC-SGPD03	N	Sediment	7/1/2021
WC-SGPD04	N	Sediment	7/1/2021
WC-SGPD05	N	Sediment	7/1/2021
WC-SGPD06A	N	Sediment	7/2/2021
WC-SGPD07A	N	Sediment	7/2/2021
WC-SGPD08	N	Sediment	7/1/2021
WC-SGPD09	N	Sediment	7/9/2021
WC-SGPD10	N	Sediment	7/9/2021
WC-SGPD11	N	Sediment	6/30/2021
WC-SGPD12	N	Sediment	6/29/2021
WC-SGPD12A	N	Sediment	3/8/2022
WC-SGPD13	N	Sediment	7/6/2021
WC-SGPD14	N	Sediment	7/6/2021
WC-SGPD15	N	Sediment	7/6/2021
WC-SGPD16	N	Sediment	6/29/2021
WC-SGPD16A	N	Sediment	3/9/2022
WC-SGPD17	N	Sediment	7/9/2021
WC-SGPD18	N	Sediment	7/9/2021
WC-SGPD19	N	Sediment	7/9/2021
WC-SGPD20	N	Sediment	6/29/2021
WC-SGPD20A	N	Sediment	3/8/2022
WC-SGPD21	N	Sediment	6/30/2021
WC-SGPD22	N	Sediment	6/30/2021

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WC-SGPD23	N	Sediment	7/7/2021
WC-SGPD24	N	Sediment	7/8/2021
WC-SGPD25	N	Sediment	7/7/2021
WC-SGPD26	N	Sediment	6/29/2021
WC-SGPD26A	N	Sediment	3/9/2022
WC-SGPD27	N	Sediment	7/7/2021
WC-SGPD28	N	Sediment	7/8/2021
WC-SGPD29	N	Sediment	6/30/2021
WC-SGPD30	N	Sediment	6/30/2021
WC-SGPD31	N	Sediment	6/30/2021
WC-SGPD32	N	Sediment	7/6/2021
WC-SGPD33	N	Sediment	7/2/2021
WC-SGPD34	N	Sediment	6/29/2021
WC-SGPD34A	N	Sediment	3/9/2022
WC-SGPD35	N	Sediment	6/30/2021
WC-SGPD36	N	Sediment	7/2/2021
WC-SGPD37	N	Sediment	7/2/2021
WC-SGPD38	N	Sediment	6/30/2021
WC-SGPD39	N	Sediment	7/2/2021
WC-SGPD40	N	Sediment	7/7/2021
WC-SGPD41	N	Sediment	7/7/2021
WC-SGPD42	N	Sediment	7/7/2021
WC-SGPD43	N	Sediment	6/29/2021
WC-SGPD43A	N	Sediment	3/9/2022
WC-SGPD44	N	Sediment	7/8/2021
WC-SGPD45	N	Sediment	7/8/2021
WC-SGPD46	N	Sediment	7/8/2021
WC-SGPD47	N	Sediment	7/7/2021
WC-SGPD48	N	Sediment	7/7/2021
WC-SGPD49	N	Sediment	7/8/2021
WC-SGPD50	N	Sediment	7/8/2021
WC-SGPD52	N	Sediment	7/8/2021
WC-SGPD53	N	Sediment	7/8/2021
WC-SB02-0.0-1.0DMS	MSD	Soil	10/18/2021
WC-SB02-0.0-1.0MS	MS	Soil	10/18/2021
WC-SB03-0.0-1.0MS	MS	Soil	9/22/2021
WC-SB11-0.0-1.0DMS	MSD	Soil	9/20/2021
WC-SB11-0.0-1.0MS	MS	Soil	9/20/2021
WC-SB11-1.0-2.0DMS	MSD	Soil	9/20/2021
WC-SB11-1.0-2.0MS	MS	Soil	9/20/2021
WC-SCPD03-1.0-2.0DMS	MSD	Sediment	6/14/2021
WC-SCPD03-1.0-2.0MS	MS	Sediment	6/14/2021
WC-SCPD05-5.0-6.0DMS	MSD	Sediment	6/14/2021
WC-SCPD05-5.0-6.0MS	MS	Sediment	6/14/2021
WC-SCPD09-3.0-4.0DMS	MSD	Sediment	6/30/2021
WC-SCPD09-3.0-4.0MS	MS	Sediment	6/30/2021
WC-SCPD11-5.0-6.0DMS	MSD	Sediment	6/16/2021
WC-SCPD11-5.0-6.0MS	MS	Sediment	6/16/2021
WC-SCPD12A-1.0-2.0MS	MS	Sediment	3/8/2022
WC-SCPD12A-1.0-2.0DMS	MSD	Sediment	3/8/2022
WC-SCPD14-1.0-2.0DMS	MSD	Sediment	6/23/2021
WC-SCPD14-1.0-2.0MS	MS	Sediment	6/23/2021
WC-SCPD16A-1.0-2.0MS	MS	Sediment	3/30/2022
WC-SCPD16A-1.0-2.0DMS	MSD	Sediment	3/30/2022

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Sample ID	Sample Type	Matrix	Date Sampled
WC-SCPD18-2.0-3.0DMS	MSD	Sediment	7/29/2021
WC-SCPD18-2.0-3.0MS	MS	Sediment	7/29/2021
WC-SCPD19-2.0-3.0DMS	MSD	Sediment	6/16/2021
WC-SCPD19-2.0-3.0MS	MS	Sediment	6/16/2021
WC-SCPD24-3.0-4.0DMS	MSD	Sediment	6/22/2021
WC-SCPD24-3.0-4.0MS	MS	Sediment	6/22/2021
WC-SCPD26A-1.0-2.0MS	MS	Sediment	3/30/2022
WC-SCPD26A-1.0-2.0DMS	MSD	Sediment	3/30/2022
WC-SCPD32-1.0-2.0DMS	MSD	Sediment	6/17/2021
WC-SCPD32-1.0-2.0MS	MS	Sediment	6/17/2021
WC-SCPD32-6.0-7.0DMS	MSD	Sediment	6/17/2021
WC-SCPD32-6.0-7.0MS	MS	Sediment	6/17/2021
WC-SCPD36-1.0-2.0DMS	MSD	Sediment	6/21/2021
WC-SCPD36-1.0-2.0MS	MS	Sediment	6/21/2021
WC-SCPD36-12.0-12.9DMS	MSD	Sediment	6/21/2021
WC-SCPD36-12.0-12.9MS	MS	Sediment	6/21/2021
WC-SCPD40-1.0-2.0DMS	MSD	Sediment	6/23/2021
WC-SCPD40-1.0-2.0MS	MS	Sediment	6/23/2021
WC-SCPD40-8.0-9.0DMS	MSD	Sediment	6/23/2021
WC-SCPD40-8.0-9.0MS	MS	Sediment	6/23/2021
WC-SCPD46-9.0-10.0DMS	MSD	Sediment	6/24/2021
WC-SCPD46-9.0-10.0MS	MS	Sediment	6/24/2021
WC-SCPD47-1.0-2.0DMS	MSD	Sediment	6/29/2021
WC-SCPD47-1.0-2.0MS	MS	Sediment	6/29/2021
WC-SCPD48-2.0-3.0DMS	MSD	Sediment	6/18/2021
WC-SCPD48-2.0-3.0MS	MS	Sediment	6/18/2021
WC-SCPD50-1.0-2.0DMS	MSD	Sediment	6/24/2021
WC-SCPD50-1.0-2.0MS	MS	Sediment	6/24/2021
WC-SCPD52-3.0-4.0DMS	MSD	Sediment	7/26/2021
WC-SCPD52-3.0-4.0MS	MS	Sediment	7/26/2021
WC-SGPD01DMS	MSD	Sediment	7/1/2021
WC-SGPD01MS	MS	Sediment	7/1/2021
WC-SGPD07ADMS	MSD	Sediment	7/2/2021
WC-SGPD07AMS	MS	Sediment	7/2/2021
WC-SGPD10DMS	MSD	Sediment	7/9/2021
WC-SGPD10MS	MS	Sediment	7/9/2021
WC-SGPD12AMS	MS	Sediment	3/8/2022
WC-SGPD12ADMS	MSD	Sediment	3/8/2022
WC-SGPD18DMS	MSD	Sediment	8/4/2021
WC-SGPD18MS	MS	Sediment	8/4/2021
WC-SGPD23DMS	MSD	Sediment	7/7/2021
WC-SGPD23MS	MS	Sediment	7/7/2021
WC-SGPD32DMS	MSD	Sediment	7/29/2021
WC-SGPD32MS	MS	Sediment	7/29/2021
WC-SGPD34AMS	MS	Sediment	3/9/2022
WC-SGPD34ADMS	MSD	Sediment	3/9/2022
WC-SGPD39DMS	MSD	Sediment	7/2/2021
WC-SGPD39MS	MS	Sediment	7/2/2021
WC-SGPD44DMS	MSD	Sediment	7/8/2021
WC-SGPD44MS	MS	Sediment	7/8/2021

Notes:
EB = equipment blank
FD = field duplicate
N = normal sample

Table H-2. Sample Delivery Groups
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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PCB, PAH, TOC, Metals, TPH and DDX	Dioxins/Furans, PCB Congeners and Full List Pesticides	Grain Size
K2106883	L2603308	L2604717
K2107052	L2606435	L2607326
K2107104	L2606300	L2607330
K2107158	L2606306	L2607320
K2107222	L2606446	L2607329
K2107278	L2608823	L2609285
K2107340	L2608826	L2609291
K2107395	L2608839	L2609287
K2107489	L2611560	L2611761
K2107598	L2611545	L2611759
K2107637	L2611619	L2611765
K2107700	L2611632	L2611767
K2107752	L2612316	L2613379
K2107846	L2612314	L2613357
K2107902	L2614662	L2615213
K2108034	L2615160	L2616916
K2108076	L2615164	L2616873
K2108143	L2615157	NA
K2108159	L2615154	NA
K2110977	L2645738	L2646723
K2111070	L2645716	L2646707
K2111196	L2645768	L2651082
K2111932	L2659646	L2651588
K2111941	L2659632	L2652973
K2111942	L2659655	L2651574
K2111955	L2658841	L2651601
NA	L2675125	NA
K2200750	NA	NA
K2200746	NA	SK2200428
K2200743	NA	SK2200429
K2202475	L2692261	SK2201152
K2202673	NA	SK2201193
K2203345	NA	SK2201516
K2203181	NA	SK2201430
K2203194	NA	SK2201427
K2204428	NA	SK2201914
K2204432	NA	SK2201915
K2204707	NA	SK2202058
K2205401	NA	SK2202406
K2208213	NA	NA

Notes:
DDX = dichlorodiphenyldichloroethane + dichlorodiphenyldichloroethene +dichlorodiphenyltrichloroethane
PAH = polynuclear aromatic hydrocarbons
PCB = polychlorinated biphenyl Aroclors
TOC = total organic carbon
TPH = total petroleum hydrocarbons

Table H-3. Analytical Methods by Laboratory
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Parameter	Method	Laboratory
Grain Size	ASTM D6913/ASTM D7928	ALS-Saskatoon
Total Organic Carbon	SW9060	ALS-Kelso
Percent Moisture	E160.3_MOD	ALS-Kelso
Polychlorinated Biphenyl Aroclors	SW8082A	ALS-Kelso
DDX Isomers	E1699M	ALS-Kelso
Metals	SW6020B/SW7471A	ALS-Kelso
Total Petroleum Hydrocarbons	NWTPH-Dx	ALS-Kelso
Low-Level BEHP	SW8270D-LL	ALS-Kelso
Full list Pesticides	E1699M	ALS-Burlington
Dioxins and Furans	E1613B	ALS-Burlington and ALS-Houston
Polychlorinated Biphenyl Congeners	E1668	ALS-Burlington
Polynuclear Aromatic Hydrocarbons	SW8270DSIM	Alpha

Note:
ASTM = ASTM International
BEHP = bis(2-ethylhexyl)phthalate
DDX = dichlorodiphenyldichloroethane + dichlorodiphenyldichloroethene +dichlorodiphenyltrichloroethane

Table H-4. Overall Validation Findings
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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB01-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0104	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00259	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00029	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDD	0.000067	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDF	0.00018	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDD	0.000386	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDF	0.000075	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDD	0.00012	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDF	0.000054	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	1,2,3,7,8-PeCDD	0.000057	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	1,2,3,7,8-PeCDF	0.0000912	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	2,3,4,6,7,8-HxCDF	0.00024	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	2,3,4,7,8-PeCDF	0.000106	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	2,3,7,8-TCDD	0.00006	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	2,3,7,8-TCDF	0.000069	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	OCDD	0.0757	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	OCDF	0.0135	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	Total HpCDD	0.0227	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	Total HpCDF	0.00893	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	Total HxCDD	0.00136	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	Total HxCDF	0.00264	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	Total PeCDD	0.000025	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	Total PeCDF	0.00139	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	Total TCDD	0.00006	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1613B	Total TCDF	0.000069	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.00607	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	Decachlorobiphenyl	0.00698	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	Dichlorobiphenyl	0.00624	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	Heptachlorobiphenyl	0.0696	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	Hexachlorobiphenyl	0.0978	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	Monochlorobiphenyl	0.00202	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	Nonachlorobiphenyl	0.00758	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	Octachlorobiphenyl	0.0238	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-085/110/115/116/117	0.0131	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-1	0.00072	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-10	0.00046	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-103	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-104	0.000092	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-105	0.00292	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-106	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-107	0.00049	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-108/124	0.0003	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-11	0.00624	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-111	0.0001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-112	0.0001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-114	0.000265	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-118	0.00621	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-12/13	0.0018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-120	0.0001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-121	0.0001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-122	0.00017	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-123	0.00015	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-126	0.00017	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-127	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-128/166	0.00515	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-129/138/163	0.0234	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-130	0.00196	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-131	0.00026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-132	0.00734	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-133	0.00049	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-134/143	0.00095	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-135/151	0.00666	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-136	0.0018	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-137/164	0.00329	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-139/140	0.0004	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-14	0.0019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-141	0.00276	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-142	0.00026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-144	0.00094	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-145	0.000058	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-146	0.00332	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-147/149	0.018	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-148	0.000079	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-15	0.0013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-150	0.000055	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-152	0.000056	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-153/168	0.0152	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-154	0.0004	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-155	0.000083	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-156/157	0.00234	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-158	0.00184	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-159	0.000338	µg/kg	J-	Sur<LCL|TEMP	L2645768

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB01-0.0-1.0	E1668	PCB-16	0.00028	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-160	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-161	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-162	0.000234	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-165	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-167	0.000976	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-169	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-17	0.00034	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-170	0.00878	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-171/173	0.00249	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-172	0.0016	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-174	0.00791	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-175	0.00031	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-176	0.0009	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-177	0.00499	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-178	0.00189	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-179	0.00332	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-18/30	0.000527	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-180/193	0.0177	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-181	0.00011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-182	0.0001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-184	0.000071	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-185	0.000351	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-186	0.000077	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-187	0.0115	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-188	0.000087	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-189	0.00022	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-19	0.00057	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-190	0.0012	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-191	0.000335	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-192	0.000089	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-194	0.00565	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-195	0.0014	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-196	0.0024	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-197	0.000263	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-198/199	0.00791	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-2	0.00068	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-20/28	0.00103	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-200	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-201	0.00073	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-202	0.0012	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-203	0.004	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-204	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-205	0.0002	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-206	0.00538	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-207	0.0006	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-208	0.0016	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-21/33	0.00047	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-22	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-23	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-24	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-25	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-26/29	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-27	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-3	0.000617	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-31	0.00114	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-32	0.0003	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-34	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-35	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-36	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-37	0.000528	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-38	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-39	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-4	0.0017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-40/41/71	0.000849	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-42	0.00034	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-43	0.00027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-44/47/65	0.0018	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-45/51	0.000407	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-46	0.00025	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-48	0.00025	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-49/69	0.00073	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-5	0.00046	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-50/53	0.000363	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-52	0.0019	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-54	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-55	0.0003	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-56	0.000821	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-57	0.00029	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-58	0.00028	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-59/62/75	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-6	0.00046	µg/kg	UJ	Sur<LCL|TEMP	L2645768

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB01-0.0-1.0	E1668	PCB-60	0.00029	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-61/70/74/76	0.0025	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-63	0.0003	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-64	0.00062	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-66	0.0014	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-67	0.00025	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-68	0.00026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-7	0.00043	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-72	0.00029	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-73	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-77	0.00029	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-78	0.00032	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-79	0.00027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-8	0.00045	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-80	0.00025	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-81	0.00024	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-82	0.00072	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-83/99	0.0037	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-84	0.00183	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-86/87/97/108/119/125	0.00382	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-88/91	0.0015	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-89	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-9	0.00045	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-90/101/113	0.00557	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-92	0.00129	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-93/98/100/102	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-94	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-95	0.00635	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	PCB-96	0.000057	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	Pentachlorobiphenyl	0.0486	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	Tetrachlorobiphenyl	0.0123	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1668	Trichlorobiphenyl	0.00434	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	2,4'-DDD	0.023	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	2,4'-DDE	0.018	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	2,4'-DDT	0.032	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	4,4'-DDD	0.063	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	4,4'-DDE	0.025	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	4,4'-DDT	0.244	µg/kg	J-	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	Aldrin	0.018	µg/kg	UJ	LCS<LCL|TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	alpha-Chlordane	0.032	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	cis-Nonachlor	0.024	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	Dieldrin	0.022	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	gamma-BHC (Lindane)	0.039	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	Oxychlordane	0.013	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	trans-Chlordane	0.034	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	E1699M	trans-Nonachlor	0.03	µg/kg	UJ	TEMP	L2645768
WC-SB01-0.0-1.0	NWTPH-Dx	Diesel Range Organics	2.8	mg/kg	U	LB<RL	K2111196
WC-SB01-0.0-1.0	NWTPH-Dx	Residual Range Organics (C25-C36)	6	mg/kg	U	LB<RL	K2111196
WC-SB01-0.0-1.0	SW8270DSIM	2-Methylnaphthalene	0.56	µg/kg	U	LB<RL	K2111196
WC-SB01-0.0-1.0	SW8270DSIM	Benzo(a)anthracene	0.35	µg/kg	U	LB<RL	K2111196
WC-SB01-0.0-1.0	SW8270DSIM	Benzo(b)fluoranthene	0.58	µg/kg	U	LB<RL	K2111196
WC-SB01-0.0-1.0	SW8270DSIM	Benzo(k)fluoranthene	0.37	µg/kg	U	LB<RL	K2111196
WC-SB01-0.0-1.0	SW8270DSIM	Chrysene	0.47	µg/kg	U	LB<RL	K2111196
WC-SB01-0.0-1.0	SW8270DSIM	Naphthalene	0.71	µg/kg	U	LB<RL	K2111196
WC-SB02-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0168	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0062	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00033	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDD	0.00011	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDF	0.000365	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDD	0.000706	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDF	0.0002	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDD	0.00022	µg/kg	J	IonRatio	L2645716
WC-SB02-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDF	0.000051	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	1,2,3,7,8-PeCDD	0.000056	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	1,2,3,7,8-PeCDF	0.00012	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	2,3,4,6,7,8-HxCDF	0.0015	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	2,3,4,7,8-PeCDF	0.00017	µg/kg	J	IonRatio	L2645716
WC-SB02-0.0-1.0	E1613B	2,3,7,8-TCDD	0.000089	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1613B	OCDD	0.133	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.007	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	Decachlorobiphenyl	0.0068	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	Dichlorobiphenyl	0.0024	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	Heptachlorobiphenyl	0.0951	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	Hexachlorobiphenyl	0.313	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	Monochlorobiphenyl	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	Nonachlorobiphenyl	0.0036	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	Octachlorobiphenyl	0.0239	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-085/110/115/116/117	0.0962	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-1	0.003	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-10	0.0026	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-103	0.0016	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-104	0.00052	µg/kg	UJ	Sur<LCL	L2645716

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB02-0.0-1.0	E1668	PCB-105	0.0161	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-106	0.00066	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-107	0.0026	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-108/124	0.0023	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-11	0.003	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-111	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-112	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-114	0.00074	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-118	0.0377	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-12/13	0.0028	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-120	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-121	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-122	0.00069	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-123	0.0015	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-126	0.00065	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-127	0.00061	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-128/166	0.0171	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-129/138/163	0.0864	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-130	0.00548	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-131	0.00093	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-132	0.0266	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-133	0.00081	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-134/143	0.0026	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-135/151	0.0173	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-136	0.00604	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-137/164	0.0102	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-139/140	0.00208	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-14	0.0029	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-141	0.00992	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-142	0.0009	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-144	0.0024	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-145	0.00041	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-146	0.007	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-147/149	0.045	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-148	0.00057	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-15	0.0027	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-150	0.00039	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-152	0.0004	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-153/168	0.0508	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-154	0.00044	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-155	0.0005	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-156/157	0.013	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-158	0.0072	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-159	0.00054	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-16	0.0021	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-160	0.00056	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-161	0.00058	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-162	0.00053	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-165	0.00059	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-167	0.00383	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-169	0.0006	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-17	0.0016	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-170	0.0125	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-171/173	0.00407	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-172	0.00207	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-174	0.0115	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-175	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-176	0.0017	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-177	0.00849	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-178	0.0019	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-179	0.00528	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-18/30	0.00173	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-180/193	0.024	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-181	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-182	0.00095	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-184	0.00069	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-185	0.00156	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-186	0.00076	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-187	0.015	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-188	0.00076	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-189	0.00078	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-19	0.0016	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-190	0.00074	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-191	0.00081	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-192	0.00083	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-194	0.00599	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-195	0.0016	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-196	0.0032	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-197	0.00047	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-198/199	0.00953	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-2	0.0017	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-20/28	0.0026	µg/kg	J-	IonRatio|Sur<LCL	L2645716

Table H-4. Overall Validation Findings
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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB02-0.0-1.0	E1668	PCB-200	0.00057	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-201	0.00052	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-202	0.00049	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-203	0.0036	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-204	0.00054	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-205	0.00064	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-206	0.0036	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-207	0.0017	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-208	0.0015	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-21/33	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-22	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-23	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-24	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-25	0.00099	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-26/29	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-27	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-3	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-31	0.0021	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-32	0.00127	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-34	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-35	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-36	0.00094	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-37	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-38	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-39	0.00093	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-4	0.0057	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-40/41/71	0.00407	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-42	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-43	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-44/47/65	0.0065	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-45/51	0.0019	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-46	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-48	0.00098	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-49/69	0.00432	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-5	0.0026	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-50/53	0.00136	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-52	0.0124	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-54	0.00079	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-55	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-56	0.0017	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-57	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-58	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-59/62/75	0.001	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-6	0.0025	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-60	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-61/70/74/76	0.00914	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-63	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-64	0.00368	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-66	0.00406	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-67	0.00097	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-68	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-7	0.0024	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-72	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-73	0.00073	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-77	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-78	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-79	0.00097	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-8	0.0024	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-80	0.00094	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-81	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-82	0.0056	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-83/99	0.0277	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-84	0.0134	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-86/87/97/109/119/125	0.0291	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-88/91	0.0066	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-89	0.0019	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-9	0.0025	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-90/101/113	0.036	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-92	0.0112	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-93/98/100/102	0.0017	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-94	0.0018	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-95	0.0366	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	PCB-96	0.00047	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	Pentachlorobiphenyl	0.323	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	Tetrachlorobiphenyl	0.0501	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1668	Trichlorobiphenyl	0.0077	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1699M	2,4'-DDE	0.019	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1699M	4,4'-DDE	0.163	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1699M	4,4'-DDT	0.467	µg/kg	J-	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1699M	Aldrin	0.033	µg/kg	UJ	LCS<LCL|MS<LCL	L2645716
WC-SB02-0.0-1.0	E1699M	gamma-BHC (Lindane)	0.048	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	E1699M	Oxychlordane	0.015	µg/kg	UJ	Sur<LCL	L2645716

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB02-0.0-1.0	E1699M	trans-Nonachlor	0.052	µg/kg	UJ	Sur<LCL	L2645716
WC-SB02-0.0-1.0	NWTPH-Dx	Diesel Range Organics	17	mg/kg	J+	LabDupRPD|CCV>UCL	K2111070
WC-SB02-0.0-1.0	NWTPH-Dx	Residual Range Organics (C25-C36)	130	mg/kg	J	LabDupRPD	K2111070
WC-SB02-0.0-1.0	SW6020B	Arsenic	8.83	mg/kg	J	LabDupRPD	K2111070
WC-SB02-0.0-1.0	SW6020B	Lead	13.8	mg/kg	J	LabDupRPD	K2111070
WC-SB02-0.0-1.0	SW6020B	Zinc	89.1	mg/kg	J	LabDupRPD	K2111070
WC-SB03-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0017	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000544	µg/kg	J-	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0000939	µg/kg	J-	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDD	0.000059	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDF	0.000048	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDD	0.000102	µg/kg	J-	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDF	0.00003	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDD	0.000176	µg/kg	J-	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDF	0.000041	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	1,2,3,7,8-PeCDD	0.00004	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	1,2,3,7,8-PeCDF	0.000048	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	2,3,4,6,7,8-HxCDF	0.000032	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	2,3,4,7,8-PeCDF	0.000037	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	2,3,7,8-TCDD	0.000064	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	2,3,7,8-TCDF	0.000048	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	OCDD	0.017	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	OCDF	0.0028	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	Total HpCDD	0.00339	µg/kg	J-	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	Total HpCDF	0.000638	µg/kg	J-	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	Total HxCDD	0.000713	µg/kg	J-	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	Total HxCDF	0.000041	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	Total PeCDD	0.000185	µg/kg	J-	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	Total PeCDF	0.000044	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	Total TCDD	0.000137	µg/kg	J-	TEMP	L2645768
WC-SB03-0.0-1.0	E1613B	Total TCDF	0.000569	µg/kg	J-	TEMP	L2645768
WC-SB03-0.0-1.0	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.00033	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	Decachlorobiphenyl	0.00164	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	Dichlorobiphenyl	0.0026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	Heptachlorobiphenyl	0.00355	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	Hexachlorobiphenyl	0.0104	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	Monochlorobiphenyl	0.00038	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	Nonachlorobiphenyl	0.00036	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	Octachlorobiphenyl	0.000419	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-085/110/115/116/117	0.0024	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-1	0.00056	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-10	0.0027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-103	0.00023	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-104	0.00024	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-105	0.000767	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-106	0.0002	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-107	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-108/124	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-11	0.0042	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-111	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-112	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-114	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-118	0.00181	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-12/13	0.0039	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-120	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-121	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-122	0.0002	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-123	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-126	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-127	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-128/166	0.000659	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-129/138/163	0.0021	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-130	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-131	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-132	0.00119	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-133	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-134/143	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-135/151	0.001	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-136	0.000309	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-137/164	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-139/140	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-14	0.004	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-141	0.000395	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-142	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-144	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-145	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-146	0.00035	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-147/149	0.0019	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-148	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-15	0.0032	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-150	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-152	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB03-0.0-1.0	E1668	PCB-153/168	0.00184	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-154	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-155	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-156/157	0.000404	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-158	0.00023	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-159	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-16	0.00058	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-160	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-161	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-162	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-165	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-167	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-169	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-17	0.00045	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-170	0.00048	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-171/173	0.00023	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-172	0.00023	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-174	0.00059	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-175	0.00022	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-176	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-177	0.00024	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-178	0.00023	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-179	0.00025	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-18/30	0.00039	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-180/193	0.0011	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-181	0.00022	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-182	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-184	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-185	0.0002	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-186	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-187	0.0008	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-188	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-189	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-19	0.0014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-190	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-191	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-192	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-194	0.000419	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-195	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-196	0.00027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-197	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-198/199	0.00026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-2	0.00051	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-20/28	0.000787	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-200	0.0002	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-201	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-202	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-203	0.00024	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-204	0.0002	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-205	0.00011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-206	0.0006	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-207	0.00036	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-208	0.00036	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-21/33	0.00049	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-22	0.00047	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-23	0.00046	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-24	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-25	0.00044	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-26/29	0.00044	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-27	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-3	0.00038	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-31	0.0006	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-32	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-34	0.00047	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-35	0.00051	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-36	0.00043	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-37	0.00042	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-38	0.00047	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-39	0.00044	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-4	0.0076	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-40/41/71	0.00028	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-42	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-43	0.00035	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-44/47/65	0.00112	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-45/51	0.00029	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-46	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-48	0.00028	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-49/69	0.00057	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-5	0.0027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-50/53	0.00027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-52	0.00106	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-54	0.00054	µg/kg	UJ	Sur<LCL|TEMP	L2645768

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB03-0.0-1.0	E1668	PCB-55	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-56	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-57	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-58	0.00031	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-59/62/75	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-6	0.0027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-60	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-61/70/74/76	0.00134	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-63	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-64	0.00032	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-66	0.000628	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-67	0.00028	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-68	0.0003	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-7	0.0026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-72	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-73	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-77	0.00026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-78	0.00036	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-79	0.0003	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-8	0.0027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-80	0.00028	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-81	0.00028	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-82	0.00031	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-83/99	0.00112	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-84	0.00047	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-86/87/97/108/119/125	0.00115	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-88/91	0.00026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-89	0.00029	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-9	0.0027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-90/101/113	0.00166	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-92	0.00044	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-93/98/100/102	0.00025	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-94	0.00027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-95	0.00128	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	PCB-96	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	Pentachlorobiphenyl	0.0111	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	Tetrachlorobiphenyl	0.00504	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1668	Trichlorobiphenyl	0.00188	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	2,4'-DDD	0.041	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	2,4'-DDE	0.021	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	2,4'-DDT	0.036	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	4,4'-DDD	0.029	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	4,4'-DDE	0.025	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	4,4'-DDT	0.084	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	Aldrin	0.026	µg/kg	UJ	LCS<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	alpha-Chlordane	0.046	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	cis-Nonachlor	0.061	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	Dieldrin	0.025	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	gamma-BHC (Lindane)	0.054	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	Oxychlordane	0.017	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	trans-Chlordane	0.048	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	E1699M	trans-Nonachlor	0.042	µg/kg	UJ	TEMP	L2645768
WC-SB03-0.0-1.0	NWTPH-Dx	Diesel Range Organics	5.7	mg/kg	U	LB<RL	K2111196
WC-SB03-0.0-1.0	NWTPH-Dx	Residual Range Organics (C25-C36)	13	mg/kg	U	LB<RL	K2111196
WC-SB03-0.0-1.0	SW8270DSIM	2-Methylnaphthalene	0.59	µg/kg	U	LB<RL	K2111196
WC-SB03-0.0-1.0	SW8270DSIM	Benzo(a)anthracene	0.37	µg/kg	U	LB<RL	K2111196
WC-SB03-0.0-1.0	SW8270DSIM	Benzo(b)fluoranthene	0.6	µg/kg	U	LB<RL	K2111196
WC-SB03-0.0-1.0	SW8270DSIM	Naphthalene	0.74	µg/kg	U	LB<RL	K2111196
WC-SB03-0.0-1.0	SW8270DSIM	Pyrene	0.51	µg/kg	U	LB<RL	K2111196
WC-SB04-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00111	µg/kg	J-	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00039	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000035	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDD	0.000069	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDF	0.000047	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDD	0.00007	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDF	0.000027	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDD	0.00014	µg/kg	J-	IonRatio|TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDF	0.000038	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	1,2,3,7,8-PeCDD	0.000045	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	1,2,3,7,8-PeCDF	0.00003	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	2,3,4,6,7,8-HxCDF	0.000028	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	2,3,4,7,8-PeCDF	0.000025	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	2,3,7,8-TCDD	0.00006	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	2,3,7,8-TCDF	0.000042	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	OCDD	0.0122	µg/kg	J-	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	OCDF	0.00178	µg/kg	J-	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	Total HpCDD	0.00111	µg/kg	J-	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	Total HpCDF	0.000035	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	Total HxCDD	0.00007	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	Total HxCDF	0.000038	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	Total PeCDD	0.000045	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	Total PeCDF	0.00003	µg/kg	UJ	TEMP	L2645768

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB04-0.0-1.0	E1613B	Total TCDD	0.00006	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1613B	Total TCDF	0.000042	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	Decachlorobiphenyl	0.0014	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	Dichlorobiphenyl	0.00551	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	Heptachlorobiphenyl	0.000632	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	Hexachlorobiphenyl	0.00264	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	Monochlorobiphenyl	0.000723	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	Nonachlorobiphenyl	0.00038	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	Octachlorobiphenyl	0.00037	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-085/110/115/116/117	0.0013	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-1	0.002	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-10	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-103	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-104	0.000077	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-105	0.00028	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-106	0.0003	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-107	0.00026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-108/124	0.00026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-11	0.00502	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-111	0.00012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-112	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-114	0.00024	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-118	0.000747	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-12/13	0.0003	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-120	0.00012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-121	0.00012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-122	0.0003	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-123	0.00029	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-126	0.00024	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-127	0.00028	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-128/166	0.00011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-129/138/163	0.00099	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-130	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-131	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-132	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-133	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-134/143	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-135/151	0.000372	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-136	0.000096	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-137/164	0.00011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-139/140	0.00012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-14	0.00031	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-141	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-142	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-144	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-145	0.000094	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-146	0.00012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-147/149	0.00077	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-148	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-15	0.00049	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-150	0.000089	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-152	0.000091	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-153/168	0.00051	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-154	0.0001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-155	0.00011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-156/157	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-158	0.000085	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-159	0.000094	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-16	0.00027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-160	0.0001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-161	0.000094	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-162	0.000097	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-165	0.0001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-167	0.0001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-169	0.0001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-17	0.000236	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-170	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-171/173	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-172	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-174	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-175	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-176	0.00011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-177	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-178	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-179	0.00011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-18/30	0.00043	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-180/193	0.000322	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-181	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-182	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-184	0.000098	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-185	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB04-0.0-1.0	E1668	PCB-186	0.00011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-187	0.00031	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-188	0.00012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-189	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-19	0.00041	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-190	0.00011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-191	0.00012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-192	0.00012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-194	0.00037	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-195	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-196	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-197	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-198/199	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-2	0.000723	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-20/28	0.000745	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-200	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-201	0.00012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-202	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-203	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-204	0.00013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-205	0.00012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-206	0.00062	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-207	0.00038	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-208	0.00038	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-21/33	0.000451	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-22	0.00033	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-23	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-24	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-25	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-26/29	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-27	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-3	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-31	0.00065	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-32	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-34	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-35	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-36	0.00016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-37	0.00028	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-38	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-39	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-4	0.00092	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-40/41/71	0.000522	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-42	0.00022	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-43	0.00023	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-44/47/65	0.00084	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-45/51	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-46	0.00022	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-48	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-49/69	0.000404	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-5	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-50/53	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-52	0.000679	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-54	0.00023	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-55	0.00035	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-56	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-57	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-58	0.00032	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-59/62/75	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-6	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-60	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-61/70/74/76	0.000777	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-63	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-64	0.00015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-66	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-67	0.00029	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-68	0.00031	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-7	0.00032	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-72	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-73	0.00014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-77	0.0003	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-78	0.00037	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-79	0.00031	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-8	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-80	0.00028	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-81	0.0003	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-82	0.00021	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-83/99	0.00064	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-84	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-86/87/97/108/119/125	0.00054	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-88/91	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-89	0.00019	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-9	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768

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Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB04-0.0-1.0	E1668	PCB-90/101/113	0.00065	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-92	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-93/98/100/102	0.00017	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-94	0.00018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-95	0.000738	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	PCB-96	0.000055	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	Pentachlorobiphenyl	0.0049	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	Tetrachlorobiphenyl	0.00322	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1668	Trichlorobiphenyl	0.00312	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	2,4'-DDD	0.025	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	2,4'-DDE	0.013	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	2,4'-DDT	0.025	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	4,4'-DDD	0.02	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	4,4'-DDE	0.019	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	4,4'-DDT	0.057	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	Aldrin	0.017	µg/kg	UJ	LCS<LCL|TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	alpha-Chlordane	0.025	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	cis-Nonachlor	0.029	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	Dieldrin	0.013	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	gamma-BHC (Lindane)	0.045	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	Oxychlordane	0.012	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	trans-Chlordane	0.026	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	E1699M	trans-Nonachlor	0.023	µg/kg	UJ	TEMP	L2645768
WC-SB04-0.0-1.0	NWTPH-Dx	Diesel Range Organics	2.6	mg/kg	U	LB<RL	K2111196
WC-SB04-0.0-1.0	NWTPH-Dx	Residual Range Organics (C25-C36)	5.6	mg/kg	U	LB<RL	K2111196
WC-SB04-0.0-1.0	SW8270DSIM	Benzo(g,h,i)perylene	0.58	µg/kg	U	LB<RL	K2111196
WC-SB04-0.0-1.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.52	µg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00976	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00354	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000217	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDD	0.00011	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDF	0.00035	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDD	0.000412	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDF	0.00019	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDD	0.00023	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDF	0.000124	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	1,2,3,7,8-PeCDD	0.0000767	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	1,2,3,7,8-PeCDF	0.00013	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	2,3,4,6,7,8-HxCDF	0.00039	µg/kg	J-	Sur<LCL|Coelute|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	2,3,4,7,8-PeCDF	0.000165	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	2,3,7,8-TCDD	0.000049	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	2,3,7,8-TCDF	0.000064	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	OCDD	0.0806	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	OCDF	0.0108	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	Total HpCDD	0.0208	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	Total HpCDF	0.0105	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	Total HxCDD	0.00259	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	Total HxCDF	0.00581	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	Total PeCDD	0.0000767	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	Total PeCDF	0.00165	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	Total TCDD	0.000129	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1613B	Total TCDF	0.000059	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.0084	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	Decachlorobiphenyl	0.00882	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	Dichlorobiphenyl	0.0035	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	Heptachlorobiphenyl	0.104	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	Hexachlorobiphenyl	0.0792	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	Monochlorobiphenyl	0.00027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	Nonachlorobiphenyl	0.00983	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	Octachlorobiphenyl	0.0326	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-085/110/115/116/117	0.011	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-1	0.00035	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-10	0.0012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-103	0.00069	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-104	0.00026	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-105	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-106	0.00036	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-107	0.00031	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-108/124	0.00032	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-11	0.0035	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-111	0.00053	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-112	0.00055	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-114	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-118	0.0016	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-12/13	0.0012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-120	0.00055	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-121	0.00053	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-122	0.00035	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-123	0.00036	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-126	0.00032	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-127	0.00033	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-128/166	0.0054	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB09-0.0-1.0	E1668	PCB-129/138/163	0.0199	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-130	0.002	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-131	0.00066	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-132	0.00778	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-133	0.00059	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-134/143	0.00066	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-135/151	0.0042	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-136	0.0029	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-137/164	0.00443	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-139/140	0.00052	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-14	0.0013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-141	0.0012	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-142	0.00067	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-144	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-145	0.00025	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-146	0.00209	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-147/149	0.0187	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-148	0.00034	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-15	0.0011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-150	0.00024	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-152	0.00024	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-153/168	0.00847	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-154	0.00027	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-155	0.00041	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-156/157	0.00051	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-158	0.0021	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-159	0.00041	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-16	0.00092	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-160	0.00044	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-161	0.00041	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-162	0.00043	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-165	0.00044	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-167	0.00041	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-169	0.00042	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-17	0.00071	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-170	0.0137	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-171/173	0.0037	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-172	0.00288	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-174	0.011	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-175	0.0015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-176	0.0015	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-177	0.01	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-178	0.0025	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-179	0.0041	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-18/30	0.00083	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-180/193	0.0268	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-181	0.0015	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-182	0.0014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-184	0.001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-185	0.0014	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-186	0.0011	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-187	0.0169	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-188	0.0013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-189	0.00038	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-19	0.0013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-190	0.00259	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-191	0.0012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-192	0.0013	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-194	0.00784	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-195	0.0026	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-196	0.00432	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-197	0.00037	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-198/199	0.0105	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-2	0.00035	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-20/28	0.00063	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-200	0.00037	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-201	0.0011	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-202	0.00324	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-203	0.003	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-204	0.00038	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-205	0.00048	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-206	0.00983	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-207	0.0016	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-208	0.0018	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-21/33	0.00069	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-22	0.00071	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-23	0.00068	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-24	0.00054	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-25	0.00065	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-26/29	0.00066	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-27	0.00053	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-3	0.00027	µg/kg	UJ	Sur<LCL|TEMP	L2645768

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB09-0.0-1.0	E1668	PCB-31	0.00065	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-32	0.00052	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-34	0.0007	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-35	0.00077	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-36	0.00065	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-37	0.00072	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-38	0.00071	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-39	0.00066	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-4	0.0025	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-40/41/71	0.00072	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-42	0.00085	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-43	0.00089	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-44/47/65	0.0013	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-45/51	0.00074	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-46	0.00083	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-48	0.0007	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-49/69	0.00065	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-5	0.0012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-50/53	0.00069	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-52	0.0018	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-54	0.00066	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-55	0.00097	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-56	0.00095	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-57	0.00095	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-58	0.0009	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-59/62/75	0.00054	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-6	0.0012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-60	0.00094	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-61/70/74/76	0.00089	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-63	0.00095	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-64	0.00056	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-66	0.00092	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-67	0.00081	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-68	0.00085	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-7	0.0012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-72	0.00095	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-73	0.00053	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-77	0.00089	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-78	0.001	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-79	0.00085	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-8	0.0012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-80	0.00079	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-81	0.00084	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-82	0.00092	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-83/99	0.00213	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-84	0.0014	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-86/87/97/108/119/125	0.00277	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-88/91	0.0014	µg/kg	J-	IonRatio|Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-89	0.00084	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-9	0.0012	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-90/101/113	0.00339	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-92	0.0008	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-93/98/100/102	0.00074	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-94	0.0008	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-95	0.0049	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	PCB-96	0.00023	µg/kg	UJ	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	Pentachlorobiphenyl	0.0286	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	Tetrachlorobiphenyl	0.0031	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1668	Trichlorobiphenyl	0.00083	µg/kg	J-	Sur<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	2,4'-DDD	0.016	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	2,4'-DDE	0.0098	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	2,4'-DDT	0.02	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	4,4'-DDD	0.016	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	4,4'-DDE	0.023	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	4,4'-DDT	0.677	µg/kg	J-	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	Aldrin	0.012	µg/kg	UJ	LCS<LCL|TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	alpha-Chlordane	0.036	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	cis-Nonachlor	0.021	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	Dieldrin	0.01	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	gamma-BHC (Lindane)	0.02	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	Oxychlordane	0.01	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	trans-Chlordane	0.037	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	E1699M	trans-Nonachlor	0.033	µg/kg	UJ	TEMP	L2645768
WC-SB09-0.0-1.0	NWTPH-Dx	Diesel Range Organics	12	mg/kg	J+	CCV>UCL	K2111196
WC-SB09-0.0-1.0	NWTPH-Dx	Residual Range Organics (C25-C36)	4.3	mg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	SW8270DSIM	2-Methylnaphthalene	0.41	µg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	SW8270DSIM	Benzo(a)anthracene	0.26	µg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	SW8270DSIM	Benzo(a)pyrene	0.42	µg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	SW8270DSIM	Benzo(b)fluoranthene	0.42	µg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	SW8270DSIM	Benzo(g,h,i)perylene	0.44	µg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	SW8270DSIM	Benzo(k)fluoranthene	0.27	µg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	SW8270DSIM	Chrysene	0.34	µg/kg	U	LB<RL	K2111196

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB09-0.0-1.0	SW8270DSIM	Fluoranthene	0.69	µg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.4	µg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	SW8270DSIM	Naphthalene	0.52	µg/kg	U	LB<RL	K2111196
WC-SB09-0.0-1.0	SW8270DSIM	Pyrene	0.35	µg/kg	U	LB<RL	K2111196
WC-SB10-0.0-1.0	D6913/D7928	Clay (<2 um)	9.8	µg/kg	J	LabDupRPD	K2111070
WC-SB10-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDD	0.00012	µg/kg	J	IonRatio	L2645716
WC-SB10-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDF	0.000064	µg/kg	J	IonRatio	L2645716
WC-SB10-0.0-1.0	E1613B	2,3,4,7,8-PeCDF	0.000049	µg/kg	J	IonRatio	L2645716
WC-SB10-0.0-1.0	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.0018	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	Decachlorobiphenyl	0.00315	µg/kg	J-	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	Dichlorobiphenyl	0.0076	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	Heptachlorobiphenyl	0.0162	µg/kg	J-	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	Hexachlorobiphenyl	0.0154	µg/kg	J-	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	Monochlorobiphenyl	0.0046	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	Nonachlorobiphenyl	0.0025	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	Octachlorobiphenyl	0.00573	µg/kg	J-	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-085/110/115/116/117	0.0026	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-1	0.0088	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-10	0.011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-103	0.0015	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-104	0.0008	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-105	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-106	0.0014	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-107	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-108/124	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-11	0.01	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-111	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-112	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-114	0.0016	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-118	0.0014	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-12/13	0.0095	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-120	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-121	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-122	0.0014	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-123	0.0014	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-126	0.0015	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-127	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-128/166	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-129/138/163	0.0046	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-130	0.0017	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-131	0.0018	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-132	0.0026	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-133	0.0015	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-134/143	0.0017	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-135/151	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-136	0.00087	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-137/164	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-139/140	0.0014	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-14	0.0099	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-141	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-142	0.0017	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-144	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-145	0.00086	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-146	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-147/149	0.00463	µg/kg	J-	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-148	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-15	0.0076	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-150	0.00083	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-152	0.00084	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-153/168	0.0036	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-154	0.00093	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-155	0.00073	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-156/157	0.0016	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-158	0.00095	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-159	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-16	0.005	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-160	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-161	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-162	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-165	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-167	0.001	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-169	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-17	0.0039	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-170	0.0031	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-171/173	0.002	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-172	0.002	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-174	0.0031	µg/kg	J-	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-175	0.0019	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-176	0.0014	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-177	0.002	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-178	0.002	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-179	0.0013	µg/kg	UJ	Sur<LCL	L2645716

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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB10-0.0-1.0	E1668	PCB-18/30	0.0033	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-180/193	0.00684	µg/kg	J-	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-181	0.0018	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-182	0.0017	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-184	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-185	0.0019	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-186	0.0014	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-187	0.0032	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-188	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-189	0.00097	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-19	0.007	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-190	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-191	0.0014	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-192	0.0015	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-194	0.0011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-195	0.0012	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-196	0.0012	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-197	0.00069	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-198/199	0.00263	µg/kg	J-	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-2	0.0056	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-20/28	0.0032	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-200	0.00082	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-201	0.00076	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-202	0.00075	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-203	0.0019	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-204	0.00078	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-205	0.00099	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-206	0.0047	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-207	0.0028	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-208	0.0025	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-21/33	0.0034	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-22	0.0034	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-23	0.0035	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-24	0.0029	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-25	0.0033	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-26/29	0.0033	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-27	0.0029	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-3	0.0046	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-31	0.0033	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-32	0.0027	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-34	0.0036	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-35	0.0036	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-36	0.0031	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-37	0.0031	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-38	0.0034	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-39	0.0031	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-4	0.042	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-40/41/71	0.0025	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-42	0.0029	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-43	0.003	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-44/47/65	0.0023	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-45/51	0.0027	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-46	0.003	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-48	0.0025	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-49/69	0.0022	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-5	0.011	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-50/53	0.0025	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-52	0.0026	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-54	0.0031	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-55	0.0027	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-56	0.0027	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-57	0.0028	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-58	0.0026	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-59/62/75	0.0019	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-6	0.01	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-60	0.0026	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-61/70/74/76	0.0025	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-63	0.0026	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-64	0.0019	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-66	0.0026	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-67	0.0023	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-68	0.0024	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-7	0.0096	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-72	0.0026	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-73	0.0019	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-77	0.0023	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-78	0.0027	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-79	0.0023	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-8	0.0096	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-80	0.0022	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-81	0.0025	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-82	0.0019	µg/kg	UJ	Sur<LCL	L2645716

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB10-0.0-1.0	E1668	PCB-83/99	0.0016	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-84	0.0018	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-86/87/97/109/119/125	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-88/91	0.0016	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-89	0.0018	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-9	0.01	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-90/101/113	0.0013	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-92	0.0017	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-93/98/100/102	0.0016	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-94	0.0017	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-95	0.0034	µg/kg	J-	IonRatio|Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	PCB-96	0.0007	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	Pentachlorobiphenyl	0.006	µg/kg	J-	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	Tetrachlorobiphenyl	0.0019	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1668	Trichlorobiphenyl	0.0027	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1699M	4,4'-DDD	0.042	µg/kg	J	IonRatio	L2645716
WC-SB10-0.0-1.0	E1699M	4,4'-DDT	0.083	µg/kg	UJ	Sur<LCL	L2645716
WC-SB10-0.0-1.0	E1699M	Aldrin	0.025	µg/kg	UJ	LCS<LCL	L2645716
WC-SB10-0.0-1.0	NWTPH-Dx	Diesel Range Organics	120	mg/kg	J+	CCV>UCL	K2111070
WC-SB10-0.0-1.0	NWTPH-Dx	Diesel Range Organics	120	mg/kg	J+	CCV>UCL	K2111070
WC-SB10-0.0-1.0	SW8270DSIM	Benzo(a)anthracene	0.3	µg/kg	U	LB<RL	K2111070
WC-SB10-0.0-1.0	SW8270DSIM	Naphthalene	0.61	µg/kg	U	LB<RL	K2111070
WC-SB11-0.0-1.0	D6913/D7928	Fine Sand (0.125 to 0.25mm), Wentworth	15.1	µg/kg	J	FD>RPD	K2110977
WC-SB11-0.0-1.0	D6913/D7928	Fine Silt (2-5 um)	66.6	µg/kg	J	FD>RPD	K2110977
WC-SB11-0.0-1.0	D6913/D7928	Medium Sand (0.25 to 0.5mm), Wentworth	2	µg/kg	J	FD>RPD	K2110977
WC-SB11-0.0-1.0	D6913/D7928	Medium Silt (5-20 um)	57	µg/kg	J	FD>RPD	K2110977
WC-SB11-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0314	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0157	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00085	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDD	0.00058	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDD	0.00149	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDF	0.00068	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDF	0.00029	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1613B	1,2,3,7,8-PeCDD	0.0003	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1613B	2,3,4,6,7,8-HxCDF	0.0011	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1613B	2,3,4,7,8-PeCDF	0.000363	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1613B	OCDD	0.231	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1613B	OCDF	0.028	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1613B	Total HpCDD	0.064	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1613B	Total HpCDF	0.0422	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1613B	Total HxCDF	0.024	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1613B	Total PeCDF	0.00204	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.0027	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	Decachlorobiphenyl	0.0445	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	Heptachlorobiphenyl	0.0289	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	Hexachlorobiphenyl	0.0323	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	Nonachlorobiphenyl	0.0143	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	Octachlorobiphenyl	0.0146	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-085/110/115/116/117	0.00653	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-1	0.0058	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-105	0.0012	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-114	0.00085	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-118	0.00276	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-123	0.00088	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-126	0.0012	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-128/166	0.0012	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-129/138/163	0.0075	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-132	0.0022	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-135/151	0.0024	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-137/164	0.00082	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-141	0.00086	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-146	0.0018	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-147/149	0.00495	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-15	0.068	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-153/168	0.00849	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-156/157	0.0012	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-158	0.00088	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-170	0.00239	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-171/173	0.00071	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-174	0.0018	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-176	0.00036	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-177	0.0014	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-178	0.00059	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-179	0.00061	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-180/193	0.011	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-187	0.00611	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-19	0.0029	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-194	0.00379	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-196	0.0017	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-198/199	0.00466	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-20/28	0.008	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-202	0.000847	µg/kg	J+	FD>RPD|Sur>UCL	L2645738

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB11-0.0-1.0	E1668	PCB-203	0.0028	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-206	0.00936	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-208	0.0028	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-21/33	0.0048	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-22	0.0051	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-3	0.0016	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-31	0.0065	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-37	0.00446	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-4	0.016	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-44/47/65	0.00617	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-54	0.0019	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-56	0.0038	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-61/70/74/76	0.0068	µg/kg	J	FD>RPD|IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-66	0.00408	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	PCB-77	0.0017	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-81	0.0015	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1668	PCB-83/99	0.0025	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-90/101/113	0.0038	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	PCB-92	0.00098	µg/kg	J	IonRatio	L2645738
WC-SB11-0.0-1.0	E1668	Pentachlorobiphenyl	0.0205	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	Tetrachlorobiphenyl	0.0254	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1668	Trichlorobiphenyl	0.0289	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1699M	2,4'-DDE	0.029	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1699M	4,4'-DDE	0.039	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1699M	4,4'-DDT	0.451	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0	E1699M	Aldrin	0.018	µg/kg	UJ	LCS<LCL	L2645738
WC-SB11-0.0-1.0	E1699M	gamma-BHC (Lindane)	0.06	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1699M	Oxychlordane	0.02	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	E1699M	trans-Nonachlor	0.074	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0	NWTPH-Dx	Diesel Range Organics	2.6	mg/kg	U	LB<RL	K2110977
WC-SB11-0.0-1.0	NWTPH-Dx	Residual Range Organics (C25-C36)	5.6	mg/kg	U	LB<RL	K2110977
WC-SB11-0.0-1.0	SW7471A	Mercury	0.035	mg/kg	J-	LCS<LCL	K2110977
WC-SB11-0.0-1.0	SW8270D-LL	Bis (2-ethylhexyl) phthalate	13	µg/kg	U	LB<RL	K2110977
WC-SB11-0.0-1.0	SW8270DSIM	Benzo(a)anthracene	0.33	µg/kg	U	LB<RL	K2110977
WC-SB11-0.0-1.0	SW8270DSIM	Benzo(a)pyrene	0.55	µg/kg	U	LB<RL	K2110977
WC-SB11-0.0-1.0FD	D6913/D7928	Fine Sand (0.125 to 0.25mm), Wentworth	32.2	µg/kg	J	FD>RPD	K2110977
WC-SB11-0.0-1.0FD	D6913/D7928	Fine Silt (2-5 um)	46.5	µg/kg	J	FD>RPD	K2110977
WC-SB11-0.0-1.0FD	D6913/D7928	Medium Sand (0.25 to 0.5mm), Wentworth	5.4	µg/kg	J	FD>RPD	K2110977
WC-SB11-0.0-1.0FD	D6913/D7928	Medium Silt (5-20 um)	38.9	µg/kg	J	FD>RPD	K2110977
WC-SB11-0.0-1.0FD	E1613B	1,2,3,4,6,7,8-HpCDD	0.0455	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	1,2,3,4,6,7,8-HpCDF	0.0248	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	1,2,3,4,7,8,9-HpCDF	0.0012	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	1,2,3,4,7,8-HxCDD	0.00073	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	1,2,3,4,7,8-HxCDF	0.002	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	1,2,3,6,7,8-HxCDD	0.00276	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	1,2,3,6,7,8-HxCDF	0.001	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	1,2,3,7,8,9-HxCDD	0.0014	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	1,2,3,7,8,9-HxCDF	0.00052	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	1,2,3,7,8-PeCDD	0.000655	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	1,2,3,7,8-PeCDF	0.0003	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	2,3,4,6,7,8-HxCDF	0.0046	µg/kg	J-	FD>RPD|Sur<LCL|Coelute	L2645738
WC-SB11-0.0-1.0FD	E1613B	2,3,4,7,8-PeCDF	0.00071	µg/kg	J-	FD>RPD|IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	2,3,7,8-TCDD	0.00013	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	2,3,7,8-TCDF	0.00014	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	OCDD	0.361	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	OCDF	0.0386	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	Total HpCDD	0.0944	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	Total HpCDF	0.0649	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	Total HxCDD	0.00966	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	Total HxCDF	0.0433	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	Total PeCDD	0.000655	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	Total PeCDF	0.00826	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	Total TCDD	0.00013	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1613B	Total TCDF	0.00014	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.0051	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	Decachlorobiphenyl	0.0951	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	Dichlorobiphenyl	0.013	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	Heptachlorobiphenyl	0.0807	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	Hexachlorobiphenyl	0.0834	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	Monochlorobiphenyl	0.0023	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	Nonachlorobiphenyl	0.0264	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	Octachlorobiphenyl	0.0328	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-085/110/115/116/117	0.0114	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-1	0.0012	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-10	0.0026	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-103	0.00066	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-104	0.00043	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-105	0.00246	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-106	0.0006	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-107	0.00052	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-108/124	0.00062	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-11	0.013	µg/kg	J-	IonRatio|Sur<LCL	L2645738

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB11-0.0-1.0FD	E1668	PCB-111	0.00049	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-112	0.00052	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-114	0.00058	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-118	0.00516	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-12/13	0.0027	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-120	0.00049	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-121	0.00051	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-122	0.00067	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-123	0.00064	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-126	0.00058	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-127	0.0006	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-128/166	0.0049	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-129/138/163	0.0193	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-130	0.00172	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-131	0.001	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-132	0.00761	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-133	0.00093	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-134/143	0.00125	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-135/151	0.00574	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-136	0.00219	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-137/164	0.00385	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-139/140	0.00081	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-14	0.0029	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-141	0.00253	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-142	0.001	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-144	0.00039	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-145	0.00029	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-146	0.00248	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-147/149	0.0156	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-148	0.00039	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-15	0.0021	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-150	0.00027	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-152	0.00028	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-153/168	0.0107	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-154	0.00031	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-155	0.00029	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-156/157	0.0025	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-158	0.00216	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-159	0.00064	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-16	0.0015	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-160	0.00063	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-161	0.00067	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-162	0.00063	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-165	0.00069	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-167	0.00087	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-169	0.00062	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-17	0.00144	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-170	0.012	µg/kg	J-	FD>RPD|IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-171/173	0.0026	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-172	0.00197	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-174	0.0107	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-175	0.00066	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-176	0.00122	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-177	0.00621	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-178	0.00197	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-179	0.0035	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-18/30	0.00097	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-180/193	0.0216	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-181	0.00064	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-182	0.00061	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-184	0.00044	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-185	0.00072	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-186	0.00049	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-187	0.0125	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-188	0.00045	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-189	0.00084	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-19	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-190	0.0013	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-191	0.00051	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-192	0.00053	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-194	0.00743	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-195	0.00275	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-196	0.0035	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-197	0.00047	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-198/199	0.01	µg/kg	J-	FD>RPD|IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-2	0.0023	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-20/28	0.00265	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-200	0.00053	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-201	0.000889	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-202	0.00232	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-203	0.00595	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-204	0.00051	µg/kg	UJ	Sur<LCL	L2645738

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB11-0.0-1.0FD	E1668	PCB-205	0.00055	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-206	0.0149	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-207	0.0028	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-208	0.00866	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-21/33	0.00178	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-22	0.0015	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-23	0.0015	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-24	0.00082	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-25	0.0013	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-26/29	0.0014	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-27	0.00083	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-3	0.00062	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-31	0.00229	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-32	0.00079	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-34	0.0015	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-35	0.0015	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-36	0.0013	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-37	0.0012	µg/kg	UJ	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-38	0.0015	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-39	0.0013	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-4	0.0067	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-40/41/71	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-42	0.0013	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-43	0.0013	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-44/47/65	0.00318	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-45/51	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-46	0.0013	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-48	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-49/69	0.00098	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-5	0.0026	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-50/53	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-52	0.00283	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-54	0.00084	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-55	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-56	0.00165	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-57	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-58	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-59/62/75	0.00081	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-6	0.0025	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-60	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-61/70/74/76	0.00404	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-63	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-64	0.00084	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-66	0.0014	µg/kg	J-	FD>RPD|IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-67	0.00094	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-68	0.001	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-7	0.0024	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-72	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-73	0.00081	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-77	0.00091	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-78	0.0011	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-79	0.00094	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-8	0.0022	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-80	0.00093	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-81	0.0009	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-82	0.00084	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-83/99	0.00233	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-84	0.00204	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-86/87/97/108/119/125	0.0035	µg/kg	J-	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-88/91	0.00072	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-89	0.0008	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-9	0.0025	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-90/101/113	0.0045	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-92	0.00076	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-93/98/100/102	0.00071	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-94	0.00077	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-95	0.0043	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	PCB-96	0.0004	µg/kg	UJ	Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	Pentachlorobiphenyl	0.0357	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	Tetrachlorobiphenyl	0.0131	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1668	Trichlorobiphenyl	0.00816	µg/kg	J-	FD>RPD|Sur<LCL	L2645738
WC-SB11-0.0-1.0FD	E1699M	4,4'-DDT	0.97	µg/kg	J	FD>RPD	L2645738
WC-SB11-0.0-1.0FD	E1699M	Aldrin	0.019	µg/kg	UJ	LCS<LCL	L2645738
WC-SB11-0.0-1.0FD	NWTPH-Dx	Diesel Range Organics	2.6	mg/kg	U	LB<RL	K2110977
WC-SB11-0.0-1.0FD	NWTPH-Dx	Residual Range Organics (C25-C36)	5.7	mg/kg	U	LB<RL	K2110977
WC-SB11-0.0-1.0FD	SW7471A	Mercury	0.033	mg/kg	J-	LCS<LCL	K2110977
WC-SB11-0.0-1.0FD	SW8270D-LL	Bis (2-ethylhexyl) phthalate	13	µg/kg	U	LB<RL	K2110977
WC-SB11-0.0-1.0FD	SW8270DSIM	Anthracene	1.5	µg/kg	J+	CCV>UCL	K2110977
WC-SB11-0.0-1.0FD	SW8270DSIM	Benzo(a)anthracene	0.33	µg/kg	U	LB<RL	K2110977
WC-SB11-0.0-1.0FD	SW8270DSIM	Benzo(a)pyrene	0.55	µg/kg	U	LB<RL	K2110977
WC-SB11-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000142	µg/kg	U	LB<RL	K2204428
WC-SB11-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.000767	µg/kg	J	IonRatio	K2204428

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB11-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.00313	µg/kg	J	Coelute	K2204428
WC-SB11-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.00172	µg/kg	J	IonRatio	K2204428
WC-SB11-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000284	µg/kg	U	LB<RL	K2204428
WC-SB11-1.0-2.0	SW8270DSIM	Benzo(a)anthracene	0.34	µg/kg	U	LB<RL	K2204428
WC-SB11-1.0-2.0	SW8270DSIM	Benzo(a)pyrene	0.56	µg/kg	U	LB<RL	K2204428
WC-SB11-1.0-2.0	SW8270DSIM	Naphthalene	0.7	µg/kg	U	LB<RL	K2204428
WC-SB11-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.000344	µg/kg	U	LB<RL	K2204428
WC-SB11-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0000831	µg/kg	U	LB<RL	K2204428
WC-SB11-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0000973	µg/kg	U	LB<RL	K2204428
WC-SB11-2.0-3.0	E1613B	OCDF	0.000419	µg/kg	U	LB<RL	K2204428
WC-SB11-2.0-3.0	E1613B	Total HpCDD	0.000344	µg/kg	U	LB<RL	K2204428
WC-SB11-2.0-3.0	E1613B	Total HpCDF	0.0000899	µg/kg	U	LB<RL	K2204428
WC-SB11-2.0-3.0	SW8270DSIM	Benzo(a)anthracene	0.35	µg/kg	U	LB<RL	K2204428
WC-SB11-2.0-3.0	SW8270DSIM	Naphthalene	0.71	µg/kg	U	LB<RL	K2204428
WC-SB11-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.000236	µg/kg	U	LB<RL	K2204428
WC-SB11-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0000535	µg/kg	U	LB<RL	K2204428
WC-SB11-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0000607	µg/kg	U	LB<RL	K2204428
WC-SB11-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.000188	µg/kg	J	IonRatio	K2204428
WC-SB11-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.000178	µg/kg	J	IonRatio	K2204428
WC-SB11-3.0-4.0	E1613B	2,3,7,8-TCDF	0.000461	µg/kg	UJ	Sur<LCL	K2204428
WC-SB11-3.0-4.0	E1613B	OCDF	0.00221	µg/kg	J	IonRatio	K2204428
WC-SB11-3.0-4.0	E1613B	Total HpCDD	0.000236	µg/kg	U	LB<RL	K2204428
WC-SB11-3.0-4.0	SW8270DSIM	Benzo(a)anthracene	0.35	µg/kg	U	LB<RL	K2204428
WC-SB11-3.0-4.0	SW8270DSIM	Naphthalene	0.7	µg/kg	U	LB<RL	K2204428
WC-SB11-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0000502	µg/kg	U	LB<RL	K2204428
WC-SB11-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0000546	µg/kg	U	LB<RL	K2204428
WC-SB11-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.000184	µg/kg	J	IonRatio	K2204428
WC-SB11-4.0-5.0	E1613B	2,3,7,8-TCDD	0.000622	µg/kg	UJ	Sur<LCL	K2204428
WC-SB11-4.0-5.0	E1613B	2,3,7,8-TCDF	0.000582	µg/kg	UJ	Sur<LCL	K2204428
WC-SB11-4.0-5.0	E1613B	OCDF	0.00289	µg/kg	J	IonRatio	K2204428
WC-SB11-4.0-5.0	E1613B	Total HpCDF	0.0000524	µg/kg	U	LB<RL	K2204428
WC-SB11-4.0-5.0	E1613B	Total HxCDF	0.0000934	µg/kg	U	LB<RL	K2204428
WC-SB11-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	0.34	µg/kg	U	LB<RL	K2204428
WC-SB11-4.0-5.0	SW8270DSIM	Benzo(a)pyrene	0.55	µg/kg	U	LB<RL	K2204428
WC-SB12-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00672	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00142	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00013	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDD	0.00032	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	1,2,3,4,7,8-HxCDF	0.0002	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDD	0.0003	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	1,2,3,6,7,8-HxCDF	0.00021	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDD	0.00031	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	1,2,3,7,8,9-HxCDF	0.0003	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	1,2,3,7,8-PeCDD	0.00019	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	1,2,3,7,8-PeCDF	0.00012	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	2,3,4,6,7,8-HxCDF	0.000274	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	2,3,4,7,8-PeCDF	0.000088	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	2,3,7,8-TCDD	0.00018	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	2,3,7,8-TCDF	0.00012	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	OCDD	0.0497	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	OCDF	0.0025	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	Total HpCDD	0.00672	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	Total HpCDF	0.00343	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	Total HxCDD	0.00189	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	Total HxCDF	0.00152	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	Total PeCDD	0.000238	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	Total PeCDF	0.000095	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	Total TCDD	0.000558	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1613B	Total TCDF	0.00012	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.00062	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	Decachlorobiphenyl	0.00283	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-1	0.0027	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-105	0.0013	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-114	0.00028	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-118	0.0015	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-123	0.0003	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-126	0.00029	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-128/166	0.00059	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-129/138/163	0.0036	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-132	0.0011	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-137/164	0.00035	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-147/149	0.0026	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-15	0.0033	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-153/168	0.0024	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-155	0.00019	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-156/157	0.00045	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-17	0.001	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-177	0.00081	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-179	0.00066	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-18/30	0.002	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-180/193	0.0029	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-187	0.0016	µg/kg	J	IonRatio	L2645738

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SB12-0.0-1.0	E1668	PCB-189	0.00026	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-19	0.00056	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-202	0.00026	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-3	0.00153	µg/kg	J-	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-31	0.0055	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-35	0.0015	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-4	0.0023	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-40/41/71	0.0018	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-44/47/65	0.0034	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-56	0.0016	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-59/62/75	0.00043	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-60	0.0014	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-64	0.0015	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1668	PCB-77	0.00067	µg/kg	J-	IonRatio|Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-81	0.00035	µg/kg	UJ	Sur<LCL	L2645738
WC-SB12-0.0-1.0	E1668	PCB-86/87/97/108/119/125	0.0016	µg/kg	J	IonRatio	L2645738
WC-SB12-0.0-1.0	E1699M	Aldrin	0.031	µg/kg	UJ	LCS<LCL	L2645738
WC-SB12-0.0-1.0	NWTPH-Dx	Diesel Range Organics	2.8	mg/kg	U	LB<RL	K2110977
WC-SB12-0.0-1.0	NWTPH-Dx	Residual Range Organics (C25-C36)	6	mg/kg	U	LB<RL	K2110977
WC-SB12-0.0-1.0	SW7471A	Mercury	0.043	mg/kg	J-	LCS<LCL	K2110977
WC-SB12-0.0-1.0	SW8270D-LL	Bis (2-ethylhexyl) phthalate	14	µg/kg	U	LB<RL	K2110977
WC-SB12-0.0-1.0	SW8270DSIM	Anthracene	0.96	µg/kg	J+	CCV>UCL	K2110977
WC-SB12-0.0-1.0	SW8270DSIM	Benzo(a)anthracene	0.36	µg/kg	U	LB<RL	K2110977
WC-SCPD01-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.246	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0223	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00488	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0228	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.0038	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.0193	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.00205	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000918	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.0106	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.00138	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.00252	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.00109	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1613B	2,3,7,8-TCDD	0.0015	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1613B	2,3,7,8-TCDF	0.0015	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-1.0-2.0	E1613B	OCDD	1.12	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-1.0-2.0	E1699M	2,4'-DDD	0.41	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-1.0-2.0	E1699M	2,4'-DDE	0.52	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-1.0-2.0	E1699M	2,4'-DDT	0.62	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-1.0-2.0	E1699M	4,4'-DDD	1	µg/kg	J-	IS>UCL	K2203181
WC-SCPD01-1.0-2.0	E1699M	4,4'-DDE	1.6	µg/kg	J-	IS>UCL	K2203181
WC-SCPD01-1.0-2.0	E1699M	4,4'-DDT	0.31	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-1.0-2.0	SW8082A	Aroclor 1242	8.4	µg/kg	J	CF>RPD	K2203181
WC-SCPD01-1.0-2.0	SW8082A	Aroclor 1260	10	µg/kg	J	CF>RPD	K2203181
WC-SCPD01-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0405	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00406	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000801	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.000932	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.000527	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.00101	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.000562	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.000592	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.000797	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.00102	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.000677	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.000942	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	2,3,7,8-TCDD	0.00177	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	2,3,7,8-TCDF	0.00131	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	OCDD	0.313	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-2.0-3.0	E1613B	OCDF	0.0149	µg/kg	J	IonRatio	K2203181
WC-SCPD01-2.0-3.0	E1699M	2,4'-DDD	0.55	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-2.0-3.0	E1699M	2,4'-DDE	0.69	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-2.0-3.0	E1699M	2,4'-DDT	0.82	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-2.0-3.0	E1699M	4,4'-DDD	1.1	µg/kg	J-	IS>UCL	K2203181
WC-SCPD01-2.0-3.0	E1699M	4,4'-DDE	3.4	µg/kg	J-	IS>UCL	K2203181
WC-SCPD01-2.0-3.0	E1699M	4,4'-DDT	0.41	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-2.0-3.0	SW8082A	Aroclor 1254	26	µg/kg	J	CF>RPD	K2203181
WC-SCPD01-2.0-3.0	SW8082A	Aroclor 1260	24	µg/kg	J	CF>RPD	K2203181
WC-SCPD01-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.166	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00941	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000801	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.000363	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.0011	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.00273	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDF	0.00128	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00117	µg/kg	J	IonRatio	K2203181
WC-SCPD01-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.000408	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.000402	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.000622	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-3.0-4.0	E1613B	2,3,7,8-TCDD	0.000904	µg/kg	UJ	Sur<LCL	K2203181

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD01-3.0-4.0	E1613B	2,3,7,8-TCDF	0.000714	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-3.0-4.0	E1613B	OCDD	1.12	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-3.0-4.0	E1699M	2,4'-DDD	0.49	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-3.0-4.0	E1699M	2,4'-DDE	0.62	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-3.0-4.0	E1699M	2,4'-DDT	0.73	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-3.0-4.0	E1699M	4,4'-DDD	1.4	µg/kg	J-	IS>UCL	K2203181
WC-SCPD01-3.0-4.0	E1699M	4,4'-DDE	3	µg/kg	J-	IS>UCL	K2203181
WC-SCPD01-3.0-4.0	E1699M	4,4'-DDT	0.37	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-3.0-4.0	SW8082A	Aroclor 1254	21	µg/kg	J	CF>RPD	K2203181
WC-SCPD01-3.0-4.0	SW8082A	Aroclor 1260	20	µg/kg	J	CF>RPD	K2203181
WC-SCPD01-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.156	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0114	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000349	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD01-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.000496	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.00131	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDD	0.00334	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.00113	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDF	0.000467	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.000332	µg/kg	J	IonRatio	K2203181
WC-SCPD01-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.000454	µg/kg	J	IonRatio	K2203181
WC-SCPD01-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.000704	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD01-4.0-5.0	E1613B	2,3,4,7,8-PeCDF	0.000474	µg/kg	J	IonRatio	K2203181
WC-SCPD01-4.0-5.0	E1613B	2,3,7,8-TCDF	0.00115	µg/kg	J	IonRatio	K2203181
WC-SCPD01-4.0-5.0	E1613B	OCDD	1.29	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD01-4.0-5.0	E1699M	2,4'-DDD	0.4	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-4.0-5.0	E1699M	2,4'-DDE	0.5	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-4.0-5.0	E1699M	2,4'-DDT	0.59	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-4.0-5.0	E1699M	4,4'-DDD	0.77	µg/kg	J-	IS>UCL	K2203181
WC-SCPD01-4.0-5.0	E1699M	4,4'-DDE	1	µg/kg	J-	IS>UCL	K2203181
WC-SCPD01-4.0-5.0	E1699M	4,4'-DDT	0.3	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD01-4.0-5.0	SW8082A	Aroclor 1254	12	µg/kg	J	CF>RPD	K2203181
WC-SCPD01-4.0-5.0	SW8082A	Aroclor 1260	11	µg/kg	J	CF>RPD	K2203181
WC-SCPD03-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0015	µg/kg	J	IonRatio	L2603308
WC-SCPD03-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.0026	µg/kg	J	IonRatio	L2603308
WC-SCPD03-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.0021	µg/kg	J	IonRatio	L2603308
WC-SCPD03-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00028	µg/kg	J	IonRatio	L2603308
WC-SCPD03-1.0-2.0	E1613B	2,3,7,8-TCDF	0.00095	µg/kg	J	IonRatio	L2603308
WC-SCPD03-1.0-2.0	E1699M	4,4'-DDE	2.5	µg/kg	J+	LCS>UCL	K2106883
WC-SCPD03-1.0-2.0	SW8082A	Aroclor 1016	1.8	µg/kg	UJ	LCS<LCL	K2106883
WC-SCPD03-1.0-2.0	SW8270DSIM	Pyrene	170	µg/kg	J+	MSD>UCL	K2106883
WC-SCPD03-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.124	µg/kg	J-	Sur<LCL	L2603308
WC-SCPD03-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.023	µg/kg	J-	Sur<LCL	L2603308
WC-SCPD03-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0012	µg/kg	J-	IonRatio|Sur<LCL	L2603308
WC-SCPD03-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.00075	µg/kg	J	IonRatio	L2603308
WC-SCPD03-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.000973	µg/kg	J-	Sur<LCL	L2603308
WC-SCPD03-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.0023	µg/kg	J	IonRatio	L2603308
WC-SCPD03-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.00203	µg/kg	J-	Sur<LCL	L2603308
WC-SCPD03-2.0-3.0	E1613B	2,3,7,8-TCDD	0.00022	µg/kg	J	IonRatio	L2603308
WC-SCPD03-2.0-3.0	E1613B	OCDD	1.23	µg/kg	J-	Sur<LCL	L2603308
WC-SCPD03-2.0-3.0	E1699M	4,4'-DDE	3.7	µg/kg	J+	LCS>UCL	K2106883
WC-SCPD03-2.0-3.0	SW8082A	Aroclor 1016	1.7	µg/kg	UJ	LCS<LCL	K2106883
WC-SCPD03-2.0-3.0	SW8082A	Aroclor 1254	15	µg/kg	J	CF>RPD	K2106883
WC-SCPD03-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.0021	µg/kg	J	IonRatio	L2603308
WC-SCPD03-3.0-4.0	E1613B	OCDD	2.43	µg/kg	J-	Sur<LCL	L2603308
WC-SCPD03-3.0-4.0	E1699M	4,4'-DDE	2.9	µg/kg	J+	LCS>UCL	K2106883
WC-SCPD03-3.0-4.0	SW8082A	Aroclor 1016	1.6	µg/kg	UJ	LCS<LCL	K2106883
WC-SCPD03-4.0-5.0	E1699M	4,4'-DDE	2.8	µg/kg	J+	LCS>UCL	K2106883
WC-SCPD03-4.0-5.0	SW8082A	Aroclor 1016	1.8	µg/kg	UJ	LCS<LCL	K2106883
WC-SCPD03-8.0-9.0	E1613B	1,2,3,4,7,8-HxCDF	0.0424	µg/kg	J	Coelute	K2203181
WC-SCPD03-8.0-9.0	E1613B	1,2,3,6,7,8-HxCDF	0.0116	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD03-8.0-9.0	E1613B	1,2,3,7,8-PeCDD	0.000988	µg/kg	J	IonRatio	K2203181
WC-SCPD03-8.0-9.0	E1613B	OCDD	1.37	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD03-8.0-9.0	E1699M	2,4'-DDD	3.1	µg/kg	J-	IS>UCL	K2203181
WC-SCPD03-8.0-9.0	E1699M	2,4'-DDE	0.8	µg/kg	J-	IS>UCL	K2203181
WC-SCPD03-8.0-9.0	E1699M	2,4'-DDT	0.64	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD03-8.0-9.0	E1699M	4,4'-DDD	7.7	µg/kg	J-	IS>UCL	K2203181
WC-SCPD03-8.0-9.0	E1699M	4,4'-DDE	6.2	µg/kg	J-	IS>UCL	K2203181
WC-SCPD03-8.0-9.0	E1699M	4,4'-DDT	0.32	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD03-8.0-9.0	SW8082A	Aroclor 1254	21	µg/kg	J	CF>RPD	K2203181
WC-SCPD03-8.0-9.0	SW8082A	Aroclor 1260	31	µg/kg	J	CF>RPD	K2203181
WC-SCPD03-9.0-9.8	E1613B	1,2,3,4,6,7,8-HpCDD	0.0524	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD03-9.0-9.8	E1613B	1,2,3,4,6,7,8-HpCDF	0.0419	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD03-9.0-9.8	E1613B	1,2,3,4,7,8,9-HpCDF	0.00871	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD03-9.0-9.8	E1613B	1,2,3,4,7,8-HxCDD	0.00372	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD03-9.0-9.8	E1613B	1,2,3,4,7,8-HxCDF	0.0177	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD03-9.0-9.8	E1613B	1,2,3,6,7,8-HxCDD	0.00261	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD03-9.0-9.8	E1613B	1,2,3,6,7,8-HxCDF	0.00412	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD03-9.0-9.8	E1613B	1,2,3,7,8,9-HxCDD	0.00349	µg/kg	J	IonRatio	K2203181
WC-SCPD03-9.0-9.8	E1613B	1,2,3,7,8,9-HxCDF	0.00224	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD03-9.0-9.8	E1613B	1,2,3,7,8-PeCDD	0.000661	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD03-9.0-9.8	E1613B	2,3,4,6,7,8-HxCDF	0.00139	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD03-9.0-9.8	E1613B	2,3,4,7,8-PeCDF	0.00245	µg/kg	J	IonRatio	K2203181

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD03-9.0-9.8	E1613B	2,3,7,8-TCDD	0.000777	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD03-9.0-9.8	E1613B	2,3,7,8-TCDF	0.000717	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD03-9.0-9.8	E1613B	OCDD	0.514	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD03-9.0-9.8	E1699M	2,4'-DDD	1.6	µg/kg	J-	IS>UCL	K2203181
WC-SCPD03-9.0-9.8	E1699M	2,4'-DDE	0.56	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD03-9.0-9.8	E1699M	2,4'-DDT	0.67	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD03-9.0-9.8	E1699M	4,4'-DDD	5.1	µg/kg	J-	IS>UCL	K2203181
WC-SCPD03-9.0-9.8	E1699M	4,4'-DDE	3	µg/kg	J-	IS>UCL	K2203181
WC-SCPD03-9.0-9.8	E1699M	4,4'-DDT	0.34	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD03-9.0-9.8	SW8082A	Aroclor 1254	14	µg/kg	J	CF>RPD	K2203181
WC-SCPD03-9.0-9.8	SW8082A	Aroclor 1260	11	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.843	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0323	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD05-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0041	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD05-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0467	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD05-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.00176	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD05-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.0425	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.00445	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD05-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.00125	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD05-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.0202	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.000835	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD05-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.00496	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.000933	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD05-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00236	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD05-1.0-2.0	E1613B	2,3,7,8-TCDF	0.000596	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD05-1.0-2.0	E1613B	OCDD	4.35	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-1.0-2.0	SW8082A	Aroclor 1242	6.6	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-1.0-2.0	SW8082A	Aroclor 1254	13	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-1.0-2.0	SW8082A	Aroclor 1260	9.5	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0851	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0575	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00144	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.00173	µg/kg	J	Coelute	K2203181
WC-SCPD05-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.00377	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.00651	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.00136	µg/kg	J	IonRatio	K2203181
WC-SCPD05-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.000498	µg/kg	J	IonRatio	K2203181
WC-SCPD05-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.000472	µg/kg	J	IonRatio	K2203181
WC-SCPD05-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.000576	µg/kg	J	IonRatio	K2203181
WC-SCPD05-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.00224	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.0019	µg/kg	J	IonRatio	K2203181
WC-SCPD05-2.0-3.0	E1613B	2,3,7,8-TCDD	0.000385	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD05-2.0-3.0	E1613B	2,3,7,8-TCDF	0.000454	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD05-2.0-3.0	E1613B	OCDD	1.67	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD05-2.0-3.0	E1699M	2,4'-DDD	0.43	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD05-2.0-3.0	E1699M	2,4'-DDE	0.54	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD05-2.0-3.0	E1699M	2,4'-DDT	0.64	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD05-2.0-3.0	E1699M	4,4'-DDD	0.97	µg/kg	J-	IS>UCL	K2203181
WC-SCPD05-2.0-3.0	E1699M	4,4'-DDE	1.4	µg/kg	J-	IS>UCL	K2203181
WC-SCPD05-2.0-3.0	E1699M	4,4'-DDT	0.32	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD05-2.0-3.0	SW8082A	Aroclor 1242	7.1	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-2.0-3.0	SW8082A	Aroclor 1254	16	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-2.0-3.0	SW8082A	Aroclor 1260	13	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.00175	µg/kg	J	IonRatio|Coelute	K2203181
WC-SCPD05-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.000605	µg/kg	J	IonRatio	K2203181
WC-SCPD05-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.000877	µg/kg	J	IonRatio	K2203181
WC-SCPD05-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.00206	µg/kg	J	IonRatio	K2203181
WC-SCPD05-3.0-4.0	E1699M	2,4'-DDD	0.98	µg/kg	J-	IS>UCL	K2203181
WC-SCPD05-3.0-4.0	E1699M	2,4'-DDE	0.62	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD05-3.0-4.0	E1699M	2,4'-DDT	0.73	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD05-3.0-4.0	E1699M	4,4'-DDD	4.5	µg/kg	J-	IS>UCL	K2203181
WC-SCPD05-3.0-4.0	E1699M	4,4'-DDE	4.5	µg/kg	J-	IS>UCL	K2203181
WC-SCPD05-3.0-4.0	E1699M	4,4'-DDT	0.37	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD05-3.0-4.0	SW8082A	Aroclor 1254	22	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-3.0-4.0	SW8082A	Aroclor 1260	22	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.00222	µg/kg	J	IonRatio	K2203181
WC-SCPD05-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.0109	µg/kg	J	IonRatio	K2203181
WC-SCPD05-4.0-5.0	E1613B	2,3,7,8-TCDD	0.00101	µg/kg	J	IonRatio	K2203181
WC-SCPD05-4.0-5.0	E1613B	OCDD	7.02	µg/kg	J	ICRange	K2203181
WC-SCPD05-4.0-5.0	SW8082A	Aroclor 1242	41	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-4.0-5.0	SW8082A	Aroclor 1254	51	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-4.0-5.0	SW8082A	Aroclor 1260	45	µg/kg	J	CF>RPD	K2203181
WC-SCPD05-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.161	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0679	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00475	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDD	0.0013	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDF	0.0119	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDD	0.00504	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDF	0.0073	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDD	0.00249	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDF	0.00202	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	1,2,3,7,8-PeCDD	0.000684	ug/kg	J-	IonRatio|HT>UCL	K2208213

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD05-5.0-6.0	E1613B	1,2,3,7,8-PeCDF	0.00661	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	2,3,4,6,7,8-HxCDF	0.00365	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	2,3,4,7,8-PeCDF	0.00594	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	2,3,7,8-TCDD	0.000422	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	2,3,7,8-TCDF	0.00331	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	OCDD	3.38	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	OCDF	0.177	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	Total HpCDD	0.498	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	Total HpCDF	0.226	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	Total HxCDD	0.0622	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	Total HxCDF	0.103	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	Total PeCDD	0.00772	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	Total PeCDF	0.066	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	Total TCDD	0.00671	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1613B	Total TCDF	0.0267	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1699M	2,4'-DDD	6.5	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1699M	2,4'-DDE	2	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1699M	2,4'-DDT	0.71	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1699M	4,4'-DDD	24	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1699M	4,4'-DDE	12	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	E1699M	4,4'-DDT	0.36	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8082A	Aroclor 1016	0.82	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8082A	Aroclor 1221	0.82	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8082A	Aroclor 1232	0.82	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8082A	Aroclor 1242	11	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8082A	Aroclor 1248	0.82	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8082A	Aroclor 1254	25	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8082A	Aroclor 1260	60	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	2-Methylnaphthalene	25	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Acenaphthene	16	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Acenaphthylene	16	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Anthracene	24	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Benzo(a)anthracene	49	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Benzo(a)pyrene	71	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Benzo(b)fluoranthene	73	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Benzo(g,h,i)perylene	60	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Benzo(k)fluoranthene	25	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Chrysene	83	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Dibenzo(a,h)anthracene	7.7	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Dibenzofuran	13	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Fluoranthene	180	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Fluorene	27	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	51	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Naphthalene	53	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Phenanthrene	190	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-5.0-6.0	SW8270DSIM	Pyrene	220	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0396	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0444	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00595	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,4,7,8-HxCDD	0.00619	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,4,7,8-HxCDF	0.00724	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,6,7,8-HxCDD	0.00607	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,6,7,8-HxCDF	0.00918	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDD	0.00579	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDF	0.00596	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,7,8-PeCDD	0.00621	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	1,2,3,7,8-PeCDF	0.00656	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	2,3,4,6,7,8-HxCDF	0.00748	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	2,3,4,7,8-PeCDF	0.00993	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	2,3,7,8-TCDD	0.00105	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	2,3,7,8-TCDF	0.00187	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	OCDD	0.778	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	OCDF	0.0561	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	Total HpCDD	0.12	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	Total HpCDF	0.0878	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	Total HxCDD	0.0289	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	Total HxCDF	0.0834	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	Total PeCDD	0.00872	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	Total PeCDF	0.0778	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	Total TCDD	0.000383	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1613B	Total TCDF	0.0176	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1699M	2,4'-DDD	5.7	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1699M	2,4'-DDE	1.2	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1699M	2,4'-DDT	0.67	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1699M	4,4'-DDD	17	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1699M	4,4'-DDE	8.4	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	E1699M	4,4'-DDT	0.34	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8082A	Aroclor 1016	0.83	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8082A	Aroclor 1221	0.83	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8082A	Aroclor 1232	0.83	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8082A	Aroclor 1242	4.5	ug/kg	J-	CF>RPD|HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8082A	Aroclor 1248	0.83	ug/kg	UJ	HT>UCL	K2208213

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD05-6.0-7.0	SW8082A	Aroclor 1254	27	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8082A	Aroclor 1260	41	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	2-Methylnaphthalene	50	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Acenaphthene	40	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Acenaphthylene	33	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Anthracene	57	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Benzo(a)anthracene	94	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Benzo(a)pyrene	130	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Benzo(b)fluoranthene	130	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Benzo(g,h,i)perylene	120	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Benzo(k)fluoranthene	42	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Chrysene	150	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Dibenzo(a,h)anthracene	13	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Dibenzofuran	21	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Fluoranthene	340	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Fluorene	48	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	96	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Naphthalene	84	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Phenanthrene	340	ug/kg	J-	HT>UCL	K2208213
WC-SCPD05-6.0-7.0	SW8270DSIM	Pyrene	430	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0241	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0112	µg/kg	J-	Sur<LCL|Coelute	K2203181
WC-SCPD06-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00082	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD06-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.000157	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD06-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.00225	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.000855	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.00149	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.000165	µg/kg	UJ	LB<RL	K2203181
WC-SCPD06-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000439	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00027	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD06-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.000542	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD06-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00062	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD06-1.0-2.0	E1613B	2,3,7,8-TCDF	0.000417	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD06-1.0-2.0	E1613B	OCDD	0.345	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-1.0-2.0	E1699M	2,4'-DDD	0.87	µg/kg	J-	IS>UCL	K2203181
WC-SCPD06-1.0-2.0	E1699M	2,4'-DDE	0.55	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-1.0-2.0	E1699M	2,4'-DDT	0.65	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-1.0-2.0	E1699M	4,4'-DDD	4.6	µg/kg	J-	IS>UCL	K2203181
WC-SCPD06-1.0-2.0	E1699M	4,4'-DDE	4.1	µg/kg	J-	IS>UCL	K2203181
WC-SCPD06-1.0-2.0	E1699M	4,4'-DDT	0.33	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-1.0-2.0	SW8082A	Aroclor 1254	44	µg/kg	J	CF>RPD	K2203181
WC-SCPD06-1.0-2.0	SW8082A	Aroclor 1260	27	µg/kg	J	CF>RPD	K2203181
WC-SCPD06-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.000488	µg/kg	J	IonRatio	K2203181
WC-SCPD06-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.00162	µg/kg	J	IonRatio	K2203181
WC-SCPD06-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.00716	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.00107	µg/kg	J	IonRatio	K2203181
WC-SCPD06-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.000419	µg/kg	J	IonRatio	K2203181
WC-SCPD06-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.00122	µg/kg	J	IonRatio	K2203181
WC-SCPD06-2.0-3.0	E1613B	2,3,7,8-TCDF	0.000239	µg/kg	J	IonRatio	K2203181
WC-SCPD06-2.0-3.0	E1699M	2,4'-DDD	0.68	µg/kg	J-	IS>UCL	K2203181
WC-SCPD06-2.0-3.0	E1699M	2,4'-DDE	0.65	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-2.0-3.0	E1699M	2,4'-DDT	0.78	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-2.0-3.0	E1699M	4,4'-DDD	3.4	µg/kg	J-	IS>UCL	K2203181
WC-SCPD06-2.0-3.0	E1699M	4,4'-DDE	2.1	µg/kg	J-	IS>UCL	K2203181
WC-SCPD06-2.0-3.0	E1699M	4,4'-DDT	0.39	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-2.0-3.0	SW8082A	Aroclor 1260	25	µg/kg	J	CF>RPD	K2203181
WC-SCPD06-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.255	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0477	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00198	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD06-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.0115	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.00166	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.00985	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDF	0.00698	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.000502	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD06-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.00174	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD06-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.000839	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.00218	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.00189	µg/kg	J	IonRatio	K2203181
WC-SCPD06-3.0-4.0	E1613B	2,3,7,8-TCDD	0.000388	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1613B	2,3,7,8-TCDF	0.000471	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1613B	OCDD	2.08	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-3.0-4.0	E1699M	2,4'-DDD	0.74	µg/kg	J-	IS>UCL	K2203181
WC-SCPD06-3.0-4.0	E1699M	2,4'-DDE	0.61	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-3.0-4.0	E1699M	2,4'-DDT	0.73	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-3.0-4.0	E1699M	4,4'-DDD	3.1	µg/kg	J-	IS>UCL	K2203181
WC-SCPD06-3.0-4.0	E1699M	4,4'-DDE	1.9	µg/kg	J-	IS>UCL	K2203181
WC-SCPD06-3.0-4.0	E1699M	4,4'-DDT	0.37	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-3.0-4.0	SW8082A	Aroclor 1254	23	µg/kg	J	CF>RPD	K2203181
WC-SCPD06-3.0-4.0	SW8082A	Aroclor 1260	26	µg/kg	J	CF>RPD	K2203181
WC-SCPD06-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.000298	µg/kg	J	IonRatio	K2203181
WC-SCPD06-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDD	0.00136	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD06-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.00355	µg/kg	J-	Sur<LCL	K2203181

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD06-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.000642	µg/kg	J	IonRatio	K2203181
WC-SCPD06-4.0-5.0	E1613B	OCDD	0.562	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD06-4.0-5.0	E1699M	2,4'-DDD	0.77	µg/kg	J-	Sur>UCL|IS>UCL	K2203181
WC-SCPD06-4.0-5.0	E1699M	2,4'-DDE	0.57	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-4.0-5.0	E1699M	2,4'-DDT	0.67	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-4.0-5.0	E1699M	4,4'-DDD	3.5	µg/kg	J-	Sur>UCL|IS>UCL	K2203181
WC-SCPD06-4.0-5.0	E1699M	4,4'-DDE	1.9	µg/kg	J-	Sur>UCL|IS>UCL	K2203181
WC-SCPD06-4.0-5.0	E1699M	4,4'-DDT	0.34	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD06-4.0-5.0	SW8082A	Aroclor 1254	19	µg/kg	J	CF>RPD	K2203181
WC-SCPD06-4.0-5.0	SW8082A	Aroclor 1260	33	µg/kg	J	CF>RPD	K2203181
WC-SCPD06-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0596	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0694	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00264	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDD	0.000653	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDF	0.00346	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDD	0.00273	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDF	0.0102	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDD	0.00158	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDF	0.00178	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	1,2,3,7,8-PeCDD	0.00113	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	1,2,3,7,8-PeCDF	0.00154	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	2,3,4,6,7,8-HxCDF	0.0032	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	2,3,4,7,8-PeCDF	0.00362	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	2,3,7,8-TCDD	0.000379	ug/kg	UJ	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	2,3,7,8-TCDF	0.00109	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	OCDD	1.59	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	OCDF	0.0761	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	Total HpCDD	0.142	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	Total HpCDF	0.157	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	Total HxCDD	0.0286	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	Total HxCDF	0.0792	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	Total PeCDD	0.0039	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	Total PeCDF	0.0521	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	Total TCDD	0.00234	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1613B	Total TCDF	0.0111	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1699M	2,4'-DDD	1.8	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1699M	2,4'-DDE	0.7	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1699M	2,4'-DDT	0.84	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1699M	4,4'-DDD	7.1	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1699M	4,4'-DDE	2.8	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	E1699M	4,4'-DDT	0.42	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8082A	Aroclor 1016	0.81	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8082A	Aroclor 1221	0.81	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8082A	Aroclor 1232	0.81	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8082A	Aroclor 1242	5.2	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8082A	Aroclor 1248	0.81	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8082A	Aroclor 1254	20	ug/kg	J-	CF>RPD|HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8082A	Aroclor 1260	29	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	2-Methylnaphthalene	51	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Acenaphthene	29	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Acenaphthylene	40	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Anthracene	41	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Benzo(a)anthracene	58	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Benzo(a)pyrene	96	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Benzo(b)fluoranthene	98	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Benzo(g,h,i)perylene	94	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Benzo(k)fluoranthene	31	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Chrysene	88	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Dibenzo(a,h)anthracene	7.7	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Dibenzofuran	19	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Fluoranthene	250	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Fluorene	36	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	71	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Naphthalene	180	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Phenanthrene	240	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-5.0-6.0	SW8270DSIM	Pyrene	310	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0445	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0425	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00137	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,4,7,8-HxCDD	0.000602	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,4,7,8-HxCDF	0.00109	ug/kg	J-	IonRatio|Inter|HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,6,7,8-HxCDD	0.00214	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,6,7,8-HxCDF	0.00599	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDD	0.000625	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDF	0.000752	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,7,8-PeCDD	0.000405	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	1,2,3,7,8-PeCDF	0.000736	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	2,3,4,6,7,8-HxCDF	0.00158	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	2,3,4,7,8-PeCDF	0.00185	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	2,3,7,8-TCDD	0.000381	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	2,3,7,8-TCDF	0.000265	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	OCDD	0.992	ug/kg	J-	Sur<LCL|HT>UCL	K2208213

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD06-6.0-7.0	E1613B	OCDF	0.0834	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	Total HpCDD	0.136	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	Total HpCDF	0.109	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	Total HxCDD	0.0205	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	Total HxCDF	0.0491	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	Total PeCDD	0.00178	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	Total PeCDF	0.0259	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	Total TCDD	0.000381	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1613B	Total TCDF	0.00276	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1699M	2,4'-DDD	1.1	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1699M	2,4'-DDE	0.64	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1699M	2,4'-DDT	0.76	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1699M	4,4'-DDD	5	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1699M	4,4'-DDE	1.5	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD06-6.0-7.0	E1699M	4,4'-DDT	0.38	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8082A	Aroclor 1016	0.83	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8082A	Aroclor 1221	0.83	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8082A	Aroclor 1232	0.83	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8082A	Aroclor 1242	3.9	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8082A	Aroclor 1248	0.83	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8082A	Aroclor 1254	15	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8082A	Aroclor 1260	18	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	2-Methylnaphthalene	41	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Acenaphthene	20	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Acenaphthylene	32	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Anthracene	33	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Benzo(a)anthracene	45	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Benzo(a)pyrene	77	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Benzo(b)fluoranthene	74	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Benzo(g,h,i)perylene	73	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Benzo(k)fluoranthene	24	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Chrysene	65	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Dibenzo(a,h)anthracene	5.9	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Dibenzofuran	13	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Fluoranthene	180	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Fluorene	24	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	57	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Naphthalene	95	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Phenanthrene	170	ug/kg	J-	HT>UCL	K2208213
WC-SCPD06-6.0-7.0	SW8270DSIM	Pyrene	230	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000137	µg/kg	U	LB<RL	K2204707
WC-SCPD07-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.00042	µg/kg	J	IonRatio	K2204707
WC-SCPD07-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.000865	µg/kg	J	IonRatio	K2204707
WC-SCPD07-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.000368	µg/kg	J	IonRatio	K2204707
WC-SCPD07-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.000199	µg/kg	J	IonRatio	K2204707
WC-SCPD07-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000233	µg/kg	U	LB<RL	K2204707
WC-SCPD07-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.000345	µg/kg	J	IonRatio	K2204707
WC-SCPD07-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.000368	µg/kg	J	IonRatio	K2204707
WC-SCPD07-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.000184	µg/kg	U	LB<RL	K2204707
WC-SCPD07-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.000358	µg/kg	J	IonRatio	K2204707
WC-SCPD07-1.0-2.0	E1613B	2,3,7,8-TCDD	0.000889	µg/kg	UJ	Sur<LCL	K2204707
WC-SCPD07-1.0-2.0	E1699M	4,4'-DDD	5.2	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-1.0-2.0	E1699M	4,4'-DDE	3.4	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.0115	µg/kg	J	IonRatio	K2204707
WC-SCPD07-2.0-3.0	E1699M	4,4'-DDD	3.7	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-2.0-3.0	E1699M	4,4'-DDE	4.2	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-2.0-3.0	SW8082A	Aroclor 1248	18	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-2.0-3.0	SW8082A	Aroclor 1254	34	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-2.0-3.0	SW8082A	Aroclor 1260	37	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000534	µg/kg	U	LB<RL	K2204707
WC-SCPD07-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.000963	µg/kg	J	IonRatio	K2204707
WC-SCPD07-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00086	µg/kg	J	IonRatio	K2204707
WC-SCPD07-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.000245	µg/kg	U	LB<RL	K2204707
WC-SCPD07-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.00103	µg/kg	J	IonRatio	K2204707
WC-SCPD07-3.0-4.0	E1613B	2,3,7,8-TCDD	0.00098	µg/kg	UJ	Sur<LCL	K2204707
WC-SCPD07-3.0-4.0	E1613B	2,3,7,8-TCDF	0.000769	µg/kg	UJ	Sur<LCL	K2204707
WC-SCPD07-3.0-4.0	E1699M	2,4'-DDD	0.93	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-3.0-4.0	E1699M	4,4'-DDD	6.2	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-3.0-4.0	E1699M	4,4'-DDE	4.2	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00127	µg/kg	J	IonRatio	K2204707
WC-SCPD07-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.00232	µg/kg	J	IonRatio	K2204707
WC-SCPD07-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.000702	µg/kg	J	IonRatio	K2204707
WC-SCPD07-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDF	0.000281	µg/kg	U	LB<RL	K2204707
WC-SCPD07-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.000311	µg/kg	J	IonRatio	K2204707
WC-SCPD07-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.00105	µg/kg	J	IonRatio	K2204707
WC-SCPD07-4.0-5.0	E1699M	2,4'-DDD	1.5	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-4.0-5.0	E1699M	4,4'-DDD	8.1	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-4.0-5.0	E1699M	4,4'-DDE	6.6	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD07-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.116	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0238	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00175	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDD	0.00166	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD07-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDF	0.00356	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDD	0.00466	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDF	0.00288	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDD	0.002	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDF	0.00113	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	1,2,3,7,8-PeCDD	0.000889	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	1,2,3,7,8-PeCDF	0.00116	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	2,3,4,6,7,8-HxCDF	0.0015	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	2,3,4,7,8-PeCDF	0.00167	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	2,3,7,8-TCDD	0.000566	ug/kg	UJ	Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	2,3,7,8-TCDF	0.000426	ug/kg	UJ	Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	OCDD	1.91	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	OCDF	0.0747	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	Total HpCDD	0.295	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	Total HpCDF	0.0609	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	Total HxCDD	0.0401	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	Total HxCDF	0.0404	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	Total PeCDD	0.000423	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	Total PeCDF	0.0188	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	Total TCDD	0.000566	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1613B	Total TCDF	0.00188	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1699M	2,4'-DDD	0.64	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1699M	2,4'-DDE	0.6	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1699M	2,4'-DDT	0.71	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1699M	4,4'-DDD	3.6	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1699M	4,4'-DDE	5.4	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD07-5.0-6.0	E1699M	4,4'-DDT	0.36	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8082A	Aroclor 1016	0.88	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8082A	Aroclor 1221	0.88	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8082A	Aroclor 1232	0.88	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8082A	Aroclor 1242	18	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8082A	Aroclor 1248	0.88	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8082A	Aroclor 1254	31	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8082A	Aroclor 1260	22	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	2-Methylnaphthalene	17	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Acenaphthene	20	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Acenaphthylene	9.6	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Anthracene	25	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Benzo(a)anthracene	34	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Benzo(a)pyrene	44	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Benzo(b)fluoranthene	43	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Benzo(g,h,i)perylene	30	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Benzo(k)fluoranthene	14	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Chrysene	46	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Dibenzo(a,h)anthracene	4.7	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Dibenzofuran	8.9	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Fluoranthene	110	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Fluorene	23	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	27	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Naphthalene	30	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Phenanthrene	140	ug/kg	J-	HT>UCL	K2208213
WC-SCPD07-5.0-6.0	SW8270DSIM	Pyrene	120	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000165	µg/kg	U	LB<RL	K2204707
WC-SCPD08-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.00124	µg/kg	J	IonRatio	K2204707
WC-SCPD08-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000149	µg/kg	U	LB<RL	K2204707
WC-SCPD08-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.000267	µg/kg	J	IonRatio	K2204707
WC-SCPD08-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.000427	µg/kg	J	IonRatio	K2204707
WC-SCPD08-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.000136	µg/kg	U	LB<RL	K2204707
WC-SCPD08-1.0-2.0	E1613B	2,3,7,8-TCDD	0.0005	µg/kg	UJ	Sur<LCL	K2204707
WC-SCPD08-1.0-2.0	E1613B	2,3,7,8-TCDF	0.000327	µg/kg	UJ	Sur<LCL	K2204707
WC-SCPD08-1.0-2.0	E1699M	2,4'-DDD	0.47	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-1.0-2.0	E1699M	4,4'-DDD	2.4	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-1.0-2.0	E1699M	4,4'-DDE	3.9	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-1.0-2.0	SW8082A	Aroclor 1254	39	µg/kg	J	CF>RPD	K2204707
WC-SCPD08-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.000596	µg/kg	J	IonRatio	K2204707
WC-SCPD08-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.000308	µg/kg	U	LB<RL	K2204707
WC-SCPD08-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.000314	µg/kg	J	IonRatio	K2204707
WC-SCPD08-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.000328	µg/kg	J	IonRatio	K2204707
WC-SCPD08-2.0-3.0	E1699M	2,4'-DDD	0.53	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-2.0-3.0	E1699M	4,4'-DDD	2.2	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-2.0-3.0	E1699M	4,4'-DDE	5.3	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-2.0-3.0	E1699M	4,4'-DDT	1.2	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00115	µg/kg	J	IonRatio	K2204707
WC-SCPD08-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.000804	µg/kg	J	IonRatio	K2204707
WC-SCPD08-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.00028	µg/kg	U	LB<RL	K2204707
WC-SCPD08-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.000325	µg/kg	J	IonRatio	K2204707
WC-SCPD08-3.0-4.0	E1699M	2,4'-DDD	1.2	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-3.0-4.0	E1699M	2,4'-DDE	0.84	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-3.0-4.0	E1699M	4,4'-DDD	6.1	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-3.0-4.0	E1699M	4,4'-DDE	10	µg/kg	J+	Sur>UCL	K2204707
WC-SCPD08-3.0-4.0	SW8082A	Aroclor 1248	23	µg/kg	J	CF>RPD	K2204707
WC-SCPD08-3.0-4.0	SW8082A	Aroclor 1254	28	µg/kg	J	CF>RPD	K2204707

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD08-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000307	µg/kg	U	LB<RL	K2204707
WC-SCPD08-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.000272	µg/kg	J	IonRatio	K2204707
WC-SCPD08-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.000833	µg/kg	J	IonRatio	K2204707
WC-SCPD08-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDF	0.000264	µg/kg	U	LB<RL	K2204707
WC-SCPD08-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.000335	µg/kg	J	IonRatio	K2204707
WC-SCPD08-4.0-5.0	SW8082A	Aroclor 1254	31	µg/kg	J	CF>RPD	K2204707
WC-SCPD08-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.283	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0875	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00591	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDD	0.00125	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDF	0.00254	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDD	0.0086	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDF	0.0104	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDD	0.00346	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDF	0.00143	ug/kg	UJ	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	1,2,3,7,8-PeCDD	0.00113	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	1,2,3,7,8-PeCDF	0.00141	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	2,3,4,6,7,8-HxCDF	0.00449	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	2,3,4,7,8-PeCDF	0.00449	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	2,3,7,8-TCDD	0.000954	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	2,3,7,8-TCDF	0.000657	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	OCDD	4.71	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	OCDF	0.329	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	Total HpCDD	0.733	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	Total HpCDF	0.335	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	Total HxCDD	0.0756	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	Total HxCDF	0.122	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	Total PeCDD	0.0104	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	Total PeCDF	0.076	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	Total TCDD	0.00679	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1613B	Total TCDF	0.0212	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1699M	2,4'-DDD	4.9	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1699M	2,4'-DDE	1.9	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1699M	2,4'-DDT	0.71	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1699M	4,4'-DDD	27	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1699M	4,4'-DDE	24	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-5.0-6.0	E1699M	4,4'-DDT	0.36	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8082A	Aroclor 1016	0.97	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8082A	Aroclor 1221	0.97	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8082A	Aroclor 1232	0.97	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8082A	Aroclor 1242	43	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8082A	Aroclor 1248	0.97	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8082A	Aroclor 1254	68	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8082A	Aroclor 1260	84	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	2-Methylnaphthalene	180	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Acenaphthene	110	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Acenaphthylene	94	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Anthracene	90	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Benzo(a)anthracene	88	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Benzo(a)pyrene	110	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Benzo(b)fluoranthene	120	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Benzo(g,h,i)perylene	98	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Benzo(k)fluoranthene	42	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Chrysene	140	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Dibenzo(a,h)anthracene	10	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Dibenzofuran	58	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Fluoranthene	440	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Fluorene	110	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	75	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Naphthalene	490	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Phenanthrene	530	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-5.0-6.0	SW8270DSIM	Pyrene	520	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.266	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0676	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00483	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,4,7,8-HxCDD	0.00198	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,4,7,8-HxCDF	0.00743	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,6,7,8-HxCDD	0.00909	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,6,7,8-HxCDF	0.00923	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDD	0.00431	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDF	0.00178	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,7,8-PeCDD	0.00126	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	1,2,3,7,8-PeCDF	0.00229	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	2,3,4,6,7,8-HxCDF	0.00427	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	2,3,4,7,8-PeCDF	0.00399	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	2,3,7,8-TCDD	0.0013	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	2,3,7,8-TCDF	0.000656	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	OCDD	4.47	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	OCDF	0.203	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	Total HpCDD	0.672	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	Total HpCDF	0.245	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	Total HxCDD	0.0752	ug/kg	J-	HT>UCL	K2208213

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD08-6.0-7.0	E1613B	Total HxCDF	0.118	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	Total PeCDD	0.00433	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	Total PeCDF	0.0629	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	Total TCDD	0.00206	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1613B	Total TCDF	0.0129	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1699M	2,4'-DDD	4.2	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1699M	2,4'-DDE	1.3	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1699M	2,4'-DDT	0.76	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1699M	4,4'-DDD	21	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1699M	4,4'-DDE	19	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	E1699M	4,4'-DDT	0.38	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8082A	Aroclor 1016	0.88	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8082A	Aroclor 1221	0.88	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8082A	Aroclor 1232	0.88	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8082A	Aroclor 1242	37	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8082A	Aroclor 1248	0.88	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8082A	Aroclor 1254	75	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8082A	Aroclor 1260	71	ug/kg	J-	CF>RPD|HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	2-Methylnaphthalene	150	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Acenaphthene	83	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Acenaphthylene	74	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Anthracene	79	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Benzo(a)anthracene	81	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Benzo(a)pyrene	110	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Benzo(b)fluoranthene	110	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Benzo(g,h,i)perylene	89	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Benzo(k)fluoranthene	36	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Chrysene	120	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Dibenzo(a,h)anthracene	9.8	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Dibenzofuran	47	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Fluoranthene	370	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Fluorene	91	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	70	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Naphthalene	410	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Phenanthrene	450	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-6.0-7.0	SW8270DSIM	Pyrene	430	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.187	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0328	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00259	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,4,7,8-HxCDD	0.00127	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,4,7,8-HxCDF	0.00198	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,6,7,8-HxCDD	0.00549	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,6,7,8-HxCDF	0.0037	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,7,8,9-HxCDD	0.00271	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,7,8,9-HxCDF	0.000499	ug/kg	UJ	LB<RL|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,7,8-PeCDD	0.000646	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	1,2,3,7,8-PeCDF	0.000534	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	2,3,4,6,7,8-HxCDF	0.00214	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	2,3,4,7,8-PeCDF	0.00119	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	2,3,7,8-TCDD	0.0005	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	2,3,7,8-TCDF	0.000164	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	OCDD	3.75	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	OCDF	0.122	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	Total HpCDD	0.546	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	Total HpCDF	0.137	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	Total HxCDD	0.0766	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	Total HxCDF	0.0577	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	Total PeCDD	0.00638	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	Total PeCDF	0.0191	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	Total TCDD	0.00144	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1613B	Total TCDF	0.00447	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1699M	2,4'-DDD	1.4	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1699M	2,4'-DDE	0.62	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1699M	2,4'-DDT	0.73	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1699M	4,4'-DDD	6.1	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1699M	4,4'-DDE	6.8	ug/kg	J-	Sur>UCL|HT>UCL	K2208213
WC-SCPD08-7.0-8.0	E1699M	4,4'-DDT	0.37	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8082A	Aroclor 1016	0.87	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8082A	Aroclor 1221	0.87	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8082A	Aroclor 1232	0.87	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8082A	Aroclor 1242	21	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8082A	Aroclor 1248	0.87	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8082A	Aroclor 1254	33	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8082A	Aroclor 1260	22	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	2-Methylnaphthalene	25	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Acenaphthene	56	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Acenaphthylene	18	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Anthracene	44	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Benzo(a)anthracene	100	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Benzo(a)pyrene	140	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Benzo(b)fluoranthene	130	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Benzo(g,h,i)perylene	86	ug/kg	J-	HT>UCL	K2208213

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD08-7.0-8.0	SW8270DSIM	Benzo(k)fluoranthene	48	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Chrysene	120	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Dibenzo(a,h)anthracene	12	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Dibenzofuran	11	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Fluoranthene	270	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Fluorene	34	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	84	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Naphthalene	63	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Phenanthrene	230	ug/kg	J-	HT>UCL	K2208213
WC-SCPD08-7.0-8.0	SW8270DSIM	Pyrene	320	ug/kg	J-	HT>UCL	K2208213
WC-SCPD09-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.00609	µg/kg	J	IonRatio	K2203181
WC-SCPD09-1.0-2.0	E1613B	OCDD	8.27	µg/kg	J	ICRange	K2203181
WC-SCPD09-1.0-2.0	E1699M	2,4'-DDD	1.8	µg/kg	J-	IS>UCL	K2203181
WC-SCPD09-1.0-2.0	E1699M	2,4'-DDE	0.86	µg/kg	J-	IS>UCL	K2203181
WC-SCPD09-1.0-2.0	E1699M	2,4'-DDT	0.73	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD09-1.0-2.0	E1699M	4,4'-DDD	5.5	µg/kg	J-	IS>UCL	K2203181
WC-SCPD09-1.0-2.0	E1699M	4,4'-DDE	7.4	µg/kg	J-	IS>UCL	K2203181
WC-SCPD09-1.0-2.0	E1699M	4,4'-DDT	0.37	µg/kg	UJ	IS>UCL	K2203181
WC-SCPD09-1.0-2.0	SW8082A	Aroclor 1254	48	µg/kg	J	CF>RPD	K2203181
WC-SCPD09-1.0-2.0	SW8082A	Aroclor 1260	45	µg/kg	J	CF>RPD	K2203181
WC-SCPD09-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0267	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00571	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00063	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD09-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.00021	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.00124	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.000954	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.000542	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SCPD09-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.00023	µg/kg	J	IonRatio	K2203181
WC-SCPD09-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.000304	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.000629	µg/kg	J	IonRatio	K2203181
WC-SCPD09-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.000279	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.000289	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	E1613B	2,3,7,8-TCDD	0.000407	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	E1613B	2,3,7,8-TCDF	0.000561	µg/kg	UJ	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	E1613B	OCDD	0.463	µg/kg	J-	Sur<LCL	K2203181
WC-SCPD09-2.0-3.0	SW8082A	Aroclor 1254	8.2	µg/kg	J	CF>RPD	K2203181
WC-SCPD09-2.0-3.0	SW8082A	Aroclor 1260	6.7	µg/kg	J	CF>RPD	K2203181
WC-SCPD09-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000262	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD09-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.000122	µg/kg	J	IonRatio	K2203194
WC-SCPD09-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDF	0.000136	µg/kg	J	IonRatio	K2203194
WC-SCPD09-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.0000981	µg/kg	UJ	LB<RL|Sur<LCL	K2203194
WC-SCPD09-3.0-4.0	E1613B	2,3,7,8-TCDF	0.000247	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD09-3.0-4.0	SW8270DSIM	2-Methylnaphthalene	0.49	µg/kg	U	LB<RL	K2203194
WC-SCPD09-3.0-4.0	SW8270DSIM	Benzo(a)anthracene	0.3	µg/kg	U	LB<RL	K2203194
WC-SCPD09-3.0-4.0	SW8270DSIM	Naphthalene	0.62	µg/kg	U	LB<RL	K2203194
WC-SCPD09-3.0-4.0	SW8270DSIM	Phenanthrene	0.77	µg/kg	U	LB<RL	K2203194
WC-SCPD09-3.0-4.0	SW8270DSIM	Pyrene	0.42	µg/kg	U	LB<RL	K2203194
WC-SCPD09-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000348	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD09-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000207	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD09-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.000124	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD09-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.000109	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD09-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDF	0.000097	µg/kg	UJ	LB<RL|Sur<LCL	K2203194
WC-SCPD09-4.0-5.0	E1613B	2,3,7,8-TCDF	0.000265	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD09-4.0-5.0	SW8270DSIM	2-Methylnaphthalene	0.5	µg/kg	U	LB<RL	K2203194
WC-SCPD09-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	0.32	µg/kg	U	LB<RL	K2203194
WC-SCPD09-4.0-5.0	SW8270DSIM	Naphthalene	0.64	µg/kg	U	LB<RL	K2203194
WC-SCPD09-4.0-5.0	SW8270DSIM	Phenanthrene	0.8	µg/kg	U	LB<RL	K2203194
WC-SCPD09-4.0-5.0	SW8270DSIM	Pyrene	0.44	µg/kg	U	LB<RL	K2203194
WC-SCPD10-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0016	µg/kg	J	IonRatio	L2659646
WC-SCPD10-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000038	µg/kg	U	LB<RL	L2659646
WC-SCPD10-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.00013	µg/kg	J	IonRatio	L2659646
WC-SCPD10-1.0-2.0	E1613B	OCDF	0.00014	µg/kg	U	LB<RL	L2659646
WC-SCPD10-1.0-2.0	E1699M	2,4'-DDD	0.4	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-1.0-2.0	E1699M	2,4'-DDE	0.5	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-1.0-2.0	E1699M	2,4'-DDT	0.59	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-1.0-2.0	E1699M	4,4'-DDD	0.22	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-1.0-2.0	E1699M	4,4'-DDE	0.44	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-1.0-2.0	E1699M	4,4'-DDT	0.3	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-1.0-2.0	SW8270DSIM	2-Methylnaphthalene	0.53	µg/kg	U	LB<RL	K2111932
WC-SCPD10-1.0-2.0	SW8270DSIM	Benzo(a)anthracene	0.33	µg/kg	U	LB<RL	K2111932
WC-SCPD10-1.0-2.0	SW8270DSIM	Dibenzofuran	0.85	µg/kg	U	LB<RL	K2111932
WC-SCPD10-1.0-2.0	SW8270DSIM	Naphthalene	0.67	µg/kg	U	LB<RL	K2111932
WC-SCPD10-1.0-2.0	SW8270DSIM	Phenanthrene	0.84	µg/kg	U	LB<RL	K2111932
WC-SCPD10-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000016	µg/kg	U	LB<RL	L2659646
WC-SCPD10-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000028	µg/kg	J	IonRatio	L2659646
WC-SCPD10-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.000054	µg/kg	J	IonRatio	L2659646
WC-SCPD10-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.000037	µg/kg	J	IonRatio	L2659646
WC-SCPD10-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.000064	µg/kg	J	IonRatio	L2659646
WC-SCPD10-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.000268	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD10-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.000016	µg/kg	U	LB<RL	L2659646
WC-SCPD10-2.0-3.0	E1613B	OCDF	0.000048	µg/kg	U	LB<RL	L2659646
WC-SCPD10-2.0-3.0	E1613B	Total TCDF	0.000022	µg/kg	U	LB<RL	L2659646

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD10-2.0-3.0	SW8270DSIM	2-Methylnaphthalene	0.53	µg/kg	U	LB<RL	K2111932
WC-SCPD10-2.0-3.0	SW8270DSIM	Benzo(a)anthracene	0.33	µg/kg	U	LB<RL	K2111932
WC-SCPD10-2.0-3.0	SW8270DSIM	Dibenzofuran	0.86	µg/kg	U	LB<RL	K2111932
WC-SCPD10-2.0-3.0	SW8270DSIM	Naphthalene	0.67	µg/kg	U	LB<RL	K2111932
WC-SCPD10-2.0-3.0	SW8270DSIM	Phenanthrene	0.84	µg/kg	U	LB<RL	K2111932
WC-SCPD10-2.0-3.0	SW8270DSIM	Pyrene	0.46	µg/kg	U	LB<RL	K2111932
WC-SCPD10-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000024	µg/kg	U	LB<RL	L2659646
WC-SCPD10-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.000023	µg/kg	J	IonRatio	L2659646
WC-SCPD10-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDF	0.000014	µg/kg	J	IonRatio	L2659646
WC-SCPD10-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00026	µg/kg	J+	IonRatio|LCS>UCL	L2659646
WC-SCPD10-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.000042	µg/kg	J	IonRatio	L2659646
WC-SCPD10-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.000024	µg/kg	U	LB<RL	L2659646
WC-SCPD10-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.00002	µg/kg	J	IonRatio	L2659646
WC-SCPD10-3.0-4.0	E1613B	2,3,7,8-TCDD	0.000058	µg/kg	J	IonRatio	L2659646
WC-SCPD10-3.0-4.0	E1613B	OCDF	0.000042	µg/kg	U	LB<RL	L2659646
WC-SCPD10-3.0-4.0	E1613B	Total TCDF	0.000028	µg/kg	U	LB<RL	L2659646
WC-SCPD10-3.0-4.0	SW8270DSIM	2-Methylnaphthalene	0.6	µg/kg	U	LB<RL	K2111932
WC-SCPD10-3.0-4.0	SW8270DSIM	Benzo(a)anthracene	0.38	µg/kg	U	LB<RL	K2111932
WC-SCPD10-3.0-4.0	SW8270DSIM	Dibenzofuran	0.97	µg/kg	U	LB<RL	K2111932
WC-SCPD10-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00002	µg/kg	U	LB<RL	L2659646
WC-SCPD10-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.000049	µg/kg	J	IonRatio	L2659646
WC-SCPD10-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.000045	µg/kg	J	IonRatio	L2659646
WC-SCPD10-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.000026	µg/kg	J	IonRatio	L2659646
WC-SCPD10-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.00028	µg/kg	J+	IonRatio|LCS>UCL	L2659646
WC-SCPD10-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.00006	µg/kg	J	IonRatio	L2659646
WC-SCPD10-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.000015	µg/kg	U	LB<RL	L2659646
WC-SCPD10-4.0-5.0	E1613B	OCDF	0.000031	µg/kg	U	LB<RL	L2659646
WC-SCPD10-4.0-5.0	E1613B	Total TCDF	0.000021	µg/kg	U	LB<RL	L2659646
WC-SCPD10-4.0-5.0	SW8270DSIM	2-Methylnaphthalene	0.59	µg/kg	UJ	LB<RL|Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Acenaphthene	0.8	µg/kg	J-	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Acenaphthylene	0.45	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Anthracene	1.4	µg/kg	J-	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	0.37	µg/kg	UJ	LB<RL|Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Benzo(a)pyrene	0.6	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Benzo(b)fluoranthene	1.1	µg/kg	J-	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Benzo(g,h,i)perylene	0.64	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Benzo(k)fluoranthene	0.38	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Chrysene	0.49	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Dibenzo(a,h)anthracene	0.37	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Dibenzofuran	0.95	µg/kg	UJ	LB<RL|Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Fluoranthene	1.1	µg/kg	J-	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Fluorene	1.1	µg/kg	J-	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.57	µg/kg	UJ	Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Naphthalene	0.75	µg/kg	UJ	LB<RL|Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Phenanthrene	0.94	µg/kg	UJ	LB<RL|Sur<LCL	K2111932
WC-SCPD10-4.0-5.0	SW8270DSIM	Pyrene	0.51	µg/kg	UJ	LB<RL|Sur<LCL	K2111932
WC-SCPD11-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.00292	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD11-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.00038	µg/kg	J	IonRatio	L2659646
WC-SCPD11-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00062	µg/kg	J	IonRatio	L2659646
WC-SCPD11-1.0-2.0	E1613B	2,3,7,8-TCDD	0.0003	µg/kg	J	IonRatio	L2659646
WC-SCPD11-1.0-2.0	SW8082A	Aroclor 1242	3.6	µg/kg	J	CF>RPD	K2111932
WC-SCPD11-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.00752	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD11-2.0-3.0	E1613B	2,3,7,8-TCDD	0.00056	µg/kg	J	IonRatio	L2659646
WC-SCPD11-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00828	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD11-3.0-4.0	E1613B	2,3,7,8-TCDD	0.00055	µg/kg	J	IonRatio	L2659646
WC-SCPD11-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.00953	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD11-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.0047	µg/kg	J	Coelute	L2659646
WC-SCPD11-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0221	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD11-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDF	0.00219	µg/kg	J	IonRatio	K2200743
WC-SCPD11-5.0-6.0	E1613B	1,2,3,7,8-PeCDD	0.00101	µg/kg	J	IonRatio	K2200743
WC-SCPD11-5.0-6.0	E1613B	1,2,3,7,8-PeCDF	0.00272	µg/kg	J	IonRatio	K2200743
WC-SCPD11-5.0-6.0	E1613B	2,3,7,8-TCDD	0.000333	µg/kg	J	IonRatio	K2200743
WC-SCPD11-5.0-6.0	E1613B	2,3,7,8-TCDF	0.00293	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD11-5.0-6.0	E1613B	OCDD	2.8	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD11-5.0-6.0	E1699M	2,4'-DDD	0.51	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-5.0-6.0	E1699M	2,4'-DDE	0.63	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-5.0-6.0	E1699M	2,4'-DDT	0.75	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-5.0-6.0	E1699M	4,4'-DDD	1.5	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD11-5.0-6.0	E1699M	4,4'-DDE	4	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD11-5.0-6.0	E1699M	4,4'-DDT	0.38	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-5.0-6.0	SW8082A	Aroclor 1260	27	µg/kg	J-	MS<LCL|MSD<LCL	K2200743
WC-SCPD11-5.0-6.0	SW8270DSIM	Benzo(a)pyrene	18	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD11-6.0-7.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0014	µg/kg	J	IonRatio	K2200743
WC-SCPD11-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDF	0.000431	µg/kg	J	IonRatio	K2200743
WC-SCPD11-6.0-7.0	E1613B	1,2,3,7,8-PeCDD	0.000653	µg/kg	J	IonRatio	K2200743
WC-SCPD11-6.0-7.0	E1613B	1,2,3,7,8-PeCDF	0.000794	µg/kg	J	IonRatio	K2200743
WC-SCPD11-6.0-7.0	E1613B	2,3,4,7,8-PeCDF	0.00118	µg/kg	J	IonRatio	K2200743
WC-SCPD11-6.0-7.0	E1613B	2,3,7,8-TCDD	0.000286	µg/kg	J	IonRatio	K2200743
WC-SCPD11-6.0-7.0	E1699M	2,4'-DDD	0.5	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-6.0-7.0	E1699M	2,4'-DDE	0.62	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-6.0-7.0	E1699M	2,4'-DDT	0.74	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-6.0-7.0	E1699M	4,4'-DDD	1.4	µg/kg	J-	Sur<LCL	K2200743

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD11-6.0-7.0	E1699M	4,4'-DDE	2.7	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD11-6.0-7.0	E1699M	4,4'-DDT	0.37	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-6.0-7.0	SW8270DSIM	Benzo(a)pyrene	14	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD11-7.0-8.0	E1613B	1,2,3,6,7,8-HxCDF	0.00155	µg/kg	J	IonRatio	K2200743
WC-SCPD11-7.0-8.0	E1613B	1,2,3,7,8,9-HxCDF	0.000599	µg/kg	J	IonRatio	K2200743
WC-SCPD11-7.0-8.0	E1613B	1,2,3,7,8-PeCDD	0.00059	µg/kg	J	IonRatio	K2200743
WC-SCPD11-7.0-8.0	E1613B	2,3,4,7,8-PeCDF	0.00146	µg/kg	J	IonRatio	K2200743
WC-SCPD11-7.0-8.0	E1613B	2,3,7,8-TCDD	0.000246	µg/kg	J	IonRatio	K2200743
WC-SCPD11-7.0-8.0	E1699M	2,4'-DDD	0.47	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-7.0-8.0	E1699M	2,4'-DDE	0.58	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-7.0-8.0	E1699M	2,4'-DDT	0.69	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-7.0-8.0	E1699M	4,4'-DDD	1.5	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD11-7.0-8.0	E1699M	4,4'-DDE	3.7	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD11-7.0-8.0	E1699M	4,4'-DDT	0.35	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD11-7.0-8.0	SW8082A	Aroclor 1254	29	µg/kg	J	CF>RPD	K2200743
WC-SCPD11-7.0-8.0	SW8270DSIM	Benzo(a)pyrene	22	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.115	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0213	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0014	µg/kg	UJ	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.00075	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.00605	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.00422	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.00243	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.0026	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.0013	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00064	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD12A-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.00284	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.0025	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD12A-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.00255	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00024	µg/kg	UJ	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	2,3,7,8-TCDF	0.00276	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	OCDD	1.13	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	OCDF	0.058	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	Total HpCDD	0.333	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	Total HpCDF	0.0556	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	Total HxCDD	0.0403	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	Total HxCDF	0.0351	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	Total PeCDD	0.00319	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	Total PeCDF	0.0237	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	Total TCDD	0.00387	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1613B	Total TCDF	0.0103	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-1.0-2.0	E1699M	2,4'-DDD	1.3	µg/kg	J-	IS>UCL|LCS>UCL	K2202475
WC-SCPD12A-1.0-2.0	E1699M	2,4'-DDE	0.78	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD12A-1.0-2.0	E1699M	2,4'-DDT	0.93	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD12A-1.0-2.0	E1699M	4,4'-DDD	3.8	µg/kg	J-	IS>UCL	K2202475
WC-SCPD12A-1.0-2.0	E1699M	4,4'-DDE	1.8	µg/kg	J-	IS>UCL|LCS>UCL	K2202475
WC-SCPD12A-1.0-2.0	E1699M	4,4'-DDT	0.47	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD12A-1.0-2.0	SW8270DSIM	Fluoranthene	760	µg/kg	J-	MSD<LCL	K2202475
WC-SCPD12A-1.0-2.0	SW8270DSIM	Phenanthrene	1200	µg/kg	J-	MS<LCL|MSD<LCL	K2202475
WC-SCPD12A-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.155	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.109	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.022	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD12A-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.0374	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.0231	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.00084	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD12A-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.0657	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.0193	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.0451	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-2.0-3.0	E1613B	2,3,7,8-TCDF	0.0317	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-2.0-3.0	E1613B	OCDD	2.42	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-2.0-3.0	E1699M	2,4'-DDD	41	µg/kg	J+	LCS>UCL	K2202475
WC-SCPD12A-2.0-3.0	E1699M	4,4'-DDE	36	µg/kg	J+	LCS>UCL	K2202475
WC-SCPD12A-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.143	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.141	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0083	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD12A-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.00084	µg/kg	J	IonRatio	L2692261
WC-SCPD12A-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDF	0.0139	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.00934	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.0029	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD12A-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.0187	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.017	µg/kg	J-	Sur<LCL|Coelute	L2692261
WC-SCPD12A-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.0268	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-3.0-4.0	E1613B	2,3,7,8-TCDF	0.0133	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-3.0-4.0	E1613B	OCDD	2.26	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-3.0-4.0	E1699M	2,4'-DDD	350	µg/kg	J+	LCS>UCL	K2202475
WC-SCPD12A-3.0-4.0	E1699M	4,4'-DDE	26	µg/kg	J+	LCS>UCL	K2202475
WC-SCPD12A-4.0-4.8	E1613B	1,2,3,4,6,7,8-HpCDD	0.231	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-4.0-4.8	E1613B	1,2,3,4,6,7,8-HpCDF	0.461	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-4.0-4.8	E1613B	1,2,3,4,7,8,9-HpCDF	0.00719	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-4.0-4.8	E1613B	1,2,3,4,7,8-HxCDD	0.001	µg/kg	J	IonRatio	L2692261
WC-SCPD12A-4.0-4.8	E1613B	1,2,3,4,7,8-HxCDF	0.0091	µg/kg	J	IonRatio	L2692261
WC-SCPD12A-4.0-4.8	E1613B	1,2,3,7,8,9-HxCDD	0.0033	µg/kg	J-	Sur<LCL|IonRatio	L2692261

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD12A-4.0-4.8	E1613B	1,2,3,7,8,9-HxCDF	0.00427	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-4.0-4.8	E1613B	1,2,3,7,8-PeCDD	0.00203	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-4.0-4.8	E1613B	1,2,3,7,8-PeCDF	0.00207	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-4.0-4.8	E1613B	2,3,4,6,7,8-HxCDF	0.022	µg/kg	J	Coelute	L2692261
WC-SCPD12A-4.0-4.8	E1613B	2,3,4,7,8-PeCDF	0.019	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-4.0-4.8	E1613B	2,3,7,8-TCDD	0.0004	µg/kg	UJ	Sur<LCL	L2692261
WC-SCPD12A-4.0-4.8	E1613B	2,3,7,8-TCDF	0.0011	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD12A-4.0-4.8	E1613B	OCDD	3.59	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-4.0-4.8	E1613B	OCDF	0.425	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD12A-4.0-4.8	E1699M	2,4'-DDD	0.46	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD12A-4.0-4.8	E1699M	2,4'-DDE	0.58	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD12A-4.0-4.8	E1699M	2,4'-DDT	0.68	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD12A-4.0-4.8	E1699M	4,4'-DDD	0.26	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD12A-4.0-4.8	E1699M	4,4'-DDE	0.54	µg/kg	J-	IS>UCL|LCS>UCL	K2202475
WC-SCPD12A-4.0-4.8	E1699M	4,4'-DDT	0.34	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD12A-4.0-4.8	SW8082A	Aroclor 1260	27	µg/kg	J+	Sur>UCL	K2202475
WC-SCPD14-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0019	µg/kg	J	IonRatio	L2608826
WC-SCPD14-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.0055	µg/kg	J	IonRatio	L2608826
WC-SCPD14-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.0036	µg/kg	J	IonRatio|Coelute	L2608826
WC-SCPD14-1.0-2.0	E1699M	2,4'-DDD	0.54	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD14-1.0-2.0	E1699M	2,4'-DDE	0.61	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-1.0-2.0	E1699M	2,4'-DDT	0.72	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-1.0-2.0	E1699M	4,4'-DDD	2.2	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD14-1.0-2.0	E1699M	4,4'-DDE	3.8	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD14-1.0-2.0	E1699M	4,4'-DDT	0.36	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-1.0-2.0	SW8082A	Aroclor 1016	0.81	µg/kg	UJ	LCS<LCL	K2107340
WC-SCPD14-1.0-2.0	SW8082A	Aroclor 1260	16	µg/kg	J-	LCS<LCL	K2107340
WC-SCPD14-1.0-2.0	SW8270DSIM	Fluoranthene	560	µg/kg	J	MSRPD	K2107340
WC-SCPD14-1.0-2.0	SW8270DSIM	Phenanthrene	660	µg/kg	J-	MSD<LCL|MSRPD	K2107340
WC-SCPD14-1.0-2.0	SW8270DSIM	Pyrene	530	µg/kg	J+	CCV>UCL	K2107340
WC-SCPD14-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00014	µg/kg	U	LB<RL	L2608826
WC-SCPD14-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.0001	µg/kg	J	IonRatio	L2608826
WC-SCPD14-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.000056	µg/kg	J	IonRatio	L2608826
WC-SCPD14-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.00016	µg/kg	J	IonRatio	L2608826
WC-SCPD14-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.000046	µg/kg	U	LB<RL	L2608826
WC-SCPD14-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.000041	µg/kg	J	IonRatio	L2608826
WC-SCPD14-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.000056	µg/kg	J	Coelute	L2608826
WC-SCPD14-2.0-3.0	E1613B	OCDD	0.0782	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD14-2.0-3.0	E1613B	OCDF	0.00016	µg/kg	U	LB<RL	L2608826
WC-SCPD14-2.0-3.0	E1699M	2,4'-DDD	0.35	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-2.0-3.0	E1699M	2,4'-DDE	0.44	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-2.0-3.0	E1699M	2,4'-DDT	0.53	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-2.0-3.0	E1699M	4,4'-DDD	0.2	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-2.0-3.0	E1699M	4,4'-DDE	0.39	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-2.0-3.0	E1699M	4,4'-DDT	0.27	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-2.0-3.0	SW8270DSIM	Pyrene	1.2	µg/kg	J+	CCV>UCL	K2107340
WC-SCPD14-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00697	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD14-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000933	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD14-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00028	µg/kg	UJ	Sur<LCL	L2608826
WC-SCPD14-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.00011	µg/kg	J	IonRatio	L2608826
WC-SCPD14-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.00011	µg/kg	J	IonRatio	L2608826
WC-SCPD14-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.00014	µg/kg	J	IonRatio	L2608826
WC-SCPD14-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00034	µg/kg	J	IonRatio	L2608826
WC-SCPD14-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.00013	µg/kg	UJ	Sur<LCL	L2608826
WC-SCPD14-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.000053	µg/kg	UJ	Sur<LCL	L2608826
WC-SCPD14-3.0-4.0	E1613B	OCDD	0.0565	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD14-3.0-4.0	E1613B	OCDF	0.0003	µg/kg	U	LB<RL	L2608826
WC-SCPD14-3.0-4.0	E1699M	2,4'-DDD	0.36	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-3.0-4.0	E1699M	2,4'-DDE	0.46	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-3.0-4.0	E1699M	2,4'-DDT	0.54	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-3.0-4.0	E1699M	4,4'-DDD	0.2	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-3.0-4.0	E1699M	4,4'-DDE	0.4	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-3.0-4.0	E1699M	4,4'-DDT	0.27	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-3.0-4.0	SW8270DSIM	Benzo(a)anthracene	0.32	µg/kg	U	LB<RL	K2107340
WC-SCPD14-3.0-4.0	SW8270DSIM	Benzo(g,h,i)perylene	0.55	µg/kg	U	LB<RL	K2107340
WC-SCPD14-3.0-4.0	SW8270DSIM	Chrysene	0.43	µg/kg	U	LB<RL	K2107340
WC-SCPD14-3.0-4.0	SW8270DSIM	Pyrene	4.4	µg/kg	J+	CCV>UCL	K2107340
WC-SCPD14-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000038	µg/kg	U	LB<RL	L2608826
WC-SCPD14-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDD	0.000083	µg/kg	J	IonRatio	L2608826
WC-SCPD14-4.0-5.0	E1613B	OCDD	0.0287	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD14-4.0-5.0	SW8082A	Aroclor 1016	0.61	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107340
WC-SCPD14-4.0-5.0	SW8082A	Aroclor 1221	0.61	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-4.0-5.0	SW8082A	Aroclor 1232	0.61	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-4.0-5.0	SW8082A	Aroclor 1242	0.61	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-4.0-5.0	SW8082A	Aroclor 1248	0.61	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-4.0-5.0	SW8082A	Aroclor 1254	0.61	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-4.0-5.0	SW8082A	Aroclor 1260	0.61	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107340
WC-SCPD14-4.0-5.0	SW8082A	Aroclor 1262	0.61	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD14-4.0-5.0	SW8082A	Aroclor 1268	0.61	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0453	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.142	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00165	µg/kg	J-	Sur<LCL|IonRatio	K2203345

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0004	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.00198	µg/kg	J-	Sur<LCL|IonRatio	K2203345
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.00264	µg/kg	J-	Sur<LCL|IonRatio	K2203345
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.0109	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.00115	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000835	µg/kg	J-	Sur<LCL|IonRatio	K2203345
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.000674	µg/kg	J-	Sur<LCL|IonRatio	K2203345
WC-SCPD16A-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.00056	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.0039	µg/kg	J-	Sur<LCL|IonRatio	K2203345
WC-SCPD16A-1.0-2.0	E1613B	OCDD	0.798	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD16A-1.0-2.0	SW8082A	Aroclor 1016	0.85	µg/kg	UJ	MSD<LCL	K2203345
WC-SCPD16A-1.0-2.0	SW8082A	Aroclor 1260	22	µg/kg	J-	MSD<LCL|Sur>UCL	K2203345
WC-SCPD16A-1.0-2.0	SW8270DSIM	Fluoranthene	1200	µg/kg	J-	MS<LCL	K2203345
WC-SCPD16A-1.0-2.0	SW8270DSIM	Naphthalene	510	µg/kg	J-	MS<LCL	K2203345
WC-SCPD16A-1.0-2.0	SW8270DSIM	Phenanthrene	1700	µg/kg	J-	MS<LCL|MSD<LCL	K2203345
WC-SCPD16A-1.0-2.0	SW8270DSIM	Pyrene	1100	µg/kg	J-	MS<LCL	K2203345
WC-SCPD16A-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.000638	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.00555	µg/kg	J	Coelute	K2203345
WC-SCPD16A-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.00164	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-2.0-3.0	E1613B	2,3,7,8-TCDD	0.000471	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-2.0-3.0	E1613B	OCDD	1.9	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD16A-2.0-3.0	SW8082A	Aroclor 1260	44	µg/kg	J+	Sur>UCL	K2203345
WC-SCPD16A-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.201	µg/kg	J-	Sur<LCL|Coelute	K2203345
WC-SCPD16A-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.000283	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDF	0.0136	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD16A-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.000868	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.000335	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.00051	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.00282	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-3.0-4.0	E1613B	2,3,7,8-TCDF	0.000526	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-3.0-4.0	E1613B	OCDD	2.55	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD16A-4.0-4.3	E1613B	1,2,3,4,6,7,8-HpCDF	0.0563	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD16A-4.0-4.3	E1613B	1,2,3,4,7,8-HxCDF	0.00192	µg/kg	J	Coelute	K2203345
WC-SCPD16A-4.0-4.3	E1613B	1,2,3,7,8,9-HxCDF	0.000682	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-4.0-4.3	E1613B	1,2,3,7,8-PeCDF	0.000338	µg/kg	J	IonRatio	K2203345
WC-SCPD16A-4.0-4.3	E1613B	2,3,4,6,7,8-HxCDF	0.00254	µg/kg	J	IonRatio	K2203345
WC-SCPD18-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.000485	µg/kg	J	FD>RPD	L2611619
WC-SCPD18-1.0-2.0	E1613B	OCDD	0.00759	µg/kg	J	FD>RPD	L2611619
WC-SCPD18-1.0-2.0	E1613B	Total HpCDD	0.000485	µg/kg	J	FD>RPD	L2611619
WC-SCPD18-1.0-2.0	SW8270DSIM	Naphthalene	0.7	µg/kg	U	LB<RL	K2107637
WC-SCPD18-1.0-2.0FD	E1613B	1,2,3,4,6,7,8-HpCDD	0.00221	µg/kg	J	FD>RPD	L2611619
WC-SCPD18-1.0-2.0FD	E1613B	OCDD	0.0241	µg/kg	J-	FD>RPD|Sur<LCL	L2611619
WC-SCPD18-1.0-2.0FD	E1613B	Total HpCDD	0.00605	µg/kg	J	FD>RPD	L2611619
WC-SCPD18-1.0-2.0FD	SW8270DSIM	Naphthalene	0.68	µg/kg	U	LB<RL	K2107637
WC-SCPD18-2.0-3.0	E1613B	OCDD	0.0103	µg/kg	J-	Sur<LCL	L2611619
WC-SCPD18-2.0-3.0	SW8270DSIM	2-Methylnaphthalene	0.67	µg/kg	J	MSRPD	K2107637
WC-SCPD18-2.0-3.0	SW8270DSIM	Benzo(a)anthracene	1.2	µg/kg	J	MSRPD	K2107637
WC-SCPD18-2.0-3.0	SW8270DSIM	Naphthalene	0.69	µg/kg	U	LB<RL	K2107637
WC-SCPD18-2.0-3.0	SW8270DSIM	Phenanthrene	0.98	µg/kg	J	MSRPD	K2107637
WC-SCPD18-2.0-3.0	SW8270DSIM	Pyrene	1.4	µg/kg	J+	MSRPD|CCV>UCL	K2107637
WC-SCPD18-3.0-4.0	E1613B	OCDD	0.00958	µg/kg	J-	Sur<LCL	L2611619
WC-SCPD18-3.0-4.0	SW8270DSIM	Naphthalene	0.69	µg/kg	U	LB<RL	K2107637
WC-SCPD18-3.0-4.0	SW8270DSIM	Pyrene	1.1	µg/kg	J+	CCV>UCL	K2107637
WC-SCPD18-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00041	µg/kg	J	IonRatio	L2611619
WC-SCPD18-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.000062	µg/kg	J	IonRatio	L2611619
WC-SCPD18-4.0-5.0	E1613B	OCDD	0.00601	µg/kg	J-	Sur<LCL	L2611619
WC-SCPD18-4.0-5.0	SW8270DSIM	Naphthalene	0.68	µg/kg	U	LB<RL	K2107637
WC-SCPD18-4.0-5.0	SW8270DSIM	Pyrene	1.3	µg/kg	J+	CCV>UCL	K2107637
WC-SCPD19-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.000072	µg/kg	J	IonRatio	L2606435
WC-SCPD19-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.000063	µg/kg	U	LB<RL	L2606435
WC-SCPD19-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.00023	µg/kg	J	IonRatio	L2606435
WC-SCPD19-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000051	µg/kg	J	IonRatio	L2606435
WC-SCPD19-1.0-2.0	E1613B	OCDF	0.00017	µg/kg	U	LB<RL	L2606435
WC-SCPD19-1.0-2.0	SW8270DSIM	Anthracene	0.44	µg/kg	U	LB<RL	K2107052
WC-SCPD19-1.0-2.0	SW8270DSIM	Benzo(a)anthracene	0.35	µg/kg	U	LB<RL	K2107052
WC-SCPD19-1.0-2.0	SW8270DSIM	Naphthalene	0.71	µg/kg	U	LB<RL	K2107052
WC-SCPD19-1.0-2.0	SW8270DSIM	Phenanthrene	0.88	µg/kg	U	LB<RL	K2107052
WC-SCPD19-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0022	µg/kg	J	IonRatio	L2606435
WC-SCPD19-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00014	µg/kg	J	IonRatio	L2606435
WC-SCPD19-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00012	µg/kg	UJ	Sur<LCL	L2606435
WC-SCPD19-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.00017	µg/kg	J	IonRatio	L2606435
WC-SCPD19-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.00017	µg/kg	J	IonRatio	L2606435
WC-SCPD19-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.00011	µg/kg	J	IonRatio	L2606435
WC-SCPD19-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.000067	µg/kg	J	IonRatio	L2606435
WC-SCPD19-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.00012	µg/kg	J	IonRatio	L2606435
WC-SCPD19-2.0-3.0	E1613B	OCDD	0.018	µg/kg	J-	Sur<LCL|IonRatio	L2606435
WC-SCPD19-2.0-3.0	E1613B	OCDF	0.0004	µg/kg	U	LB<RL	L2606435
WC-SCPD19-2.0-3.0	SW8270DSIM	Benzo(a)anthracene	0.36	µg/kg	U	LB<RL	K2107052
WC-SCPD19-2.0-3.0	SW8270DSIM	Naphthalene	0.73	µg/kg	U	LB<RL	K2107052
WC-SCPD19-2.0-3.0	SW8270DSIM	Phenanthrene	0.91	µg/kg	U	LB<RL	K2107052
WC-SCPD19-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.00005	µg/kg	J	IonRatio	L2606435
WC-SCPD19-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.000047	µg/kg	U	LB<RL	L2606435

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD19-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00018	µg/kg	J	IonRatio	L2606435
WC-SCPD19-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.00012	µg/kg	J	IonRatio	L2606435
WC-SCPD19-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.000054	µg/kg	J	IonRatio	L2606435
WC-SCPD19-3.0-4.0	E1613B	OCDF	0.000054	µg/kg	U	LB<RL	L2606435
WC-SCPD19-3.0-4.0	SW8270DSIM	Anthracene	0.43	µg/kg	U	LB<RL	K2107052
WC-SCPD19-3.0-4.0	SW8270DSIM	Naphthalene	0.69	µg/kg	U	LB<RL	K2107052
WC-SCPD19-3.0-4.0	SW8270DSIM	Phenanthrene	0.87	µg/kg	U	LB<RL	K2107052
WC-SCPD19-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.000051	µg/kg	J	IonRatio	L2606435
WC-SCPD19-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDD	0.000037	µg/kg	U	LB<RL	L2606435
WC-SCPD19-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.00023	µg/kg	J	IonRatio	L2606435
WC-SCPD19-4.0-5.0	E1613B	OCDF	0.000048	µg/kg	U	LB<RL	L2606435
WC-SCPD19-4.0-5.0	SW8270DSIM	Naphthalene	0.68	µg/kg	U	LB<RL	K2107052
WC-SCPD19-4.0-5.0	SW8270DSIM	Phenanthrene	0.86	µg/kg	U	LB<RL	K2107052
WC-SCPD19-4.0-5.0	SW8270DSIM	Pyrene	0.47	µg/kg	U	LB<RL	K2107052
WC-SCPD20A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.0066	µg/kg	J	IonRatio	L2692261
WC-SCPD20A-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.0027	µg/kg	J	IonRatio	L2692261
WC-SCPD20A-1.0-2.0	E1613B	2,3,7,8-TCDF	0.001	µg/kg	J	IonRatio	L2692261
WC-SCPD20A-1.0-2.0	E1699M	4,4'-DDE	1.7	µg/kg	J+	LCS>UCL	K2202475
WC-SCPD20A-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.51	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD20A-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00862	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD20A-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.0011	µg/kg	J	IonRatio	L2692261
WC-SCPD20A-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.0081	µg/kg	J	IonRatio	L2692261
WC-SCPD20A-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.0017	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD20A-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.0022	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD20A-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.023	µg/kg	J	Coelute	L2692261
WC-SCPD20A-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.015	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD20A-2.0-3.0	E1613B	OCDD	3.49	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD20A-2.0-3.0	E1699M	2,4'-DDD	0.47	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-2.0-3.0	E1699M	2,4'-DDE	0.58	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-2.0-3.0	E1699M	2,4'-DDT	0.69	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-2.0-3.0	E1699M	4,4'-DDD	0.26	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-2.0-3.0	E1699M	4,4'-DDE	0.52	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-2.0-3.0	E1699M	4,4'-DDT	0.35	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.424	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD20A-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00956	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD20A-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.0075	µg/kg	J	IonRatio	L2692261
WC-SCPD20A-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.0018	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SCPD20A-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.00193	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD20A-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.02	µg/kg	J	Coelute	L2692261
WC-SCPD20A-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.0103	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD20A-3.0-4.0	E1613B	OCDD	7.32	µg/kg	J-	Sur<LCL	L2692261
WC-SCPD20A-3.0-4.0	E1699M	2,4'-DDD	0.47	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-3.0-4.0	E1699M	2,4'-DDE	0.59	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-3.0-4.0	E1699M	2,4'-DDT	0.7	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-3.0-4.0	E1699M	4,4'-DDD	0.27	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-3.0-4.0	E1699M	4,4'-DDE	0.53	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-3.0-4.0	E1699M	4,4'-DDT	0.35	µg/kg	UJ	IS>UCL	K2202475
WC-SCPD20A-3.0-4.0	SW8082A	Aroclor 1260	10	µg/kg	J+	Sur>UCL	K2202475
WC-SCPD21-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0053	µg/kg	J	IonRatio	L2606300
WC-SCPD21-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0015	µg/kg	J	IonRatio	L2606300
WC-SCPD21-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.0076	µg/kg	J	IonRatio	L2606300
WC-SCPD21-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00094	µg/kg	J	IonRatio	L2606300
WC-SCPD21-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.0038	µg/kg	J	IonRatio	L2606300
WC-SCPD21-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00029	µg/kg	J	IonRatio	L2606300
WC-SCPD21-1.0-2.0	E1699M	2,4'-DDD	0.46	µg/kg	UJ	IS>UCL	K2107104
WC-SCPD21-1.0-2.0	E1699M	2,4'-DDE	0.62	µg/kg	J-	IS>UCL	K2107104
WC-SCPD21-1.0-2.0	E1699M	2,4'-DDT	0.68	µg/kg	UJ	IS>UCL	K2107104
WC-SCPD21-1.0-2.0	E1699M	4,4'-DDD	7	µg/kg	J-	IS>UCL	K2107104
WC-SCPD21-1.0-2.0	E1699M	4,4'-DDE	8.8	µg/kg	J-	IS>UCL	K2107104
WC-SCPD21-1.0-2.0	E1699M	4,4'-DDT	0.34	µg/kg	UJ	IS>UCL	K2107104
WC-SCPD21-1.0-2.0	SW8082A	Aroclor 1016	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-1.0-2.0	SW8082A	Aroclor 1221	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-1.0-2.0	SW8082A	Aroclor 1232	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-1.0-2.0	SW8082A	Aroclor 1242	30	µg/kg	J-	Sur<LCL	K2107104
WC-SCPD21-1.0-2.0	SW8082A	Aroclor 1248	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-1.0-2.0	SW8082A	Aroclor 1254	31	µg/kg	J-	Sur<LCL|CF>RPD	K2107104
WC-SCPD21-1.0-2.0	SW8082A	Aroclor 1260	23	µg/kg	J-	Sur<LCL	K2107104
WC-SCPD21-1.0-2.0	SW8082A	Aroclor 1262	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-1.0-2.0	SW8082A	Aroclor 1268	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-1.0-2.0	SW8270DSIM	Dibenzofuran	10	µg/kg	J+	Inter	K2107104
WC-SCPD21-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.045	µg/kg	J	IonRatio	L2606300
WC-SCPD21-2.0-3.0	E1613B	2,3,7,8-TCDD	0.0033	µg/kg	J	IonRatio	L2606300
WC-SCPD21-2.0-3.0	SW8082A	Aroclor 1254	83	µg/kg	J	CF>RPD	K2107104
WC-SCPD21-2.0-3.0	SW8270DSIM	Dibenzofuran	42	µg/kg	J+	Inter	K2107104
WC-SCPD21-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.027	µg/kg	J	IonRatio	L2606300
WC-SCPD21-3.0-4.0	E1613B	2,3,7,8-TCDD	0.0019	µg/kg	J	IonRatio	L2606300
WC-SCPD21-3.0-4.0	SW8082A	Aroclor 1016	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-3.0-4.0	SW8082A	Aroclor 1221	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-3.0-4.0	SW8082A	Aroclor 1232	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-3.0-4.0	SW8082A	Aroclor 1242	29	µg/kg	J-	Sur<LCL	K2107104
WC-SCPD21-3.0-4.0	SW8082A	Aroclor 1248	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-3.0-4.0	SW8082A	Aroclor 1254	46	µg/kg	J-	Sur<LCL|CF>RPD	K2107104

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD21-3.0-4.0	SW8082A	Aroclor 1260	47	µg/kg	J-	Sur<LCL	K2107104
WC-SCPD21-3.0-4.0	SW8082A	Aroclor 1262	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-3.0-4.0	SW8082A	Aroclor 1268	0.78	µg/kg	UJ	Sur<LCL	K2107104
WC-SCPD21-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.0021	µg/kg	J	IonRatio	L2606300
WC-SCPD21-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDD	0.00375	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD21-6.0-7.0	E1613B	1,2,3,4,7,8-HxCDD	0.0013	µg/kg	J	IonRatio	L2659646
WC-SCPD21-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDD	0.0062	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD21-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0711	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0317	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00197	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1613B	1,2,3,4,7,8-HxCDD	0.000377	µg/kg	J-	IonRatio|Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1613B	1,2,3,6,7,8-HxCDF	0.00301	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1613B	1,2,3,7,8,9-HxCDF	0.000628	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1613B	1,2,3,7,8-PeCDF	0.00083	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1613B	2,3,4,6,7,8-HxCDF	0.00146	µg/kg	J-	IonRatio|Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1613B	2,3,7,8-TCDF	0.000446	µg/kg	J-	IonRatio|Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1613B	OCDD	1.34	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1699M	2,4'-DDD	3.4	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1699M	2,4'-DDE	0.9	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1699M	2,4'-DDT	0.63	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1699M	4,4'-DDD	12	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1699M	4,4'-DDE	6.4	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	E1699M	4,4'-DDT	0.32	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD21-7.0-8.0	SW8270DSIM	Benzo(a)pyrene	49	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,4,6,7,8-HpCDD	0.0866	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,4,6,7,8-HpCDF	0.154	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,4,7,8,9-HpCDF	0.0489	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,4,7,8-HxCDD	0.000697	µg/kg	J-	IonRatio|Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,4,7,8-HxCDF	0.255	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,6,7,8-HxCDD	0.0042	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,6,7,8-HxCDF	0.054	µg/kg	J-	Sur<LCL|Coelute	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,7,8,9-HxCDD	0.00237	µg/kg	J	IonRatio	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,7,8,9-HxCDF	0.0204	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,7,8-PeCDD	0.00103	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	1,2,3,7,8-PeCDF	0.055	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	2,3,4,6,7,8-HxCDF	0.00969	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	2,3,4,7,8-PeCDF	0.021	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	2,3,7,8-TCDD	0.000513	µg/kg	J	IonRatio	K2200743
WC-SCPD21-8.0-8.8	E1613B	2,3,7,8-TCDF	0.00701	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	E1613B	OCDD	1.53	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD21-8.0-8.8	SW8270DSIM	Benzo(a)pyrene	120	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD22-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.00748	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD22-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.00981	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD22-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.0274	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD22-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.009	µg/kg	J	IonRatio	L2659646
WC-SCPD22-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.0216	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD22-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0912	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD22-7.0-8.0	E1613B	1,2,3,6,7,8-HxCDF	0.0212	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD22-7.0-8.0	E1613B	OCDD	1.45	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD22-7.0-8.0	E1699M	2,4'-DDD	32	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD22-7.0-8.0	E1699M	2,4'-DDE	4.7	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD22-7.0-8.0	E1699M	2,4'-DDT	0.69	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD22-7.0-8.0	E1699M	4,4'-DDD	36	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD22-7.0-8.0	E1699M	4,4'-DDE	16	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD22-7.0-8.0	E1699M	4,4'-DDT	0.35	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD22-7.0-8.0	SW8270DSIM	Benzo(a)pyrene	290	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD22-8.0-8.7	E1613B	1,2,3,4,6,7,8-HpCDF	0.0572	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD22-8.0-8.7	E1613B	1,2,3,4,7,8,9-HpCDF	0.00343	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD22-8.0-8.7	E1613B	1,2,3,7,8,9-HxCDF	0.000974	µg/kg	J	IonRatio	K2200743
WC-SCPD22-8.0-8.7	E1613B	2,3,7,8-TCDF	0.00124	µg/kg	J	IonRatio	K2200743
WC-SCPD22-8.0-8.7	E1613B	OCDD	2.13	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD22-8.0-8.7	SW8270DSIM	Benzo(a)pyrene	100	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD23-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.00021	µg/kg	J	IonRatio	L2608826
WC-SCPD23-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.0017	µg/kg	J	IonRatio	L2608826
WC-SCPD23-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.0011	µg/kg	J	IonRatio	L2608826
WC-SCPD23-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00027	µg/kg	J	IonRatio	L2608826
WC-SCPD23-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.00073	µg/kg	J	IonRatio	L2608826
WC-SCPD23-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00012	µg/kg	J	IonRatio	L2608826
WC-SCPD23-1.0-2.0	E1613B	OCDD	0.633	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD23-1.0-2.0	E1699M	2,4'-DDD	0.43	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	E1699M	2,4'-DDE	0.53	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	E1699M	2,4'-DDT	0.63	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	E1699M	4,4'-DDD	1.4	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	E1699M	4,4'-DDE	1.3	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	E1699M	4,4'-DDT	0.32	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	SW8082A	Aroclor 1016	0.71	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107340
WC-SCPD23-1.0-2.0	SW8082A	Aroclor 1221	0.71	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	SW8082A	Aroclor 1232	0.71	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	SW8082A	Aroclor 1242	0.71	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	SW8082A	Aroclor 1248	4.9	µg/kg	J-	Sur<LCL|CF>RPD	K2107340
WC-SCPD23-1.0-2.0	SW8082A	Aroclor 1254	8.4	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	SW8082A	Aroclor 1260	4.6	µg/kg	J-	Sur<LCL|LCS<LCL	K2107340

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD23-1.0-2.0	SW8082A	Aroclor 1262	0.71	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	SW8082A	Aroclor 1268	0.71	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-1.0-2.0	SW8270DSIM	Pyrene	230	µg/kg	J+	CCV>UCL	K2107340
WC-SCPD23-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000034	µg/kg	U	LB<RL	L2608826
WC-SCPD23-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.000025	µg/kg	J	IonRatio	L2608826
WC-SCPD23-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.0001	µg/kg	J	IonRatio	L2608826
WC-SCPD23-2.0-3.0	E1613B	OCDF	0.000088	µg/kg	U	LB<RL	L2608826
WC-SCPD23-2.0-3.0	E1699M	2,4'-DDD	0.39	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	E1699M	2,4'-DDE	0.49	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	E1699M	2,4'-DDT	0.58	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	E1699M	4,4'-DDD	0.22	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	E1699M	4,4'-DDE	0.43	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	E1699M	4,4'-DDT	0.29	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	SW8082A	Aroclor 1016	0.68	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107340
WC-SCPD23-2.0-3.0	SW8082A	Aroclor 1221	0.68	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	SW8082A	Aroclor 1232	0.68	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	SW8082A	Aroclor 1242	0.68	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	SW8082A	Aroclor 1248	0.68	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	SW8082A	Aroclor 1254	0.68	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	SW8082A	Aroclor 1260	0.68	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107340
WC-SCPD23-2.0-3.0	SW8082A	Aroclor 1262	0.68	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	SW8082A	Aroclor 1268	0.68	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-2.0-3.0	SW8270DSIM	Pyrene	1.6	µg/kg	J+	CCV>UCL	K2107340
WC-SCPD23-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00002	µg/kg	U	LB<RL	L2608826
WC-SCPD23-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.000049	µg/kg	J	IonRatio	L2608826
WC-SCPD23-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.00007	µg/kg	J	IonRatio	L2608826
WC-SCPD23-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.000022	µg/kg	U	LB<RL	L2608826
WC-SCPD23-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.000044	µg/kg	J	IonRatio	L2608826
WC-SCPD23-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.000028	µg/kg	J	IonRatio	L2608826
WC-SCPD23-3.0-4.0	E1613B	2,3,7,8-TCDF	0.000034	µg/kg	UJ	Sur<LCL	L2608826
WC-SCPD23-3.0-4.0	E1613B	OCDF	0.000065	µg/kg	U	LB<RL	L2608826
WC-SCPD23-3.0-4.0	E1699M	2,4'-DDD	0.42	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	E1699M	2,4'-DDE	0.53	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	E1699M	2,4'-DDT	0.63	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	E1699M	4,4'-DDD	0.24	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	E1699M	4,4'-DDE	0.47	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	E1699M	4,4'-DDT	0.32	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	SW8082A	Aroclor 1016	0.67	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107340
WC-SCPD23-3.0-4.0	SW8082A	Aroclor 1221	0.67	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	SW8082A	Aroclor 1232	0.67	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	SW8082A	Aroclor 1242	0.67	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	SW8082A	Aroclor 1248	0.67	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	SW8082A	Aroclor 1254	0.67	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	SW8082A	Aroclor 1260	0.67	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107340
WC-SCPD23-3.0-4.0	SW8082A	Aroclor 1262	0.67	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	SW8082A	Aroclor 1268	0.67	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-3.0-4.0	SW8270DSIM	Pyrene	0.82	µg/kg	J+	CCV>UCL	K2107340
WC-SCPD23-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000035	µg/kg	U	LB<RL	L2608826
WC-SCPD23-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.000056	µg/kg	J	IonRatio	L2608826
WC-SCPD23-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.000034	µg/kg	J	IonRatio	L2608826
WC-SCPD23-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDD	0.00012	µg/kg	J	IonRatio	L2608826
WC-SCPD23-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.000028	µg/kg	J	IonRatio	L2608826
WC-SCPD23-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.000043	µg/kg	J	IonRatio	L2608826
WC-SCPD23-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.00003	µg/kg	J	IonRatio	L2608826
WC-SCPD23-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.000024	µg/kg	J	IonRatio	L2608826
WC-SCPD23-4.0-5.0	E1613B	2,3,4,7,8-PeCDF	0.000025	µg/kg	J	IonRatio	L2608826
WC-SCPD23-4.0-5.0	E1613B	2,3,7,8-TCDF	0.00004	µg/kg	J	IonRatio	L2608826
WC-SCPD23-4.0-5.0	E1613B	OCDF	0.000054	µg/kg	U	LB<RL	L2608826
WC-SCPD23-4.0-5.0	E1699M	2,4'-DDD	0.38	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	E1699M	2,4'-DDE	0.48	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	E1699M	2,4'-DDT	0.57	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	E1699M	4,4'-DDD	0.21	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	E1699M	4,4'-DDE	0.42	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	E1699M	4,4'-DDT	0.29	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	SW8082A	Aroclor 1016	0.64	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107340
WC-SCPD23-4.0-5.0	SW8082A	Aroclor 1221	0.64	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	SW8082A	Aroclor 1232	0.64	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	SW8082A	Aroclor 1242	0.64	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	SW8082A	Aroclor 1248	0.64	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	SW8082A	Aroclor 1254	0.64	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	SW8082A	Aroclor 1260	0.64	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107340
WC-SCPD23-4.0-5.0	SW8082A	Aroclor 1262	0.64	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	SW8082A	Aroclor 1268	0.64	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD23-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	0.3	µg/kg	U	LB<RL	K2107340
WC-SCPD23-4.0-5.0	SW8270DSIM	Benzo(g,h,i)perylene	0.52	µg/kg	U	LB<RL	K2107340
WC-SCPD23-4.0-5.0	SW8270DSIM	Chrysene	0.41	µg/kg	U	LB<RL	K2107340
WC-SCPD23-4.0-5.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.47	µg/kg	U	LB<RL	K2107340
WC-SCPD23-4.0-5.0	SW8270DSIM	Pyrene	1.7	µg/kg	J+	CCV>UCL	K2107340
WC-SCPD24-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.000077	µg/kg	J	IonRatio	L2659646
WC-SCPD24-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.00045	µg/kg	J	IonRatio	L2659646
WC-SCPD24-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.000326	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD24-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000098	µg/kg	J	IonRatio	L2659646

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD24-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.000081	µg/kg	J	IonRatio	L2659646
WC-SCPD24-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.00025	µg/kg	J	IonRatio	L2659646
WC-SCPD24-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.00019	µg/kg	J	IonRatio	L2659646
WC-SCPD24-1.0-2.0	E1613B	2,3,7,8-TCDD	0.000056	µg/kg	J	IonRatio	L2659646
WC-SCPD24-1.0-2.0	E1613B	2,3,7,8-TCDF	0.00016	µg/kg	J	IonRatio	L2659646
WC-SCPD24-1.0-2.0	SW8270DSIM	2-Methylnaphthalene	0.56	µg/kg	U	LB<RL	K2111932
WC-SCPD24-1.0-2.0	SW8270DSIM	Benzo(a)anthracene	0.35	µg/kg	U	LB<RL	K2111932
WC-SCPD24-1.0-2.0	SW8270DSIM	Dibenzofuran	0.9	µg/kg	U	LB<RL	K2111932
WC-SCPD24-1.0-2.0	SW8270DSIM	Naphthalene	0.71	µg/kg	U	LB<RL	K2111932
WC-SCPD24-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000048	µg/kg	U	LB<RL	L2659646
WC-SCPD24-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.000042	µg/kg	J	IonRatio	L2659646
WC-SCPD24-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.00005	µg/kg	J	IonRatio	L2659646
WC-SCPD24-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.000037	µg/kg	J	IonRatio	L2659646
WC-SCPD24-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.000145	µg/kg	J+	LCS>UCL	L2659646
WC-SCPD24-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.000016	µg/kg	U	LB<RL	L2659646
WC-SCPD24-2.0-3.0	E1613B	OCDF	0.000045	µg/kg	U	LB<RL	L2659646
WC-SCPD24-2.0-3.0	E1613B	Total TCDF	0.000023	µg/kg	U	LB<RL	L2659646
WC-SCPD24-2.0-3.0	SW8270DSIM	2-Methylnaphthalene	0.54	µg/kg	U	LB<RL	K2111932
WC-SCPD24-2.0-3.0	SW8270DSIM	Benzo(a)anthracene	0.34	µg/kg	U	LB<RL	K2111932
WC-SCPD24-2.0-3.0	SW8270DSIM	Naphthalene	0.69	µg/kg	U	LB<RL	K2111932
WC-SCPD24-2.0-3.0	SW8270DSIM	Phenanthrene	0.86	µg/kg	U	LB<RL	K2111932
WC-SCPD24-2.0-3.0	SW8270DSIM	Pyrene	0.47	µg/kg	U	LB<RL	K2111932
WC-SCPD24-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00263	µg/kg	J	LabDupRPD	L2659632
WC-SCPD24-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000048	µg/kg	U	LB<RL	L2659632
WC-SCPD24-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000099	µg/kg	J	IonRatio	L2659632
WC-SCPD24-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.00015	µg/kg	J	IonRatio	L2659632
WC-SCPD24-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00027	µg/kg	J	IonRatio	L2659632
WC-SCPD24-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.000057	µg/kg	J	IonRatio	L2659632
WC-SCPD24-3.0-4.0	E1613B	OCDF	0.00006	µg/kg	U	LB<RL	L2659632
WC-SCPD24-3.0-4.0	E1613B	Total HpCDD	0.0068	µg/kg	J	LabDupRPD	L2659632
WC-SCPD24-3.0-4.0	E1613B	Total HpCDF	0.000072	µg/kg	U	LB<RL	L2659632
WC-SCPD24-3.0-4.0	E1613B	Total HxCDD	0.00138	µg/kg	J	LabDupRPD	L2659632
WC-SCPD24-3.0-4.0	SW8270DSIM	Acenaphthene	390	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
WC-SCPD24-3.0-4.0	SW8270DSIM	Anthracene	450	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
WC-SCPD24-3.0-4.0	SW8270DSIM	Chrysene	410	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
WC-SCPD24-3.0-4.0	SW8270DSIM	Dibenzofuran	360	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
WC-SCPD24-3.0-4.0	SW8270DSIM	Fluoranthene	1700	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
WC-SCPD24-3.0-4.0	SW8270DSIM	Fluorene	640	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
WC-SCPD24-3.0-4.0	SW8270DSIM	Pyrene	1400	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
WC-SCPD24-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000023	µg/kg	U	LB<RL	L2659632
WC-SCPD24-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDD	0.000087	µg/kg	J	IonRatio	L2659632
WC-SCPD24-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.00016	µg/kg	J	IonRatio	L2659632
WC-SCPD24-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.000049	µg/kg	UJ	Sur<LCL	L2659632
WC-SCPD24-4.0-5.0	E1613B	OCDD	0.000078	µg/kg	U	LB<RL	L2659632
WC-SCPD24-4.0-5.0	E1613B	OCDF	0.000057	µg/kg	U	LB<RL	L2659632
WC-SCPD24-4.0-5.0	E1613B	Total HpCDF	0.000036	µg/kg	U	LB<RL	L2659632
WC-SCPD24-4.0-5.0	E1699M	2,4'-DDD	1.5	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD24-4.0-5.0	E1699M	2,4'-DDE	0.58	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD24-4.0-5.0	E1699M	2,4'-DDT	0.69	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD24-4.0-5.0	E1699M	4,4'-DDD	4.2	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD24-4.0-5.0	E1699M	4,4'-DDE	0.51	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD24-4.0-5.0	E1699M	4,4'-DDT	1.1	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	2-Methylnaphthalene	0.51	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Acenaphthene	0.41	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Acenaphthylene	0.39	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Anthracene	0.4	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	0.32	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Benzo(b)fluoranthene	0.52	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Benzo(g,h,i)perylene	0.55	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Benzo(k)fluoranthene	0.33	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Chrysene	0.43	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Dibenzo(a,h)anthracene	0.32	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Dibenzofuran	0.82	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Fluoranthene	0.86	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Fluorene	0.78	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.5	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Naphthalene	0.65	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Phenanthrene	0.81	µg/kg	U	LB<RL	K2111941
WC-SCPD24-4.0-5.0	SW8270DSIM	Pyrene	0.44	µg/kg	U	LB<RL	K2111941
WC-SCPD25-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000342	µg/kg	U	LB<RL	K2205401
WC-SCPD25-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.000241	µg/kg	U	LB<RL	K2205401
WC-SCPD25-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.00209	µg/kg	J	IonRatio	K2205401
WC-SCPD25-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000267	µg/kg	U	LB<RL	K2205401
WC-SCPD25-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.000219	µg/kg	U	LB<RL	K2205401
WC-SCPD25-1.0-2.0	E1613B	2,3,7,8-TCDF	0.000632	µg/kg	J	IonRatio	K2205401
WC-SCPD25-1.0-2.0	SW8082A	Aroclor 1248	27	µg/kg	J	CF>RPD	K2205401
WC-SCPD25-1.0-2.0	SW8270DSIM	Benzo(a)pyrene	47	µg/kg	J+	CCV>UCL	K2205401
WC-SCPD25-1.0-2.0	SW8270DSIM	Dibenzo(a,h)anthracene	5.2	µg/kg	J+	CCV>UCL	K2205401
WC-SCPD25-1.0-2.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	33	µg/kg	J+	CCV>UCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00607	µg/kg	J-	Sur<LCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00178	µg/kg	J-	Sur<LCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000295	µg/kg	UJ	Sur<LCL	K2205401

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD25-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.000799	µg/kg	J-	Sur<LCL|Inter	K2205401
WC-SCPD25-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.000165	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.000844	µg/kg	J	IonRatio	K2205401
WC-SCPD25-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.000216	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.000242	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.00014	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.000146	µg/kg	U	LB<RL	K2205401
WC-SCPD25-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.000109	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	2,3,7,8-TCDD	0.000557	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	2,3,7,8-TCDF	0.000304	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	OCDD	0.0634	µg/kg	J-	Sur<LCL	K2205401
WC-SCPD25-2.0-3.0	E1613B	Total HxCDF	0.000165	µg/kg	U	LB<RL	K2205401
WC-SCPD25-2.0-3.0	SW8082A	Aroclor 1248	1.2	µg/kg	J	CF>RPD	K2205401
WC-SCPD25-2.0-3.0	SW8270DSIM	Benzo(a)anthracene	0.3	µg/kg	U	LB<RL	K2205401
WC-SCPD25-2.0-3.0	SW8270DSIM	Benzo(a)pyrene	1.3	µg/kg	J+	CCV>UCL	K2205401
WC-SCPD25-2.0-3.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	1.4	µg/kg	J+	CCV>UCL	K2205401
WC-SCPD25-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00373	µg/kg	J	IonRatio	K2205401
WC-SCPD25-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000153	µg/kg	U	LB<RL	K2205401
WC-SCPD25-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.000168	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.00014	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-3.0-4.0	E1613B	2,3,7,8-TCDD	0.000452	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-3.0-4.0	E1613B	2,3,7,8-TCDF	0.000354	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-3.0-4.0	E1613B	Total HxCDD	0.000254	µg/kg	U	LB<RL	K2205401
WC-SCPD25-3.0-4.0	E1613B	Total HxCDF	0.000131	µg/kg	U	LB<RL	K2205401
WC-SCPD25-3.0-4.0	SW8270DSIM	Benzo(a)anthracene	0.3	µg/kg	U	LB<RL	K2205401
WC-SCPD25-3.0-4.0	SW8270DSIM	Benzo(a)pyrene	0.62	µg/kg	J+	CCV>UCL	K2205401
WC-SCPD25-3.0-4.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.67	µg/kg	J+	CCV>UCL	K2205401
WC-SCPD25-3.0-4.0	SW8270DSIM	Pyrene	0.42	µg/kg	U	LB<RL	K2205401
WC-SCPD25-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00823	µg/kg	J-	Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000549	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.00019	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.000205	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDF	0.000257	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.000216	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.000204	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.000185	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	2,3,4,7,8-PeCDF	0.000172	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	2,3,7,8-TCDD	0.000737	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	2,3,7,8-TCDF	0.00047	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	E1613B	OCDD	0.365	µg/kg	J-	Sur<LCL	K2205401
WC-SCPD25-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	0.29	µg/kg	U	LB<RL	K2205401
WC-SCPD25-4.0-5.0	SW8270DSIM	Pyrene	0.4	µg/kg	U	LB<RL	K2205401
WC-SCPD26A-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00279	µg/kg	J	IonRatio	K2204432
WC-SCPD26A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.000195	µg/kg	J	IonRatio	K2204432
WC-SCPD26A-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.00154	µg/kg	J	IonRatio	K2204432
WC-SCPD26A-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.000341	µg/kg	J	IonRatio	K2204432
WC-SCPD26A-1.0-2.0	E1613B	Total PeCDD	0.000139	µg/kg	U	LB<RL	K2204432
WC-SCPD26A-1.0-2.0	E1699M	2,4'-DDE	14	µg/kg	J+	Sur>UCL	K2204432
WC-SCPD26A-1.0-2.0	E1699M	4,4'-DDE	34	µg/kg	J+	MS>UCL|Sur>UCL	K2204432
WC-SCPD26A-1.0-2.0	E1699M	4,4'-DDT	13	µg/kg	J+	MS>UCL|MSRPD|Sur>UCL	K2204432
WC-SCPD26A-1.0-2.0	SW8082A	Aroclor 1254	40	µg/kg	J+	Sur>UCL	K2204432
WC-SCPD26A-1.0-2.0	SW8082A	Aroclor 1260	58	µg/kg	J+	Sur>UCL	K2204432
WC-SCPD26A-2.0-3.0	SW8082A	Aroclor 1254	26	µg/kg	J	CF>RPD	K2204432
WC-SCPD26A-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0961	µg/kg	J-	Sur<LCL	K2204432
WC-SCPD26A-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.000192	µg/kg	J	IonRatio	K2204432
WC-SCPD26A-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.000538	µg/kg	J	IonRatio	K2204432
WC-SCPD26A-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.000229	µg/kg	U	LB<RL	K2204432
WC-SCPD26A-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.000522	µg/kg	J	IonRatio	K2204432
WC-SCPD26A-3.0-4.0	E1613B	OCDD	0.567	µg/kg	J-	Sur<LCL	K2204432
WC-SCPD26A-3.0-4.0	SW8082A	Aroclor 1254	21	µg/kg	J+	Sur>UCL	K2204432
WC-SCPD26A-3.0-4.0	SW8082A	Aroclor 1260	33	µg/kg	J+	Sur>UCL	K2204432
WC-SCPD27-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0022	µg/kg	J	IonRatio	L2659632
WC-SCPD27-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0016	µg/kg	J	IonRatio	L2659632
WC-SCPD27-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.00096	µg/kg	J	IonRatio	L2659632
WC-SCPD27-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00085	µg/kg	J	IonRatio	L2659632
WC-SCPD27-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.0025	µg/kg	J	Coelute	L2659632
WC-SCPD27-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00022	µg/kg	J	IonRatio	L2659632
WC-SCPD27-1.0-2.0	E1613B	2,3,7,8-TCDF	0.0017	µg/kg	J	IonRatio	L2659632
WC-SCPD27-1.0-2.0	SW8270DSIM	2-Methylnaphthalene	0.72	µg/kg	U	LB<RL	K2111941
WC-SCPD27-1.0-2.0	SW8270DSIM	Acenaphthylene	0.55	µg/kg	U	LB<RL	K2111941
WC-SCPD27-1.0-2.0	SW8270DSIM	Naphthalene	0.91	µg/kg	U	LB<RL	K2111941
WC-SCPD27-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.0053	µg/kg	J	IonRatio	L2659632
WC-SCPD27-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.0019	µg/kg	J	IonRatio	L2659632
WC-SCPD27-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.0011	µg/kg	J	IonRatio	L2659632
WC-SCPD27-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.0041	µg/kg	J	Coelute	L2659632
WC-SCPD27-2.0-3.0	E1699M	2,4'-DDD	0.56	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-2.0-3.0	E1699M	2,4'-DDE	0.7	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-2.0-3.0	E1699M	2,4'-DDT	0.83	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-2.0-3.0	E1699M	4,4'-DDD	1.3	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD27-2.0-3.0	E1699M	4,4'-DDE	1.3	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD27-2.0-3.0	E1699M	4,4'-DDT	0.42	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000039	µg/kg	U	LB<RL	L2659632

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD27-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.000054	µg/kg	J	IonRatio	L2659632
WC-SCPD27-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDF	0.000051	µg/kg	J	IonRatio	L2659632
WC-SCPD27-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00034	µg/kg	J	IonRatio	L2659632
WC-SCPD27-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.00005	µg/kg	J	IonRatio	L2659632
WC-SCPD27-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.00008	µg/kg	J	IonRatio	L2659632
WC-SCPD27-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.000083	µg/kg	J	IonRatio	L2659632
WC-SCPD27-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.000033	µg/kg	J	IonRatio	L2659632
WC-SCPD27-3.0-4.0	E1613B	OCDF	0.000053	µg/kg	U	LB<RL	L2659632
WC-SCPD27-3.0-4.0	E1613B	Total HpCDF	0.00006	µg/kg	U	LB<RL	L2659632
WC-SCPD27-3.0-4.0	E1699M	2,4'-DDD	0.44	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-3.0-4.0	E1699M	2,4'-DDE	0.54	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-3.0-4.0	E1699M	2,4'-DDT	0.65	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-3.0-4.0	E1699M	4,4'-DDD	0.24	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-3.0-4.0	E1699M	4,4'-DDE	0.48	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-3.0-4.0	E1699M	4,4'-DDT	0.33	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	2-Methylnaphthalene	0.48	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Acenaphthene	0.39	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Acenaphthylene	0.36	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Anthracene	0.37	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Benzo(a)anthracene	0.3	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Benzo(a)pyrene	0.49	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Benzo(b)fluoranthene	0.49	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Benzo(g,h,i)perylene	0.51	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Benzo(k)fluoranthene	0.31	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Chrysene	0.4	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Dibenzo(a,h)anthracene	0.3	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Dibenzofuran	0.77	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Fluorene	0.73	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.46	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Naphthalene	0.6	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Phenanthrene	0.76	µg/kg	U	LB<RL	K2111941
WC-SCPD27-3.0-4.0	SW8270DSIM	Pyrene	0.41	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0043	µg/kg	J	IonRatio	L2659632
WC-SCPD27-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000048	µg/kg	U	LB<RL	L2659632
WC-SCPD27-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.00013	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD27-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.000037	µg/kg	J	IonRatio	L2659632
WC-SCPD27-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDD	0.0002	µg/kg	J-	IonRatio|Sur<LCL	L2659632
WC-SCPD27-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.00047	µg/kg	J-	IonRatio|Sur<LCL	L2659632
WC-SCPD27-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.000073	µg/kg	J-	IonRatio|Sur<LCL	L2659632
WC-SCPD27-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.000043	µg/kg	UJ	Sur<LCL	L2659632
WC-SCPD27-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.000036	µg/kg	J	IonRatio	L2659632
WC-SCPD27-4.0-5.0	E1613B	2,3,4,7,8-PeCDF	0.000041	µg/kg	UJ	Sur<LCL	L2659632
WC-SCPD27-4.0-5.0	E1613B	2,3,7,8-TCDD	0.000077	µg/kg	UJ	Sur<LCL	L2659632
WC-SCPD27-4.0-5.0	E1613B	OCDF	0.000095	µg/kg	U	LB<RL	L2659632
WC-SCPD27-4.0-5.0	E1699M	2,4'-DDD	0.44	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-4.0-5.0	E1699M	2,4'-DDE	0.55	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-4.0-5.0	E1699M	2,4'-DDT	0.65	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-4.0-5.0	E1699M	4,4'-DDD	0.25	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-4.0-5.0	E1699M	4,4'-DDE	0.49	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-4.0-5.0	E1699M	4,4'-DDT	0.33	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	2-Methylnaphthalene	0.52	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Acenaphthene	0.42	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Acenaphthylene	0.39	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Anthracene	0.41	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	0.32	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Benzo(a)pyrene	0.53	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Benzo(b)fluoranthene	0.53	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Benzo(g,h,i)perylene	0.56	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Benzo(k)fluoranthene	0.34	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Chrysene	0.44	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Dibenzo(a,h)anthracene	0.32	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Dibenzofuran	0.84	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Fluoranthene	0.88	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Fluorene	0.8	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.5	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Naphthalene	0.66	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Phenanthrene	0.82	µg/kg	U	LB<RL	K2111941
WC-SCPD27-4.0-5.0	SW8270DSIM	Pyrene	0.45	µg/kg	U	LB<RL	K2111941
WC-SCPD28-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.104	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0141	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.0532	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.0214	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.00547	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.0214	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.0116	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.0121	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1613B	2,3,7,8-TCDF	0.0113	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1613B	OCDD	3.82	µg/kg	J-	Sur<LCL	L2608823
WC-SCPD28-1.0-2.0	E1613B	Total HxCDF	0.213	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1613B	Total PeCDD	0.0209	µg/kg	J	LabDupRPD	L2608823
WC-SCPD28-1.0-2.0	E1699M	2,4'-DDD	1.2	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-1.0-2.0	E1699M	2,4'-DDE	0.59	µg/kg	J-	IS>UCL	K2107278

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD28-1.0-2.0	E1699M	2,4'-DDT	0.66	µg/kg	UJ	IS>UCL	K2107278
WC-SCPD28-1.0-2.0	E1699M	4,4'-DDD	5	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-1.0-2.0	E1699M	4,4'-DDE	6.9	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-1.0-2.0	E1699M	4,4'-DDT	0.33	µg/kg	UJ	IS>UCL	K2107278
WC-SCPD28-1.0-2.0	SW8082A	Aroclor 1016	0.86	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107278
WC-SCPD28-1.0-2.0	SW8082A	Aroclor 1221	0.86	µg/kg	UJ	Sur<LCL	K2107278
WC-SCPD28-1.0-2.0	SW8082A	Aroclor 1232	0.86	µg/kg	UJ	Sur<LCL	K2107278
WC-SCPD28-1.0-2.0	SW8082A	Aroclor 1242	28	µg/kg	J-	Sur<LCL	K2107278
WC-SCPD28-1.0-2.0	SW8082A	Aroclor 1248	0.86	µg/kg	UJ	Sur<LCL	K2107278
WC-SCPD28-1.0-2.0	SW8082A	Aroclor 1254	51	µg/kg	J-	Sur<LCL	K2107278
WC-SCPD28-1.0-2.0	SW8082A	Aroclor 1260	30	µg/kg	J-	Sur<LCL	K2107278
WC-SCPD28-1.0-2.0	SW8082A	Aroclor 1262	0.86	µg/kg	UJ	Sur<LCL	K2107278
WC-SCPD28-1.0-2.0	SW8082A	Aroclor 1268	0.86	µg/kg	UJ	Sur<LCL	K2107278
WC-SCPD28-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.00098	µg/kg	J	IonRatio	L2608823
WC-SCPD28-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.00074	µg/kg	J	IonRatio	L2608823
WC-SCPD28-2.0-3.0	E1613B	2,3,7,8-TCDD	0.00031	µg/kg	J	IonRatio	L2608823
WC-SCPD28-2.0-3.0	E1699M	2,4'-DDD	1.4	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-2.0-3.0	E1699M	2,4'-DDE	0.58	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-2.0-3.0	E1699M	2,4'-DDT	0.66	µg/kg	UJ	IS>UCL	K2107278
WC-SCPD28-2.0-3.0	E1699M	4,4'-DDD	5	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-2.0-3.0	E1699M	4,4'-DDE	6.5	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-2.0-3.0	E1699M	4,4'-DDT	0.33	µg/kg	UJ	IS>UCL	K2107278
WC-SCPD28-2.0-3.0	SW8082A	Aroclor 1016	0.81	µg/kg	UJ	LCS<LCL	K2107278
WC-SCPD28-2.0-3.0	SW8270DSIM	Pyrene	410	µg/kg	J+	CCV>UCL	K2107278
WC-SCPD28-3.0-4.0	E1613B	OCDD	0.769	µg/kg	J-	Sur<LCL	L2608823
WC-SCPD28-3.0-4.0	E1699M	2,4'-DDD	2	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-3.0-4.0	E1699M	2,4'-DDE	0.77	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-3.0-4.0	E1699M	2,4'-DDT	0.5	µg/kg	UJ	IS>UCL	K2107278
WC-SCPD28-3.0-4.0	E1699M	4,4'-DDD	6.6	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-3.0-4.0	E1699M	4,4'-DDE	3.2	µg/kg	J-	IS>UCL	K2107278
WC-SCPD28-3.0-4.0	E1699M	4,4'-DDT	0.25	µg/kg	UJ	IS>UCL	K2107278
WC-SCPD28-3.0-4.0	SW8082A	Aroclor 1016	0.7	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107278
WC-SCPD28-3.0-4.0	SW8082A	Aroclor 1221	0.7	µg/kg	UJ	Sur<LCL	K2107278
WC-SCPD28-3.0-4.0	SW8082A	Aroclor 1232	0.7	µg/kg	UJ	Sur<LCL	K2107278
WC-SCPD28-3.0-4.0	SW8082A	Aroclor 1242	0.7	µg/kg	UJ	Sur<LCL	K2107278
WC-SCPD28-3.0-4.0	SW8082A	Aroclor 1248	8.1	µg/kg	J-	Sur<LCL	K2107278
WC-SCPD28-3.0-4.0	SW8082A	Aroclor 1254	7.9	µg/kg	J-	Sur<LCL|CF>RPD	K2107278
WC-SCPD28-3.0-4.0	SW8082A	Aroclor 1260	12	µg/kg	J-	Sur<LCL	K2107278
WC-SCPD28-3.0-4.0	SW8082A	Aroclor 1262	0.7	µg/kg	UJ	Sur<LCL	K2107278
WC-SCPD28-3.0-4.0	SW8082A	Aroclor 1268	0.7	µg/kg	UJ	Sur<LCL	K2107278
WC-SCPD28-3.0-4.0	SW8270DSIM	Pyrene	88	µg/kg	J+	CCV>UCL	K2107278
WC-SCPD28-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00405	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000046	µg/kg	U	LB<RL	L2608823
WC-SCPD28-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000059	µg/kg	U	LB<RL	L2608823
WC-SCPD28-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.000155	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.0002	µg/kg	J	FD>RPD|IonRatio	L2608823
WC-SCPD28-4.0-5.0	E1613B	2,3,4,7,8-PeCDF	0.0000972	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0	E1613B	OCDD	0.0393	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0	E1613B	OCDF	0.000064	µg/kg	U	LB<RL	L2608823
WC-SCPD28-4.0-5.0	E1613B	Total HpCDD	0.00978	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0	E1613B	Total HpCDF	0.000059	µg/kg	U	LB<RL	L2608823
WC-SCPD28-4.0-5.0	E1613B	Total HxCDD	0.00109	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0	E1613B	Total PeCDF	0.000226	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0	E1613B	Total TCDD	0.000085	µg/kg	UJ	FD>RPD	L2608823
WC-SCPD28-4.0-5.0	E1613B	Total TCDF	0.000097	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0	SW8082A	Aroclor 1016	0.79	µg/kg	UJ	LCS<LCL	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	2-Methylnaphthalene	20	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Acenaphthene	32	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Acenaphthylene	5.9	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Anthracene	28	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	46	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Benzo(a)pyrene	25	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Benzo(b)fluoranthene	47	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Benzo(g,h,i)perylene	21	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Benzo(k)fluoranthene	16	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Chrysene	64	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Dibenzofuran	20	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Fluoranthene	230	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Fluorene	47	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	18	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Naphthalene	30	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Phenanthrene	210	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0	SW8270DSIM	Pyrene	200	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	E1613B	1,2,3,4,6,7,8-HpCDD	0.00278	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	1,2,3,4,6,7,8-HpCDF	0.000039	µg/kg	U	LB<RL	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	1,2,3,4,7,8-HxCDF	0.0000376	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	1,2,3,6,7,8-HxCDD	0.000064	µg/kg	J	IonRatio	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	1,2,3,7,8,9-HxCDD	0.000058	µg/kg	UJ	LB<RL|FD>RPD	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	2,3,4,7,8-PeCDF	0.000029	µg/kg	J	FD>RPD|IonRatio	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	OCDD	0.024	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	OCDF	0.000036	µg/kg	U	LB<RL	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	Total HpCDD	0.00675	µg/kg	J	FD>RPD	L2608823

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD28-4.0-5.0FD	E1613B	Total HpCDF	0.000055	µg/kg	U	LB<RL	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	Total HxCDD	0.00144	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	Total PeCDF	0.000031	µg/kg	UJ	FD>RPD	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	Total TCDD	0.000441	µg/kg	J	FD>RPD	L2608823
WC-SCPD28-4.0-5.0FD	E1613B	Total TCDF	0.000034	µg/kg	UJ	FD>RPD	L2608823
WC-SCPD28-4.0-5.0FD	SW8082A	Aroclor 1016	0.78	µg/kg	UJ	LCS<LCL	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	2-Methylnaphthalene	1.4	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Acenaphthene	0.67	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Acenaphthylene	0.51	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Anthracene	0.47	µg/kg	UJ	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Benzo(a)anthracene	0.37	µg/kg	UJ	LB<RL|FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Benzo(a)pyrene	3.1	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Benzo(b)fluoranthene	1.3	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Benzo(g,h,i)perylene	0.65	µg/kg	UJ	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Benzo(k)fluoranthene	0.39	µg/kg	UJ	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Chrysene	1.8	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Dibenzofuran	0.97	µg/kg	UJ	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Fluoranthene	2.3	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Fluorene	1.1	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.58	µg/kg	UJ	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Naphthalene	2	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Phenanthrene	2.4	µg/kg	J	FD>RPD	K2107278
WC-SCPD28-4.0-5.0FD	SW8270DSIM	Pyrene	5.6	µg/kg	J+	FD>RPD|CCV>UCL	K2107278
WC-SCPD29-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.0088	µg/kg	J	Coelute	L2659632
WC-SCPD29-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.0032	µg/kg	J	IonRatio	L2659632
WC-SCPD29-1.0-2.0	E1699M	2,4'-DDD	0.64	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-1.0-2.0	E1699M	2,4'-DDE	0.65	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD29-1.0-2.0	E1699M	2,4'-DDT	0.77	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD29-1.0-2.0	E1699M	4,4'-DDD	2.1	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-1.0-2.0	E1699M	4,4'-DDE	2.8	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-1.0-2.0	E1699M	4,4'-DDT	0.39	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD29-1.0-2.0	SW8270DSIM	2-Methylnaphthalene	0.59	µg/kg	U	LB<RL	K2111941
WC-SCPD29-1.0-2.0	SW8270DSIM	Dibenzofuran	0.96	µg/kg	U	LB<RL	K2111941
WC-SCPD29-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.688	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.329	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0212	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.00565	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.0491	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.0274	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.0375	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.0155	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.0094	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.00442	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.021	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.0197	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.0224	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	2,3,7,8-TCDD	0.0016	µg/kg	J-	IonRatio|Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	2,3,7,8-TCDF	0.013	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	OCDD	11.1	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	OCDF	0.543	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	Total HpCDD	1.56	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	Total HpCDF	0.792	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	Total HxCDD	0.232	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	Total HxCDF	0.523	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	Total PeCDD	0.0352	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	Total PeCDF	0.246	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	Total TCDD	0.0126	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1613B	Total TCDF	0.108	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD29-2.0-3.0	E1699M	2,4'-DDD	1.9	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-2.0-3.0	E1699M	2,4'-DDE	1.1	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-2.0-3.0	E1699M	2,4'-DDT	0.81	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD29-2.0-3.0	E1699M	4,4'-DDD	5.2	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-2.0-3.0	E1699M	4,4'-DDE	6.7	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-2.0-3.0	E1699M	4,4'-DDT	0.41	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD29-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.047	µg/kg	J	Coelute	L2659632
WC-SCPD29-3.0-4.0	E1699M	2,4'-DDD	0.54	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD29-3.0-4.0	E1699M	2,4'-DDE	1.6	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-3.0-4.0	E1699M	2,4'-DDT	0.81	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD29-3.0-4.0	E1699M	4,4'-DDD	7.5	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-3.0-4.0	E1699M	4,4'-DDE	12	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-3.0-4.0	E1699M	4,4'-DDT	0.41	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD29-3.0-4.0	SW8270DSIM	Anthracene	0.51	µg/kg	U	LB<RL	K2111941
WC-SCPD29-3.0-4.0	SW8270DSIM	Fluorene	0.99	µg/kg	U	LB<RL	K2111941
WC-SCPD29-4.0-5.0	E1699M	2,4'-DDD	2.3	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-4.0-5.0	E1699M	2,4'-DDE	1.7	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-4.0-5.0	E1699M	2,4'-DDT	0.77	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD29-4.0-5.0	E1699M	4,4'-DDD	6.4	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-4.0-5.0	E1699M	4,4'-DDE	9.3	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD29-4.0-5.0	E1699M	4,4'-DDT	0.39	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD29-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0315	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD29-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDF	0.000633	µg/kg	J	IonRatio	K2200743
WC-SCPD29-5.0-6.0	E1613B	2,3,7,8-TCDD	0.000357	µg/kg	J	IonRatio	K2200743

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD29-5.0-6.0	E1613B	OCDD	1.04	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD29-5.0-6.0	E1699M	2,4'-DDD	25	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD29-5.0-6.0	E1699M	2,4'-DDE	5.6	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD29-5.0-6.0	E1699M	2,4'-DDT	0.66	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-5.0-6.0	E1699M	4,4'-DDD	41	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD29-5.0-6.0	E1699M	4,4'-DDE	18	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD29-5.0-6.0	E1699M	4,4'-DDT	0.33	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-5.0-6.0	SW8270DSIM	Benzo(a)pyrene	86	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD29-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDF	0.000868	µg/kg	J	IonRatio	K2200743
WC-SCPD29-6.0-7.0	E1613B	1,2,3,7,8-PeCDD	0.00044	µg/kg	J	IonRatio	K2200743
WC-SCPD29-6.0-7.0	E1613B	2,3,7,8-TCDD	0.000206	µg/kg	J	IonRatio	K2200743
WC-SCPD29-6.0-7.0	E1613B	OCDD	0.774	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD29-6.0-7.0	SW8270DSIM	Benzo(a)pyrene	180	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD29-7.0-8.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0000328	µg/kg	U	LB<RL	K2200743
WC-SCPD29-7.0-8.0	E1613B	1,2,3,6,7,8-HxCDF	0.000327	µg/kg	J	IonRatio	K2200743
WC-SCPD29-7.0-8.0	E1613B	1,2,3,7,8,9-HxCDD	0.0000364	µg/kg	U	LB<RL	K2200743
WC-SCPD29-7.0-8.0	E1613B	1,2,3,7,8-PeCDF	0.000103	µg/kg	J	IonRatio	K2200743
WC-SCPD29-7.0-8.0	E1613B	2,3,7,8-TCDF	0.000083	µg/kg	J	IonRatio	K2200743
WC-SCPD29-7.0-8.0	SW8082A	Aroclor 1016	4.3	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-7.0-8.0	SW8082A	Aroclor 1221	15	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-7.0-8.0	SW8082A	Aroclor 1232	6.5	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-7.0-8.0	SW8082A	Aroclor 1242	5	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-7.0-8.0	SW8082A	Aroclor 1248	6.7	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-7.0-8.0	SW8082A	Aroclor 1254	5.1	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-7.0-8.0	SW8082A	Aroclor 1260	0.98	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-7.0-8.0	SW8082A	Aroclor 1262	0.92	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-7.0-8.0	SW8082A	Aroclor 1268	1.2	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD29-7.0-8.0	SW8270DSIM	Benzo(a)pyrene	470	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD30-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0059	µg/kg	J	IonRatio	L2659632
WC-SCPD30-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.0019	µg/kg	J	IonRatio	L2659632
WC-SCPD30-1.0-2.0	SW8082A	Aroclor 1242	23	µg/kg	J	CF>RPD	K2111941
WC-SCPD30-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.012	µg/kg	J	Coelute	L2659632
WC-SCPD30-2.0-3.0	E1699M	2,4'-DDD	1.4	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-2.0-3.0	E1699M	2,4'-DDE	0.72	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-2.0-3.0	E1699M	2,4'-DDT	0.8	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD30-2.0-3.0	E1699M	4,4'-DDD	4.5	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-2.0-3.0	E1699M	4,4'-DDE	6.8	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-2.0-3.0	E1699M	4,4'-DDT	0.4	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD30-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.015	µg/kg	J	Coelute	L2659632
WC-SCPD30-3.0-4.0	E1699M	2,4'-DDD	1.8	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-3.0-4.0	E1699M	2,4'-DDE	0.72	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-3.0-4.0	E1699M	2,4'-DDT	0.84	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD30-3.0-4.0	E1699M	4,4'-DDD	5.9	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-3.0-4.0	E1699M	4,4'-DDE	4.5	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-3.0-4.0	E1699M	4,4'-DDT	0.42	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD30-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.05	µg/kg	J	Coelute	L2659632
WC-SCPD30-4.0-5.0	E1699M	2,4'-DDD	2.5	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-4.0-5.0	E1699M	2,4'-DDE	2.7	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-4.0-5.0	E1699M	2,4'-DDT	0.83	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD30-4.0-5.0	E1699M	4,4'-DDD	7.2	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-4.0-5.0	E1699M	4,4'-DDE	18	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD30-4.0-5.0	E1699M	4,4'-DDT	0.42	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD30-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDF	1.12	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD30-8.0-9.0	E1613B	1,2,3,6,7,8-HxCDF	0.00825	µg/kg	J	Coelute	K2200743
WC-SCPD30-8.0-9.0	E1613B	1,2,3,7,8,9-HxCDF	0.0014	µg/kg	J	IonRatio	K2200743
WC-SCPD30-8.0-9.0	E1613B	2,3,7,8-TCDF	0.000346	µg/kg	J	IonRatio	K2200743
WC-SCPD30-8.0-9.0	E1613B	OCDD	1.39	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD30-8.0-9.0	E1699M	2,4'-DDD	0.51	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-8.0-9.0	E1699M	2,4'-DDE	0.64	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-8.0-9.0	E1699M	2,4'-DDT	0.76	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-8.0-9.0	E1699M	4,4'-DDD	0.29	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-8.0-9.0	E1699M	4,4'-DDE	0.57	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-8.0-9.0	E1699M	4,4'-DDT	0.38	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-8.0-9.0	SW8270DSIM	Benzo(a)pyrene	93	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD30-9.0-9.8	E1613B	1,2,3,4,7,8-HxCDD	0.000474	µg/kg	J	IonRatio	K2200743
WC-SCPD30-9.0-9.8	E1613B	1,2,3,6,7,8-HxCDF	0.0165	µg/kg	J	Coelute	K2200743
WC-SCPD30-9.0-9.8	E1613B	2,3,7,8-TCDF	0.000278	µg/kg	J	IonRatio	K2200743
WC-SCPD30-9.0-9.8	E1613B	OCDD	0.994	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD30-9.0-9.8	E1699M	2,4'-DDD	0.47	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-9.0-9.8	E1699M	2,4'-DDE	0.59	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-9.0-9.8	E1699M	2,4'-DDT	0.7	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-9.0-9.8	E1699M	4,4'-DDD	0.26	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-9.0-9.8	E1699M	4,4'-DDE	0.52	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-9.0-9.8	E1699M	4,4'-DDT	0.35	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD30-9.0-9.8	SW8270DSIM	Benzo(a)pyrene	380	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD31-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.204	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD31-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.056	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD31-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00323	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD31-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00066	µg/kg	J	IonRatio	L2606306
WC-SCPD31-1.0-2.0	E1613B	OCDD	2.23	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD31-1.0-2.0	SW8270DSIM	Pyrene	330	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD31-10.0-11.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000411	µg/kg	J	IonRatio	K2200743

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD31-10.0-11.0	E1613B	1,2,3,4,7,8-HxCDF	0.000622	µg/kg	J	IonRatio	K2200743
WC-SCPD31-10.0-11.0	E1613B	1,2,3,7,8,9-HxCDD	0.0000563	µg/kg	U	LB<RL	K2200743
WC-SCPD31-10.0-11.0	E1613B	1,2,3,7,8,9-HxCDF	0.000301	µg/kg	J	IonRatio	K2200743
WC-SCPD31-10.0-11.0	E1613B	1,2,3,7,8-PeCDD	0.000136	µg/kg	J	IonRatio	K2200743
WC-SCPD31-10.0-11.0	E1613B	1,2,3,7,8-PeCDF	0.000257	µg/kg	J	IonRatio	K2200743
WC-SCPD31-10.0-11.0	E1613B	2,3,7,8-TCDF	0.000104	µg/kg	J	IonRatio	K2200743
WC-SCPD31-10.0-11.0	E1613B	OCDD	0.171	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-10.0-11.0	E1699M	2,4'-DDD	0.36	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-10.0-11.0	E1699M	2,4'-DDE	0.45	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-10.0-11.0	E1699M	2,4'-DDT	0.54	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-10.0-11.0	E1699M	4,4'-DDD	0.2	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-10.0-11.0	E1699M	4,4'-DDE	0.4	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-10.0-11.0	E1699M	4,4'-DDT	0.27	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-10.0-11.0	SW8270DSIM	Benzo(a)pyrene	70	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD31-11.0-12.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000102	µg/kg	UJ	LB<RL|Sur<LCL	K2200743
WC-SCPD31-11.0-12.0	E1613B	1,2,3,6,7,8-HxCDD	0.000133	µg/kg	J	IonRatio	K2200743
WC-SCPD31-11.0-12.0	E1613B	OCDD	0.00749	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-11.0-12.0	E1699M	2,4'-DDD	0.32	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-11.0-12.0	E1699M	2,4'-DDE	0.4	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-11.0-12.0	E1699M	2,4'-DDT	0.48	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-11.0-12.0	E1699M	4,4'-DDD	0.18	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-11.0-12.0	E1699M	4,4'-DDE	0.36	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-11.0-12.0	E1699M	4,4'-DDT	0.24	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD31-11.0-12.0	SW8270DSIM	Benzo(a)pyrene	2.5	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD31-11.0-12.0	SW8270DSIM	Fluoranthene	0.79	µg/kg	U	LB<RL	K2200743
WC-SCPD31-11.0-12.0	SW8270DSIM	Phenanthrene	0.74	µg/kg	U	LB<RL	K2200743
WC-SCPD31-2.0-3.0	E1613B	OCDD	4.35	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD31-2.0-3.0	E1699M	2,4'-DDD	0.48	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD31-2.0-3.0	E1699M	2,4'-DDE	0.61	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD31-2.0-3.0	E1699M	2,4'-DDT	0.72	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD31-2.0-3.0	E1699M	4,4'-DDD	4	µg/kg	J-	IS>UCL	K2107158
WC-SCPD31-2.0-3.0	E1699M	4,4'-DDE	7.6	µg/kg	J-	IS>UCL	K2107158
WC-SCPD31-2.0-3.0	E1699M	4,4'-DDT	0.36	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD31-2.0-3.0	SW8270DSIM	Pyrene	440	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD31-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.0027	µg/kg	J	IonRatio	L2606306
WC-SCPD31-3.0-4.0	E1699M	2,4'-DDD	0.44	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD31-3.0-4.0	E1699M	2,4'-DDE	0.93	µg/kg	J-	IS>UCL	K2107158
WC-SCPD31-3.0-4.0	E1699M	2,4'-DDT	0.66	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD31-3.0-4.0	E1699M	4,4'-DDD	5.9	µg/kg	J-	IS>UCL	K2107158
WC-SCPD31-3.0-4.0	E1699M	4,4'-DDE	15	µg/kg	J-	IS>UCL	K2107158
WC-SCPD31-3.0-4.0	E1699M	4,4'-DDT	0.33	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD31-3.0-4.0	SW8270DSIM	Pyrene	530	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD31-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.00047	µg/kg	J	IonRatio	L2606306
WC-SCPD31-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.0022	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD31-4.0-5.0	E1613B	2,3,4,7,8-PeCDF	0.00952	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD31-4.0-5.0	E1613B	OCDD	6.83	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD31-4.0-5.0	E1699M	2,4'-DDD	0.52	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD31-4.0-5.0	E1699M	2,4'-DDE	0.84	µg/kg	J-	IS>UCL	K2107158
WC-SCPD31-4.0-5.0	E1699M	2,4'-DDT	0.78	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD31-4.0-5.0	E1699M	4,4'-DDD	7.9	µg/kg	J-	IS>UCL	K2107158
WC-SCPD31-4.0-5.0	E1699M	4,4'-DDE	11	µg/kg	J-	IS>UCL	K2107158
WC-SCPD31-4.0-5.0	E1699M	4,4'-DDT	0.39	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD31-4.0-5.0	SW8270DSIM	Pyrene	360	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD31-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDD	0.0018	µg/kg	J	IonRatio	L2659632
WC-SCPD31-5.0-6.0	E1613B	2,3,4,6,7,8-HxCDF	0.029	µg/kg	J	Coelute	L2659632
WC-SCPD31-5.0-6.0	E1613B	2,3,7,8-TCDD	0.0006	µg/kg	J	IonRatio	L2659632
WC-SCPD31-5.0-6.0	E1613B	2,3,7,8-TCDF	0.0026	µg/kg	J	IonRatio	L2659632
WC-SCPD31-5.0-6.0	E1699M	2,4'-DDD	1.8	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD31-5.0-6.0	E1699M	2,4'-DDE	0.66	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD31-5.0-6.0	E1699M	2,4'-DDT	0.78	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD31-5.0-6.0	E1699M	4,4'-DDD	4.3	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD31-5.0-6.0	E1699M	4,4'-DDE	2.9	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD31-5.0-6.0	E1699M	4,4'-DDT	0.39	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD31-6.0-7.0	E1613B	2,3,4,6,7,8-HxCDF	0.052	µg/kg	J	Coelute	L2659632
WC-SCPD31-6.0-7.0	E1699M	2,4'-DDD	1.8	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD31-6.0-7.0	E1699M	2,4'-DDE	1.9	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD31-6.0-7.0	E1699M	2,4'-DDT	0.83	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD31-6.0-7.0	E1699M	4,4'-DDD	6.3	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD31-6.0-7.0	E1699M	4,4'-DDE	13	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD31-6.0-7.0	E1699M	4,4'-DDT	0.42	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD31-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.101	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0632	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00656	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1613B	1,2,3,6,7,8-HxCDF	0.00819	µg/kg	J-	Sur<LCL|IonRatio	K2200743
WC-SCPD31-8.0-9.0	E1613B	1,2,3,7,8,9-HxCDF	0.00396	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1613B	2,3,4,6,7,8-HxCDF	0.00389	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1613B	2,3,7,8-TCDD	0.000743	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1613B	2,3,7,8-TCDF	0.00523	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1613B	OCDD	1.37	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1699M	2,4'-DDD	24	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1699M	2,4'-DDE	5.3	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1699M	2,4'-DDT	0.68	µg/kg	UJ	Sur<LCL	K2200743

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD31-8.0-9.0	E1699M	4,4'-DDD	42	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1699M	4,4'-DDE	20	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	E1699M	4,4'-DDT	6.4	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD31-8.0-9.0	SW8270DSIM	Benzo(a)pyrene	160	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD32-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0017	µg/kg	J	IonRatio	L2606300
WC-SCPD32-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.00877	µg/kg	J	LabDupRPD	L2606300
WC-SCPD32-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.00263	µg/kg	J	LabDupRPD	L2606300
WC-SCPD32-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00215	µg/kg	J	LabDupRPD	L2606300
WC-SCPD32-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.00486	µg/kg	J	LabDupRPD	L2606300
WC-SCPD32-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.01	µg/kg	J	LabDupRPD	L2606300
WC-SCPD32-1.0-2.0	E1613B	2,3,7,8-TCDF	0.00276	µg/kg	J	LabDupRPD	L2606300
WC-SCPD32-1.0-2.0	E1613B	Total PeCDD	0.0135	µg/kg	J	LabDupRPD	L2606300
WC-SCPD32-1.0-2.0	E1613B	Total PeCDF	0.125	µg/kg	J	LabDupRPD	L2606300
WC-SCPD32-1.0-2.0	E1613B	Total TCDD	0.00941	µg/kg	J	LabDupRPD	L2606300
WC-SCPD32-1.0-2.0	E1699M	2,4'-DDD	0.55	µg/kg	UJ	IS>UCL	K2107104
WC-SCPD32-1.0-2.0	E1699M	2,4'-DDE	0.69	µg/kg	UJ	IS>UCL	K2107104
WC-SCPD32-1.0-2.0	E1699M	2,4'-DDT	0.82	µg/kg	UJ	IS>UCL	K2107104
WC-SCPD32-1.0-2.0	E1699M	4,4'-DDD	6.8	µg/kg	J-	IS>UCL	K2107104
WC-SCPD32-1.0-2.0	E1699M	4,4'-DDE	4	µg/kg	J-	IS>UCL	K2107104
WC-SCPD32-1.0-2.0	E1699M	4,4'-DDT	0.41	µg/kg	UJ	IS>UCL	K2107104
WC-SCPD32-1.0-2.0	SW8082A	Aroclor 1260	25	µg/kg	J-	MS<LCL|MSD<LCL	K2107104
WC-SCPD32-10.0-11.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000421	µg/kg	J	IonRatio	K2203194
WC-SCPD32-10.0-11.0	E1613B	1,2,3,4,7,8-HxCDF	0.00017	µg/kg	J	IonRatio	K2203194
WC-SCPD32-10.0-11.0	E1613B	1,2,3,6,7,8-HxCDD	0.000134	µg/kg	J	IonRatio	K2203194
WC-SCPD32-10.0-11.0	E1613B	1,2,3,6,7,8-HxCDF	0.000102	µg/kg	J	IonRatio	K2203194
WC-SCPD32-13.0-14.0	E1613B	1,2,3,6,7,8-HxCDD	0.0000951	µg/kg	J	IonRatio	K2203194
WC-SCPD32-13.0-14.0	E1613B	OCDF	0.00236	µg/kg	J	IonRatio	K2203194
WC-SCPD32-13.0-14.0	SW8270DSIM	2-Methylnaphthalene	0.95	µg/kg	U	LB<RL	K2203194
WC-SCPD32-13.0-14.0	SW8270DSIM	Naphthalene	1.3	µg/kg	U	LB<RL	K2203194
WC-SCPD32-14.0-14.8	E1613B	1,2,3,4,6,7,8-HpCDF	0.000119	µg/kg	U	LB<RL	K2203194
WC-SCPD32-14.0-14.8	E1613B	1,2,3,4,7,8-HxCDF	0.000056	µg/kg	J	IonRatio	K2203194
WC-SCPD32-14.0-14.8	E1613B	1,2,3,7,8,9-HxCDD	0.000259	µg/kg	J	IonRatio	K2203194
WC-SCPD32-14.0-14.8	SW8270DSIM	2-Methylnaphthalene	0.5	µg/kg	U	LB<RL	K2203194
WC-SCPD32-14.0-14.8	SW8270DSIM	Benzo(a)anthracene	0.31	µg/kg	U	LB<RL	K2203194
WC-SCPD32-14.0-14.8	SW8270DSIM	Naphthalene	0.64	µg/kg	U	LB<RL	K2203194
WC-SCPD32-2.0-3.0	SW8082A	Aroclor 1254	190	µg/kg	J	CF>RPD	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	2-Methylnaphthalene	83	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Acenaphthene	130	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Acenaphthylene	70	µg/kg	J+	Sur>UCL|Inter	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Anthracene	1100	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Benzo(a)anthracene	310	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Benzo(a)pyrene	210	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Benzo(b)fluoranthene	240	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Benzo(g,h,i)perylene	150	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Benzo(k)fluoranthene	82	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Chrysene	450	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Dibenzo(a,h)anthracene	30	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Dibenzofuran	95	µg/kg	J+	Sur>UCL|Inter	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Fluoranthene	1000	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Fluorene	440	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	130	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Naphthalene	100	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Phenanthrene	2300	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-2.0-3.0	SW8270DSIM	Pyrene	1100	µg/kg	J+	Sur>UCL	K2107104
WC-SCPD32-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.024	µg/kg	J	IonRatio	L2606300
WC-SCPD32-3.0-4.0	SW8082A	Aroclor 1260	76	µg/kg	J	CF>RPD	K2107104
WC-SCPD32-3.0-4.0	SW8270DSIM	Dibenzofuran	46	µg/kg	J+	Inter	K2107104
WC-SCPD32-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0092	µg/kg	J	IonRatio	L2606300
WC-SCPD32-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.0018	µg/kg	J	IonRatio	L2606300
WC-SCPD32-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDF	0.0049	µg/kg	J	IonRatio	L2606300
WC-SCPD32-4.0-5.0	E1613B	2,3,7,8-TCDD	0.001	µg/kg	J	IonRatio	L2606300
WC-SCPD32-4.0-5.0	SW8270DSIM	Dibenzofuran	54	µg/kg	J+	Inter	K2107104
WC-SCPD32-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.181	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD32-5.0-6.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.006	µg/kg	J	IonRatio	L2659632
WC-SCPD32-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDD	0.000838	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD32-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDF	0.0098	µg/kg	J	IonRatio	L2659632
WC-SCPD32-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDD	0.0115	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD32-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDD	0.0039	µg/kg	J	IonRatio	L2659632
WC-SCPD32-5.0-6.0	E1613B	1,2,3,7,8-PeCDD	0.0016	µg/kg	J	IonRatio	L2659632
WC-SCPD32-5.0-6.0	E1613B	1,2,3,7,8-PeCDF	0.0043	µg/kg	J	IonRatio	L2659632
WC-SCPD32-5.0-6.0	E1613B	2,3,7,8-TCDD	0.00067	µg/kg	J-	Sur<LCL|IonRatio	L2659632
WC-SCPD32-5.0-6.0	E1613B	2,3,7,8-TCDF	0.003	µg/kg	J-	Sur<LCL|IonRatio	L2659632
WC-SCPD32-5.0-6.0	E1613B	OCDD	3.15	µg/kg	J-	Sur<LCL	L2659632
WC-SCPD32-5.0-6.0	E1699M	2,4'-DDD	1.8	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD32-5.0-6.0	E1699M	2,4'-DDE	0.65	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD32-5.0-6.0	E1699M	2,4'-DDT	0.77	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD32-5.0-6.0	E1699M	4,4'-DDD	2.6	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD32-5.0-6.0	E1699M	4,4'-DDE	1.1	µg/kg	J-	Sur<LCL	K2111941
WC-SCPD32-5.0-6.0	E1699M	4,4'-DDT	0.39	µg/kg	UJ	Sur<LCL	K2111941
WC-SCPD32-5.0-6.0	SW8082A	Aroclor 1254	9.1	µg/kg	J	CF>RPD	K2111941
WC-SCPD32-6.0-7.0	E1613B	1,2,3,4,7,8-HxCDD	0.00057	µg/kg	J	IonRatio|LabDupRPD	L2659655
WC-SCPD32-6.0-7.0	E1613B	1,2,3,7,8-PeCDF	0.0021	µg/kg	J	IonRatio	L2659655

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD32-6.0-7.0	E1613B	2,3,7,8-TCDD	0.000228	µg/kg	J	LabDupRPD	L2659655
WC-SCPD32-6.0-7.0	E1613B	Total PeCDD	0.017	µg/kg	J	LabDupRPD	L2659655
WC-SCPD32-6.0-7.0	E1613B	Total TCDD	0.00762	µg/kg	J	LabDupRPD	L2659655
WC-SCPD32-6.0-7.0	SW8082A	Aroclor 1254	5.9	µg/kg	J	CF>RPD	K2111942
WC-SCPD32-6.0-7.0	SW8082A	Aroclor 1260	11	µg/kg	J-	MS<LCL|MSD<LCL	K2111942
WC-SCPD32-9.0-10.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0171	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD32-9.0-10.0	E1613B	1,2,3,4,7,8-HxCDD	0.000201	µg/kg	J	IonRatio	K2203194
WC-SCPD32-9.0-10.0	E1613B	1,2,3,6,7,8-HxCDD	0.00169	µg/kg	J	IonRatio	K2203194
WC-SCPD32-9.0-10.0	E1613B	1,2,3,7,8,9-HxCDF	0.000419	µg/kg	J	IonRatio	K2203194
WC-SCPD33-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0017	µg/kg	J	IonRatio	L2659655
WC-SCPD33-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.00065	µg/kg	J	IonRatio	L2659655
WC-SCPD33-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.0055	µg/kg	J	Coelute	L2659655
WC-SCPD33-1.0-2.0	E1613B	OCDD	1.31	µg/kg	J-	Sur<LCL	L2659655
WC-SCPD33-1.0-2.0	SW8082A	Aroclor 1254	7.2	µg/kg	J	CF>RPD	K2111942
WC-SCPD33-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00005	µg/kg	U	LB<RL	L2659655
WC-SCPD33-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.000023	µg/kg	U	LB<RL	L2659655
WC-SCPD33-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.000022	µg/kg	U	LB<RL	L2659655
WC-SCPD33-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.00011	µg/kg	J	IonRatio	L2659655
WC-SCPD33-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.000033	µg/kg	J	IonRatio	L2659655
WC-SCPD33-2.0-3.0	E1613B	OCDD	0.0202	µg/kg	J-	Sur<LCL	L2659655
WC-SCPD33-2.0-3.0	E1613B	OCDF	0.000086	µg/kg	U	LB<RL	L2659655
WC-SCPD33-2.0-3.0	E1613B	Total HxCDF	0.000034	µg/kg	U	LB<RL	L2659655
WC-SCPD33-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000013	µg/kg	U	LB<RL	L2659655
WC-SCPD33-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.000037	µg/kg	J	IonRatio	L2659655
WC-SCPD33-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.000025	µg/kg	J	IonRatio	L2659655
WC-SCPD33-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.000086	µg/kg	J	IonRatio	L2659655
WC-SCPD33-3.0-4.0	E1613B	OCDF	0.000043	µg/kg	U	LB<RL	L2659655
WC-SCPD33-3.0-4.0	E1613B	Total HxCDF	0.000021	µg/kg	U	LB<RL	L2659655
WC-SCPD33-3.0-4.0	SW8270DSIM	2-Methylnaphthalene	0.47	µg/kg	U	LB<RL	K2111942
WC-SCPD33-3.0-4.0	SW8270DSIM	Naphthalene	0.59	µg/kg	U	LB<RL	K2111942
WC-SCPD33-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000019	µg/kg	U	LB<RL	L2659655
WC-SCPD33-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.000099	µg/kg	J	IonRatio	L2659655
WC-SCPD33-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.0000096	µg/kg	U	LB<RL	L2659655
WC-SCPD33-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.000013	µg/kg	U	LB<RL	L2659655
WC-SCPD33-4.0-5.0	E1613B	OCDF	0.000057	µg/kg	U	LB<RL	L2659655
WC-SCPD33-4.0-5.0	SW8270DSIM	2-Methylnaphthalene	0.51	µg/kg	U	LB<RL	K2111942
WC-SCPD33-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	0.32	µg/kg	U	LB<RL	K2111942
WC-SCPD33-4.0-5.0	SW8270DSIM	Naphthalene	0.64	µg/kg	U	LB<RL	K2111942
WC-SCPD33-4.0-5.0	SW8270DSIM	Phenanthrene	0.81	µg/kg	U	LB<RL	K2111942
WC-SCPD33-4.0-5.0	SW8270DSIM	Pyrene	0.44	µg/kg	U	LB<RL	K2111942
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0728	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00642	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000654	µg/kg	J-	Sur<LCL|IonRatio|TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.000228	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.002	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.0013	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.000847	µg/kg	J-	Sur<LCL|IonRatio|TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.000799	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000385	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.000142	µg/kg	UJ	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.00108	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.000456	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.000733	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	2,3,7,8-TCDD	0.000321	µg/kg	UJ	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	2,3,7,8-TCDF	0.000844	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	OCDD	0.552	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	OCDF	0.0165	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	Total HpCDD	0.192	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	Total HpCDF	0.0232	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	Total HxCDD	0.0141	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	Total HxCDF	0.00724	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	Total PeCDD	0.000984	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	Total PeCDF	0.00571	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	Total TCDD	0.000321	µg/kg	UJ	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1613B	Total TCDF	0.000844	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-1.0-2.0	E1699M	2,4'-DDD	0.79	µg/kg	J-	IS>UCL	K2202673
WC-SCPD34A-1.0-2.0	E1699M	2,4'-DDE	0.75	µg/kg	UJ	IS>UCL	K2202673
WC-SCPD34A-1.0-2.0	E1699M	2,4'-DDT	0.89	µg/kg	UJ	IS>UCL	K2202673
WC-SCPD34A-1.0-2.0	E1699M	4,4'-DDD	3.4	µg/kg	J-	IS>UCL	K2202673
WC-SCPD34A-1.0-2.0	E1699M	4,4'-DDE	5.5	µg/kg	J-	IS>UCL	K2202673
WC-SCPD34A-1.0-2.0	E1699M	4,4'-DDT	0.45	µg/kg	UJ	IS>UCL	K2202673
WC-SCPD34A-1.0-2.0	SW8082A	Aroclor 1260	24	µg/kg	J	CF>RPD	K2202673
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.564	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0499	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0107	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.00496	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.047	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.0724	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.0106	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.0409	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.0123	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.00208	µg/kg	J-	TEMP	K2202673

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD34A-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.00349	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.00442	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.0109	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	2,3,7,8-TCDD	0.031	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	2,3,7,8-TCDF	0.001	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	OCDD	1.16	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	OCDF	0.195	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	Total HpCDD	0.965	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	Total HpCDF	0.125	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	Total HxCDD	0.366	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	Total HxCDF	0.163	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	Total PeCDD	0.0276	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	Total PeCDF	0.121	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	Total TCDD	0.031	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1613B	Total TCDF	0.0111	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-2.0-3.0	E1699M	2,4'-DDD	0.59	µg/kg	UJ	IS>UCL	K2202673
WC-SCPD34A-2.0-3.0	E1699M	2,4'-DDE	0.74	µg/kg	UJ	IS>UCL	K2202673
WC-SCPD34A-2.0-3.0	E1699M	2,4'-DDT	0.88	µg/kg	UJ	IS>UCL	K2202673
WC-SCPD34A-2.0-3.0	E1699M	4,4'-DDD	3.5	µg/kg	J-	IS>UCL	K2202673
WC-SCPD34A-2.0-3.0	E1699M	4,4'-DDE	10	µg/kg	J-	IS>UCL	K2202673
WC-SCPD34A-2.0-3.0	E1699M	4,4'-DDT	2.7	µg/kg	J-	IS>UCL	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,4,6,7,8-HpCDD	0.0696	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,4,6,7,8-HpCDF	0.0286	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,4,7,8,9-HpCDF	0.00787	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,4,7,8-HxCDD	0.0224	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,4,7,8-HxCDF	0.018	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,6,7,8-HxCDD	0.00351	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,6,7,8-HxCDF	0.00261	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,7,8,9-HxCDD	0.00569	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,7,8,9-HxCDF	0.00258	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,7,8-PeCDD	0.00224	µg/kg	UJ	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	1,2,3,7,8-PeCDF	0.000731	µg/kg	J-	Sur<LCL|IonRatio|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	2,3,4,6,7,8-HxCDF	0.00129	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	2,3,4,7,8-PeCDF	0.00416	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	2,3,7,8-TCDD	0.000718	µg/kg	UJ	Sur<LCL|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	2,3,7,8-TCDF	0.00245	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	OCDD	0.475	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	OCDF	0.0487	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	Total HpCDD	0.0696	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	Total HpCDF	0.0568	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	Total HxCDD	0.0122	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	Total HxCDF	0.0406	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	Total PeCDD	0.00224	µg/kg	UJ	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	Total PeCDF	0.0132	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	Total TCDD	0.000718	µg/kg	UJ	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1613B	Total TCDF	0.00494	µg/kg	J-	TEMP	K2202673
WC-SCPD34A-3.0-3.3	E1699M	2,4'-DDD	1.7	µg/kg	J-	IS>UCL	K2202673
WC-SCPD34A-3.0-3.3	E1699M	2,4'-DDE	0.73	µg/kg	UJ	IS>UCL	K2202673
WC-SCPD34A-3.0-3.3	E1699M	2,4'-DDT	0.87	µg/kg	UJ	IS>UCL	K2202673
WC-SCPD34A-3.0-3.3	E1699M	4,4'-DDD	5.9	µg/kg	J-	IS>UCL	K2202673
WC-SCPD34A-3.0-3.3	E1699M	4,4'-DDE	6	µg/kg	J-	IS>UCL	K2202673
WC-SCPD34A-3.0-3.3	E1699M	4,4'-DDT	0.44	µg/kg	UJ	IS>UCL	K2202673
WC-SCPD35-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0023	µg/kg	J	IonRatio	L2611560
WC-SCPD35-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00027	µg/kg	J	IonRatio	L2611560
WC-SCPD35-1.0-2.0	E1613B	2,3,7,8-TCDF	0.002	µg/kg	J	IonRatio	L2611560
WC-SCPD35-1.0-2.0	SW8270DSIM	Pyrene	290	µg/kg	J+	CCV>UCL	K2107489
WC-SCPD35-10.0-11.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0791	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD35-10.0-11.0	E1613B	1,2,3,4,7,8-HxCDD	0.000918	µg/kg	J	IonRatio	K2200743
WC-SCPD35-10.0-11.0	E1613B	2,3,4,7,8-PeCDF	0.00349	µg/kg	J	IonRatio	K2200743
WC-SCPD35-10.0-11.0	E1613B	2,3,7,8-TCDF	0.00111	µg/kg	J	IonRatio	K2200743
WC-SCPD35-10.0-11.0	E1613B	OCDD	1.76	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD35-10.0-11.0	SW8082A	Aroclor 1254	64	µg/kg	J	CF>RPD	K2200743
WC-SCPD35-10.0-11.0	SW8270DSIM	Benzo(a)pyrene	110	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD35-11.0-12.0	E1613B	1,2,3,6,7,8-HxCDF	0.0263	µg/kg	J	Coelute	K2200743
WC-SCPD35-11.0-12.0	E1613B	OCDD	10.7	µg/kg	J-	Sur<LCL|ICRange	K2200743
WC-SCPD35-11.0-12.0	E1699M	2,4'-DDD	3.6	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD35-11.0-12.0	E1699M	2,4'-DDE	1.8	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD35-11.0-12.0	E1699M	2,4'-DDT	0.7	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD35-11.0-12.0	E1699M	4,4'-DDD	7.6	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD35-11.0-12.0	E1699M	4,4'-DDE	13	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD35-11.0-12.0	E1699M	4,4'-DDT	0.35	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD35-11.0-12.0	SW8082A	Aroclor 1254	120	µg/kg	J	CF>RPD	K2200743
WC-SCPD35-11.0-12.0	SW8270DSIM	Benzo(a)pyrene	660	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD35-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0778	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0137	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0016	µg/kg	J	IonRatio	L2611560
WC-SCPD35-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.00048	µg/kg	J	FD>RPD|IonRatio	L2611560
WC-SCPD35-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.0063	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.00357	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.00248	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.00201	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.00122	µg/kg	J	FD>RPD	L2611560

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD35-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.00059	µg/kg	J	FD>RPD|IonRatio	L2611560
WC-SCPD35-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.00132	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.0029	µg/kg	J	FD>RPD|IonRatio	L2611560
WC-SCPD35-2.0-3.0	E1613B	2,3,7,8-TCDD	0.00026	µg/kg	J	IonRatio	L2611560
WC-SCPD35-2.0-3.0	E1613B	2,3,7,8-TCDF	0.00511	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	OCDD	0.693	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	OCDF	0.0351	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	Total HpCDD	0.185	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	Total HpCDF	0.0377	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	Total HxCDD	0.029	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	Total HxCDF	0.0229	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	Total PeCDD	0.00197	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	Total PeCDF	0.0176	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	Total TCDD	0.0012	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	E1613B	Total TCDF	0.0108	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0	SW8082A	Aroclor 1242	36	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	2-Methylnaphthalene	23	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Acenaphthene	33	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Acenaphthylene	17	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Anthracene	36	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Benzo(a)anthracene	110	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Benzo(a)pyrene	110	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Benzo(g,h,i)perylene	88	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Chrysene	170	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Dibenzofuran	17	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Fluoranthene	360	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Fluorene	38	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	81	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Naphthalene	48	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Phenanthrene	230	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0	SW8270DSIM	Pyrene	350	µg/kg	J+	FD>RPD|CCV>UCL	K2107489
WC-SCPD35-2.0-3.0FD	E1613B	1,2,3,4,6,7,8-HpCDD	0.264	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	1,2,3,4,6,7,8-HpCDF	0.0519	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	1,2,3,4,7,8,9-HpCDF	0.0038	µg/kg	J	IonRatio	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	1,2,3,4,7,8-HxCDD	0.00202	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	1,2,3,4,7,8-HxCDF	0.00939	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	1,2,3,6,7,8-HxCDD	0.0101	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	1,2,3,6,7,8-HxCDF	0.00594	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	1,2,3,7,8,9-HxCDD	0.00636	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	1,2,3,7,8,9-HxCDF	0.00191	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	1,2,3,7,8-PeCDD	0.00134	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	2,3,4,6,7,8-HxCDF	0.0044	µg/kg	J	FD>RPD|Coelute	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	2,3,4,7,8-PeCDF	0.00399	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	2,3,7,8-TCDD	0.00068	µg/kg	J	IonRatio	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	2,3,7,8-TCDF	0.00365	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	OCDD	2.62	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	OCDF	0.122	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	Total HpCDD	0.65	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	Total HpCDF	0.142	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	Total HxCDD	0.0868	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	Total HxCDF	0.0886	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	Total PeCDD	0.0113	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	Total PeCDF	0.0338	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	Total TCDD	0.00297	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	E1613B	Total TCDF	0.0198	µg/kg	J	FD>RPD	L2611560
WC-SCPD35-2.0-3.0FD	SW8082A	Aroclor 1242	26	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	2-Methylnaphthalene	54	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Acenaphthene	62	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Acenaphthylene	37	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Anthracene	81	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Benzo(a)anthracene	150	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Benzo(a)pyrene	140	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Benzo(g,h,i)perylene	130	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Chrysene	220	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Dibenzofuran	32	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Fluoranthene	580	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Fluorene	70	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Indeno(1,2,3-cd)pyrene	110	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Naphthalene	98	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Phenanthrene	460	µg/kg	J	FD>RPD	K2107489
WC-SCPD35-2.0-3.0FD	SW8270DSIM	Pyrene	580	µg/kg	J+	FD>RPD|CCV>UCL	K2107489
WC-SCPD35-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0068	µg/kg	J	IonRatio	L2611560
WC-SCPD35-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDF	0.013	µg/kg	J	IonRatio	L2611560
WC-SCPD35-3.0-4.0	E1613B	2,3,7,8-TCDD	0.0011	µg/kg	J	IonRatio	L2611560
WC-SCPD35-3.0-4.0	SW8270DSIM	Pyrene	600	µg/kg	J+	CCV>UCL	K2107489
WC-SCPD35-4.0-5.0	E1613B	2,3,7,8-TCDF	0.014	µg/kg	J-	Sur<LCL	L2611560
WC-SCPD35-4.0-5.0	SW8270DSIM	Pyrene	590	µg/kg	J+	CCV>UCL	K2107489
WC-SCPD35-5.0-6.0	E1613B	2,3,4,6,7,8-HxCDF	0.014	µg/kg	J	Coelute	L2659655
WC-SCPD36-1.0-2.0	E1613B	2,3,7,8-TCDF	0.00099	µg/kg	J	IonRatio	L2606446
WC-SCPD36-1.0-2.0	E1613B	OCDD	2.89	µg/kg	J-	Sur<LCL	L2606446
WC-SCPD36-1.0-2.0	E1699M	4,4'-DDE	7.7	µg/kg	J-	MS<LCL	K2107222
WC-SCPD36-1.0-2.0	SW8082A	Aroclor 1260	19	µg/kg	J-	MS<LCL|MSD<LCL	K2107222

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD36-1.0-2.0	SW8270DSIM	Fluoranthene	270	µg/kg	J	MSRPD	K2107222
WC-SCPD36-1.0-2.0	SW8270DSIM	Pyrene	370	µg/kg	J+	MSD>UCL|MSRPD|CCV>UCL	K2107222
WC-SCPD36-11.0-12.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.029	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0649	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000882	µg/kg	J-	IonRatio|Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	1,2,3,4,7,8-HxCDD	0.000191	µg/kg	J-	IonRatio|Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	1,2,3,4,7,8-HxCDF	0.00108	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	1,2,3,6,7,8-HxCDD	0.00164	µg/kg	J-	IonRatio|Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	1,2,3,6,7,8-HxCDF	0.00549	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	1,2,3,7,8,9-HxCDF	0.000371	µg/kg	J-	IonRatio|Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	1,2,3,7,8-PeCDF	0.000289	µg/kg	J-	IonRatio|Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	2,3,4,6,7,8-HxCDF	0.00227	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	2,3,4,7,8-PeCDF	0.002	µg/kg	J	IonRatio	K2200743
WC-SCPD36-11.0-12.0	E1613B	2,3,7,8-TCDD	0.000189	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	2,3,7,8-TCDF	0.000201	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	E1613B	OCDD	0.598	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-11.0-12.0	SW8270DSIM	Benzo(a)pyrene	130	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD36-12.0-12.9	E1613B	1,2,3,4,6,7,8-HpCDF	0.307	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD36-12.0-12.9	E1613B	1,2,3,7,8,9-HxCDF	0.00313	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD36-12.0-12.9	E1613B	2,3,7,8-TCDD	0.000318	µg/kg	J	IonRatio	K2200746
WC-SCPD36-12.0-12.9	E1613B	OCDD	1.6	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD36-12.0-12.9	E1699M	2,4'-DDE	0.64	µg/kg	UJ	MS<LCL|MSD<LCL	K2200746
WC-SCPD36-12.0-12.9	SW8082A	Aroclor 1260	20	µg/kg	J-	MS<LCL|MSD<LCL	K2200746
WC-SCPD36-12.0-12.9	SW8270DSIM	2-Methylnaphthalene	160	µg/kg	J-	MS<LCL|MSD<LCL	K2200746
WC-SCPD36-12.0-12.9	SW8270DSIM	Fluoranthene	910	µg/kg	J-	MS<LCL|MSD<LCL	K2200746
WC-SCPD36-12.0-12.9	SW8270DSIM	Phenanthrene	1500	µg/kg	J-	MS<LCL|MSD<LCL	K2200746
WC-SCPD36-12.0-12.9	SW8270DSIM	Pyrene	1400	µg/kg	J-	MS<LCL|MSD<LCL	K2200746
WC-SCPD36-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.0035	µg/kg	J	IonRatio	L2606446
WC-SCPD36-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.0015	µg/kg	J	IonRatio	L2606446
WC-SCPD36-2.0-3.0	E1613B	2,3,7,8-TCDF	0.00064	µg/kg	J	IonRatio	L2606446
WC-SCPD36-2.0-3.0	SW8270DSIM	Pyrene	370	µg/kg	J+	CCV>UCL	K2107222
WC-SCPD36-3.0-4.0	SW8082A	Aroclor 1248	590	µg/kg	J+	Sur>UCL	K2107222
WC-SCPD36-3.0-4.0	SW8082A	Aroclor 1254	270	µg/kg	J+	Sur>UCL|CF>RPD	K2107222
WC-SCPD36-3.0-4.0	SW8082A	Aroclor 1260	64	µg/kg	J+	Sur>UCL	K2107222
WC-SCPD36-3.0-4.0	SW8270DSIM	Pyrene	360	µg/kg	J+	CCV>UCL	K2107222
WC-SCPD36-4.0-5.0	E1613B	OCDD	4.47	µg/kg	J-	Sur<LCL	L2606446
WC-SCPD36-4.0-5.0	E1699M	2,4'-DDD	2.6	µg/kg	UJ	IS>UCL	K2107222
WC-SCPD36-4.0-5.0	E1699M	2,4'-DDE	3.3	µg/kg	UJ	IS>UCL	K2107222
WC-SCPD36-4.0-5.0	E1699M	2,4'-DDT	3.9	µg/kg	UJ	IS>UCL	K2107222
WC-SCPD36-4.0-5.0	E1699M	4,4'-DDD	6.6	µg/kg	J-	IS>UCL	K2107222
WC-SCPD36-4.0-5.0	E1699M	4,4'-DDE	4.1	µg/kg	J-	IS>UCL	K2107222
WC-SCPD36-4.0-5.0	E1699M	4,4'-DDT	2	µg/kg	UJ	IS>UCL	K2107222
WC-SCPD36-4.0-5.0	SW8082A	Aroclor 1242	17	µg/kg	J	CF>RPD	K2107222
WC-SCPD36-4.0-5.0	SW8270DSIM	Pyrene	350	µg/kg	J+	CCV>UCL	K2107222
WC-SCPD36-5.0-6.0	E1613B	2,3,4,6,7,8-HxCDF	0.022	µg/kg	J	Coelute	L2659655
WC-SCPD36-6.0-7.0	E1613B	2,3,4,6,7,8-HxCDF	0.038	µg/kg	J	Coelute	L2659655
WC-SCPD36-6.0-7.0	E1613B	2,3,7,8-TCDD	0.0054	µg/kg	J	IonRatio	L2659655
WC-SCPD36-6.0-7.0	SW8082A	Aroclor 1254	99	µg/kg	J+	Sur>UCL|CF>RPD	K2111942
WC-SCPD36-6.0-7.0	SW8082A	Aroclor 1260	110	µg/kg	J+	Sur>UCL	K2111942
WC-SCPD36-7.0-8.0	E1613B	OCDD	1.95	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-7.0-8.0	E1699M	2,4'-DDD	86	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-7.0-8.0	E1699M	2,4'-DDE	15	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-7.0-8.0	E1699M	2,4'-DDT	0.64	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD36-7.0-8.0	E1699M	4,4'-DDD	130	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-7.0-8.0	E1699M	4,4'-DDE	47	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-7.0-8.0	E1699M	4,4'-DDT	0.32	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD36-7.0-8.0	SW8270DSIM	Benzo(a)pyrene	220	µg/kg	J+	CCV>UCL	K2200743
WC-SCPD36-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.23	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-8.0-9.0	E1613B	1,2,3,4,7,8-HxCDD	0.000923	µg/kg	J	IonRatio	K2200743
WC-SCPD36-8.0-9.0	E1613B	1,2,3,4,7,8-HxCDF	0.0274	µg/kg	J	Coelute	K2200743
WC-SCPD36-8.0-9.0	E1613B	2,3,7,8-TCDD	0.000489	µg/kg	J	IonRatio	K2200743
WC-SCPD36-8.0-9.0	E1613B	OCDD	2.15	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-8.0-9.0	E1699M	2,4'-DDD	93	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-8.0-9.0	E1699M	2,4'-DDE	8.7	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-8.0-9.0	E1699M	2,4'-DDT	0.71	µg/kg	UJ	Sur<LCL	K2200743
WC-SCPD36-8.0-9.0	E1699M	4,4'-DDD	130	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-8.0-9.0	E1699M	4,4'-DDE	41	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-8.0-9.0	E1699M	4,4'-DDT	19	µg/kg	J-	Sur<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8082A	Aroclor 1260	29	µg/kg	J	CF>RPD	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	2-Methylnaphthalene	130	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Acenaphthene	440	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Acenaphthylene	220	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Anthracene	680	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Benzo(a)anthracene	860	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Benzo(a)pyrene	920	µg/kg	J+	Sur>UCL|IS<LCL|CCV>UCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Benzo(b)fluoranthene	860	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Benzo(g,h,i)perylene	1000	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Benzo(k)fluoranthene	270	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Chrysene	1400	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Dibenzo(a,h)anthracene	140	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Dibenzofuran	110	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Fluoranthene	2500	µg/kg	J+	Sur>UCL|IS<LCL	K2200743

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD36-8.0-9.0	SW8270DSIM	Fluorene	650	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	740	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Naphthalene	140	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Phenanthrene	4300	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD36-8.0-9.0	SW8270DSIM	Pyrene	3200	µg/kg	J+	Sur>UCL|IS<LCL	K2200743
WC-SCPD37-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00042	µg/kg	J	IonRatio	L2659655
WC-SCPD37-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.00018	µg/kg	J	IonRatio	L2659655
WC-SCPD37-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.00054	µg/kg	J	IonRatio	L2659655
WC-SCPD37-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.0002	µg/kg	J	IonRatio	L2659655
WC-SCPD37-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.00055	µg/kg	J	IonRatio|Coelute	L2659655
WC-SCPD37-1.0-2.0	SW8082A	Aroclor 1016	0.65	µg/kg	UJ	Sur<LCL	K2111942
WC-SCPD37-1.0-2.0	SW8082A	Aroclor 1221	0.65	µg/kg	UJ	Sur<LCL	K2111942
WC-SCPD37-1.0-2.0	SW8082A	Aroclor 1232	0.65	µg/kg	UJ	Sur<LCL	K2111942
WC-SCPD37-1.0-2.0	SW8082A	Aroclor 1242	2.6	µg/kg	J	CF>RPD	K2111942
WC-SCPD37-1.0-2.0	SW8082A	Aroclor 1248	0.65	µg/kg	UJ	Sur<LCL	K2111942
WC-SCPD37-1.0-2.0	SW8082A	Aroclor 1254	4.9	µg/kg	J-	Sur<LCL	K2111942
WC-SCPD37-1.0-2.0	SW8082A	Aroclor 1260	5.8	µg/kg	J-	Sur<LCL	K2111942
WC-SCPD37-1.0-2.0	SW8082A	Aroclor 1262	0.65	µg/kg	UJ	Sur<LCL	K2111942
WC-SCPD37-1.0-2.0	SW8082A	Aroclor 1268	0.65	µg/kg	UJ	Sur<LCL	K2111942
WC-SCPD37-1.0-2.0	SW8270DSIM	2-Methylnaphthalene	0.48	µg/kg	U	LB<RL	K2111942
WC-SCPD37-1.0-2.0	SW8270DSIM	Naphthalene	0.61	µg/kg	U	LB<RL	K2111942
WC-SCPD37-10.0-10.9	E1613B	1,2,3,4,6,7,8-HpCDD	0.132	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	1,2,3,4,6,7,8-HpCDF	0.045	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	1,2,3,4,7,8,9-HpCDF	0.0088	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	1,2,3,4,7,8-HxCDF	0.0403	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	1,2,3,6,7,8-HxCDD	0.00581	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	1,2,3,6,7,8-HxCDF	0.0137	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	1,2,3,7,8,9-HxCDF	0.0043	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	1,2,3,7,8-PeCDD	0.00135	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	1,2,3,7,8-PeCDF	0.0234	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	2,3,4,6,7,8-HxCDF	0.00427	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	2,3,4,7,8-PeCDF	0.0113	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	2,3,7,8-TCDD	0.000303	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	2,3,7,8-TCDF	0.0152	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	E1613B	OCDD	1.32	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-10.0-10.9	SW8082A	Aroclor 1242	460	µg/kg	J	CF>RPD	K2203194
WC-SCPD37-10.0-10.9	SW8082A	Aroclor 1254	530	µg/kg	J	CF>RPD	K2203194
WC-SCPD37-2.0-3.0	E1613B	2,3,7,8-TCDD	0.00021	µg/kg	J	IonRatio	L2659655
WC-SCPD37-2.0-3.0	SW8082A	Aroclor 1254	7.7	µg/kg	J	CF>RPD	K2111942
WC-SCPD37-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0012	µg/kg	J	IonRatio	L2659655
WC-SCPD37-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.0033	µg/kg	J	Coelute	L2659655
WC-SCPD37-3.0-4.0	SW8082A	Aroclor 1254	16	µg/kg	J+	Sur>UCL|CF>RPD	K2111942
WC-SCPD37-3.0-4.0	SW8082A	Aroclor 1260	8.3	µg/kg	J+	Sur>UCL	K2111942
WC-SCPD37-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.0065	µg/kg	J	Coelute	L2659655
WC-SCPD37-4.0-5.0	SW8082A	Aroclor 1242	9.7	µg/kg	J	CF>RPD	K2111942
WC-SCPD37-6.0-7.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00328	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-6.0-7.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000218	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-6.0-7.0	E1613B	1,2,3,4,7,8-HxCDF	0.000342	µg/kg	J	IonRatio	K2203194
WC-SCPD37-6.0-7.0	E1613B	1,2,3,6,7,8-HxCDD	0.000409	µg/kg	J	IonRatio	K2203194
WC-SCPD37-6.0-7.0	E1613B	1,2,3,6,7,8-HxCDF	0.0002	µg/kg	J	IonRatio	K2203194
WC-SCPD37-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDD	0.000255	µg/kg	J	IonRatio	K2203194
WC-SCPD37-6.0-7.0	E1613B	1,2,3,7,8-PeCDF	0.000277	µg/kg	J	IonRatio	K2203194
WC-SCPD37-6.0-7.0	E1613B	2,3,4,6,7,8-HxCDF	0.00015	µg/kg	J	IonRatio	K2203194
WC-SCPD37-6.0-7.0	E1613B	2,3,4,7,8-PeCDF	0.000115	µg/kg	J	IonRatio	K2203194
WC-SCPD37-6.0-7.0	E1613B	OCDD	0.152	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-6.0-7.0	SW8082A	Aroclor 1242	18	µg/kg	J+	Sur>UCL|CF>RPD	K2203194
WC-SCPD37-6.0-7.0	SW8082A	Aroclor 1254	17	µg/kg	J+	Sur>UCL|CF>RPD	K2203194
WC-SCPD37-6.0-7.0	SW8082A	Aroclor 1260	5.3	µg/kg	J+	Sur>UCL|CF>RPD	K2203194
WC-SCPD37-6.0-7.0	SW8270DSIM	2-Methylnaphthalene	0.46	µg/kg	U	LB<RL	K2203194
WC-SCPD37-6.0-7.0	SW8270DSIM	Naphthalene	0.58	µg/kg	U	LB<RL	K2203194
WC-SCPD37-7.0-8.0	E1613B	2,3,4,6,7,8-HxCDF	0.00199	µg/kg	J	IonRatio	K2203194
WC-SCPD37-7.0-8.0	SW8082A	Aroclor 1242	27	µg/kg	J+	Sur>UCL|CF>RPD	K2203194
WC-SCPD37-7.0-8.0	SW8082A	Aroclor 1254	17	µg/kg	J+	Sur>UCL|CF>RPD	K2203194
WC-SCPD37-7.0-8.0	SW8082A	Aroclor 1260	6.8	µg/kg	J+	Sur>UCL|CF>RPD	K2203194
WC-SCPD37-9.0-10.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0396	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-9.0-10.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0288	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-9.0-10.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0079	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-9.0-10.0	E1613B	1,2,3,4,7,8-HxCDD	0.00057	µg/kg	J	IonRatio	K2203194
WC-SCPD37-9.0-10.0	E1613B	1,2,3,4,7,8-HxCDF	0.018	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-9.0-10.0	E1613B	1,2,3,6,7,8-HxCDF	0.00528	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-9.0-10.0	E1613B	1,2,3,7,8,9-HxCDF	0.0023	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-9.0-10.0	E1613B	2,3,4,6,7,8-HxCDF	0.00167	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-9.0-10.0	E1613B	2,3,4,7,8-PeCDF	0.00277	µg/kg	J	IonRatio	K2203194
WC-SCPD37-9.0-10.0	E1613B	2,3,7,8-TCDF	0.00321	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-9.0-10.0	E1613B	OCDD	0.358	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD37-9.0-10.0	SW8082A	Aroclor 1242	35	µg/kg	J	CF>RPD	K2203194
WC-SCPD37-9.0-10.0	SW8082A	Aroclor 1260	35	µg/kg	J	CF>RPD	K2203194
WC-SCPD38-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0014	µg/kg	J	IonRatio	L2659655
WC-SCPD38-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.0037	µg/kg	J	Coelute	L2659655
WC-SCPD38-1.0-2.0	SW8082A	Aroclor 1242	6.1	µg/kg	J	CF>RPD	K2111942
WC-SCPD38-10.0-11.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0776	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD38-10.0-11.0	E1613B	1,2,3,7,8-PeCDD	0.000842	µg/kg	J	IonRatio	K2200746

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD38-10.0-11.0	E1613B	2,3,7,8-TCDD	0.000767	µg/kg	J	IonRatio	K2200746
WC-SCPD38-10.0-11.0	E1613B	2,3,7,8-TCDF	0.000438	µg/kg	J	IonRatio	K2200746
WC-SCPD38-10.0-11.0	E1613B	OCDD	2.94	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD38-13.0-14.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.172	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD38-13.0-14.0	E1613B	1,2,3,4,7,8-HxCDF	0.0172	µg/kg	J+	Inter	K2200746
WC-SCPD38-13.0-14.0	E1613B	OCDD	4.92	µg/kg	J	ICRange	K2200746
WC-SCPD38-13.0-14.0	E1699M	2,4'-DDD	17	µg/kg	J+	LCS>UCL	K2200746
WC-SCPD38-13.0-14.0	SW8082A	Aroclor 1254	150	µg/kg	J	CF>RPD	K2200746
WC-SCPD38-14.0-14.3	E1613B	1,2,3,4,7,8,9-HpCDF	0.00447	µg/kg	J	IonRatio	K2200746
WC-SCPD38-14.0-14.3	E1613B	1,2,3,4,7,8-HxCDF	0.00526	µg/kg	J+	Inter	K2200746
WC-SCPD38-14.0-14.3	E1613B	1,2,3,7,8-PeCDF	0.00198	µg/kg	J	IonRatio	K2200746
WC-SCPD38-14.0-14.3	E1699M	2,4'-DDD	1.9	µg/kg	J+	LCS>UCL	K2200746
WC-SCPD38-14.0-14.3	SW8082A	Aroclor 1254	30	µg/kg	J	CF>RPD	K2200746
WC-SCPD38-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.0083	µg/kg	J	Coelute	L2659655
WC-SCPD38-2.0-3.0	E1613B	2,3,7,8-TCDD	0.00071	µg/kg	J	IonRatio	L2659655
WC-SCPD38-2.0-3.0	SW8270DSIM	2-Methylnaphthalene	0.62	µg/kg	U	LB<RL	K2111942
WC-SCPD38-2.0-3.0	SW8270DSIM	Anthracene	23	µg/kg	J-	CCV<LCL	K2111942
WC-SCPD38-2.0-3.0	SW8270DSIM	Benzo(k)fluoranthene	0.4	µg/kg	U	LB<RL	K2111942
WC-SCPD38-2.0-3.0	SW8270DSIM	Dibenzo(a,h)anthracene	0.38	µg/kg	U	LB<RL	K2111942
WC-SCPD38-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.0023	µg/kg	J	IonRatio	L2659655
WC-SCPD38-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.0068	µg/kg	J	Coelute	L2659655
WC-SCPD38-3.0-4.0	E1613B	2,3,7,8-TCDD	0.00072	µg/kg	J	IonRatio	L2659655
WC-SCPD38-4.0-5.0	E1613B	2,3,7,8-TCDD	0.00092	µg/kg	J	IonRatio	L2659655
WC-SCPD38-4.0-5.0	SW8082A	Aroclor 1242	16	µg/kg	J	CF>RPD	K2111942
WC-SCPD38-9.0-10.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0907	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD38-9.0-10.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0115	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD38-9.0-10.0	E1613B	1,2,3,6,7,8-HxCDF	0.0151	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD38-9.0-10.0	E1613B	OCDD	3.96	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD38-9.0-10.0	SW8082A	Aroclor 1254	580	µg/kg	J	CF>RPD	K2200746
WC-SCPD39-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0019	µg/kg	J	IonRatio	L2658841
WC-SCPD39-1.0-2.0	SW8270DSIM	Anthracene	22	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD39-12.0-13.0	E1613B	1,2,3,4,6,7,8-HpCDD	1.36	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-12.0-13.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.45	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-12.0-13.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0425	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-12.0-13.0	E1613B	1,2,3,4,7,8-HxCDF	0.111	µg/kg	J+	Inter	K2200746
WC-SCPD39-12.0-13.0	E1613B	1,2,3,6,7,8-HxCDF	0.0396	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-12.0-13.0	E1613B	1,2,3,7,8,9-HxCDF	0.0171	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-12.0-13.0	E1613B	2,3,7,8-TCDF	0.0444	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-12.0-13.0	E1613B	OCDD	13.7	µg/kg	J-	Sur<LCL|ICRange	K2200746
WC-SCPD39-12.0-13.0	E1699M	2,4'-DDD	11	µg/kg	J+	LCS>UCL	K2200746
WC-SCPD39-12.0-13.0	SW8082A	Aroclor 1254	300	µg/kg	J	CF>RPD	K2200746
WC-SCPD39-12.0-13.0	SW8082A	Aroclor 1260	170	µg/kg	J+	Sur>UCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	1,2,3,4,6,7,8-HpCDD	0.609	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	1,2,3,4,6,7,8-HpCDF	0.288	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	1,2,3,4,7,8,9-HpCDF	0.0281	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	1,2,3,4,7,8-HxCDD	0.00442	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	1,2,3,4,7,8-HxCDF	0.101	µg/kg	J-	Sur<LCL|Inter	K2200746
WC-SCPD39-13.0-13.9	E1613B	1,2,3,6,7,8-HxCDD	0.0234	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	1,2,3,6,7,8-HxCDF	0.0309	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	1,2,3,7,8,9-HxCDF	0.0138	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	1,2,3,7,8-PeCDD	0.00288	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	1,2,3,7,8-PeCDF	0.0529	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	2,3,4,6,7,8-HxCDF	0.0156	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	2,3,4,7,8-PeCDF	0.0345	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	2,3,7,8-TCDD	0.00313	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	2,3,7,8-TCDF	0.0248	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-13.0-13.9	E1613B	OCDD	7.82	µg/kg	J-	Sur<LCL|ICRange	K2200746
WC-SCPD39-13.0-13.9	E1699M	2,4'-DDD	13	µg/kg	J+	LCS>UCL	K2200746
WC-SCPD39-13.0-13.9	SW8082A	Aroclor 1242	42	µg/kg	J	CF>RPD	K2200746
WC-SCPD39-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.017	µg/kg	J	Coelute	L2658841
WC-SCPD39-2.0-3.0	SW8082A	Aroclor 1242	6.3	µg/kg	J	CF>RPD	K2111955
WC-SCPD39-2.0-3.0	SW8270DSIM	2-Methylnaphthalene	0.62	µg/kg	U	LB<RL	K2111955
WC-SCPD39-2.0-3.0	SW8270DSIM	Anthracene	18	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD39-2.0-3.0	SW8270DSIM	Dibenzofuran	1.1	µg/kg	U	LB<RL	K2111955
WC-SCPD39-2.0-3.0	SW8270DSIM	Naphthalene	0.79	µg/kg	U	LB<RL	K2111955
WC-SCPD39-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.0039	µg/kg	J	IonRatio	L2658841
WC-SCPD39-3.0-4.0	E1613B	2,3,7,8-TCDD	0.00093	µg/kg	J	IonRatio	L2658841
WC-SCPD39-3.0-4.0	SW8082A	Aroclor 1242	12	µg/kg	J	CF>RPD	K2111955
WC-SCPD39-3.0-4.0	SW8270DSIM	Anthracene	32	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD39-4.0-5.0	E1613B	2,3,7,8-TCDD	0.00104	µg/kg	J-	Sur<LCL	L2658841
WC-SCPD39-4.0-5.0	SW8270DSIM	Anthracene	18	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD39-4.0-5.0	SW8270DSIM	Naphthalene	0.8	µg/kg	U	LB<RL	K2111955
WC-SCPD39-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0737	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.023	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00164	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	1,2,3,4,7,8-HxCDD	0.000806	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	1,2,3,4,7,8-HxCDF	0.00372	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	1,2,3,6,7,8-HxCDD	0.00283	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	1,2,3,6,7,8-HxCDF	0.00267	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	1,2,3,7,8,9-HxCDF	0.00068	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	1,2,3,7,8-PeCDF	0.00151	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	2,3,4,6,7,8-HxCDF	0.00138	µg/kg	J-	Sur<LCL	K2200746

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD39-8.0-9.0	E1613B	2,3,4,7,8-PeCDF	0.00203	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	2,3,7,8-TCDD	0.000426	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	2,3,7,8-TCDF	0.000787	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1613B	OCDD	1.08	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-8.0-9.0	E1699M	2,4'-DDD	1.3	µg/kg	J+	LCS>UCL	K2200746
WC-SCPD39-9.0-10.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0288	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-9.0-10.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00278	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD39-9.0-10.0	E1613B	1,2,3,6,7,8-HxCDF	0.00382	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-9.0-10.0	E1613B	1,2,3,7,8-PeCDD	0.000683	µg/kg	J	IonRatio	K2200746
WC-SCPD39-9.0-10.0	E1613B	2,3,7,8-TCDF	0.00268	µg/kg	J	IonRatio	K2200746
WC-SCPD39-9.0-10.0	E1613B	OCDD	1.6	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-9.0-10.0	E1699M	2,4'-DDD	2.7	µg/kg	J+	LCS>UCL	K2200746
WC-SCPD39-9.0-10.0	SW8082A	Aroclor 1016	0.84	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD39-9.0-10.0	SW8082A	Aroclor 1221	0.84	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD39-9.0-10.0	SW8082A	Aroclor 1232	0.84	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD39-9.0-10.0	SW8082A	Aroclor 1248	0.84	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD39-9.0-10.0	SW8082A	Aroclor 1254	370	µg/kg	J	CF>RPD	K2200746
WC-SCPD39-9.0-10.0	SW8082A	Aroclor 1260	76	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD39-9.0-10.0	SW8082A	Aroclor 1262	0.84	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD39-9.0-10.0	SW8082A	Aroclor 1268	0.84	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD40-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0244	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00349	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00047	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD40-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.00207	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.00068	µg/kg	J	IonRatio	K2203194
WC-SCPD40-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.000657	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.000341	µg/kg	J	IonRatio	K2203194
WC-SCPD40-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.000343	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD40-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.000346	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD40-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.00116	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD40-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.000358	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD40-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.000981	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00105	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD40-1.0-2.0	E1613B	2,3,7,8-TCDF	0.00108	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD40-1.0-2.0	E1613B	OCDD	0.234	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-1.0-2.0	SW8082A	Aroclor 1260	5.7	µg/kg	J	CF>RPD	K2203194
WC-SCPD40-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0495	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0095	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00087	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD40-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.000235	µg/kg	J	IonRatio	K2203194
WC-SCPD40-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.0013	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.000757	µg/kg	J	IonRatio	K2203194
WC-SCPD40-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.000422	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD40-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.000256	µg/kg	J	IonRatio	K2203194
WC-SCPD40-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.00123	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD40-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.000667	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD40-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.000901	µg/kg	J	IonRatio	K2203194
WC-SCPD40-2.0-3.0	E1613B	2,3,7,8-TCDF	0.000479	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD40-2.0-3.0	E1613B	OCDD	0.57	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-2.0-3.0	E1699M	2,4'-DDD	0.83	µg/kg	J+	Sur>UCL	K2203194
WC-SCPD40-2.0-3.0	E1699M	4,4'-DDD	3	µg/kg	J+	Sur>UCL	K2203194
WC-SCPD40-2.0-3.0	E1699M	4,4'-DDE	2.9	µg/kg	J+	Sur>UCL	K2203194
WC-SCPD40-2.0-3.0	SW8082A	Aroclor 1242	27	µg/kg	J	CF>RPD	K2203194
WC-SCPD40-2.0-3.0	SW8082A	Aroclor 1254	32	µg/kg	J	CF>RPD	K2203194
WC-SCPD40-2.0-3.0	SW8082A	Aroclor 1260	17	µg/kg	J	CF>RPD	K2203194
WC-SCPD40-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0302	µg/kg	J	Coelute	K2203194
WC-SCPD40-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.00337	µg/kg	J	IonRatio	K2203194
WC-SCPD40-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDF	0.00376	µg/kg	J	IonRatio	K2203194
WC-SCPD40-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00141	µg/kg	J	IonRatio	K2203194
WC-SCPD40-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.000751	µg/kg	J	IonRatio	K2203194
WC-SCPD40-3.0-4.0	E1613B	OCDD	1.81	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-3.0-4.0	SW8082A	Aroclor 1260	39	µg/kg	J	CF>RPD	K2203194
WC-SCPD40-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0832	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00897	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000972	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.000277	µg/kg	J	IonRatio	K2203194
WC-SCPD40-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.00372	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD40-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.00174	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.000679	µg/kg	J	IonRatio	K2203194
WC-SCPD40-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDF	0.000628	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD40-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.00236	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.000865	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-4.0-5.0	E1613B	2,3,4,7,8-PeCDF	0.00145	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-4.0-5.0	E1613B	2,3,7,8-TCDD	0.00061	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD40-4.0-5.0	E1613B	2,3,7,8-TCDF	0.000532	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD40-4.0-5.0	E1613B	OCDD	1.09	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD40-4.0-5.0	SW8082A	Aroclor 1242	30	µg/kg	J+	Sur>UCL|CF>RPD	K2203194
WC-SCPD40-4.0-5.0	SW8082A	Aroclor 1254	50	µg/kg	J+	Sur>UCL|CF>RPD	K2203194
WC-SCPD40-4.0-5.0	SW8082A	Aroclor 1260	39	µg/kg	J+	Sur>UCL|CF>RPD	K2203194
WC-SCPD40-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00447	µg/kg	J-	Sur<LCL	K2205401
WC-SCPD40-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000261	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD40-8.0-9.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000307	µg/kg	UJ	Sur<LCL	K2205401

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD40-8.0-9.0	E1613B	1,2,3,4,7,8-HxCDF	0.000139	µg/kg	J	LB<RL	K2205401
WC-SCPD40-8.0-9.0	E1613B	1,2,3,6,7,8-HxCDF	0.000144	µg/kg	U	LB<RL	K2205401
WC-SCPD40-8.0-9.0	E1613B	1,2,3,7,8,9-HxCDF	0.000202	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD40-8.0-9.0	E1613B	1,2,3,7,8-PeCDF	0.000176	µg/kg	J-	Sur<LCL|IonRatio	K2205401
WC-SCPD40-8.0-9.0	E1613B	2,3,4,6,7,8-HxCDF	0.000139	µg/kg	U	LB<RL	K2205401
WC-SCPD40-8.0-9.0	E1613B	2,3,7,8-TCDF	0.000164	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD40-8.0-9.0	E1613B	OCDD	0.0343	µg/kg	J-	Sur<LCL	K2205401
WC-SCPD40-8.0-9.0	E1613B	Total HxCDF	0.000153	µg/kg	U	LB<RL	K2205401
WC-SCPD40-8.0-9.0	SW8270DSIM	Benzo(a)anthracene	0.3	µg/kg	U	LB<RL	K2205401
WC-SCPD40-8.0-9.0	SW8270DSIM	Pyrene	0.41	µg/kg	U	LB<RL	K2205401
WC-SCPD40-8.0-9.0	SW9060	Total Organic Carbon	0.12	µg/kg	J	LabDupRPD	K2205401
WC-SCPD40-9.0-9.5	E1613B	1,2,3,4,6,7,8-HpCDD	0.00519	µg/kg	J-	Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	1,2,3,4,6,7,8-HpCDF	0.000246	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	1,2,3,4,7,8,9-HpCDF	0.000296	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	1,2,3,4,7,8-HxCDF	0.000173	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	1,2,3,6,7,8-HxCDF	0.000185	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	1,2,3,7,8,9-HxCDF	0.000252	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	1,2,3,7,8-PeCDD	0.00031	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	1,2,3,7,8-PeCDF	0.000129	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	2,3,4,6,7,8-HxCDF	0.000174	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	2,3,4,7,8-PeCDF	0.000103	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	2,3,7,8-TCDD	0.000557	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	2,3,7,8-TCDF	0.000403	µg/kg	UJ	Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	OCDD	0.0385	µg/kg	J-	Sur<LCL	K2205401
WC-SCPD40-9.0-9.5	E1613B	Total HxCDF	0.000193	µg/kg	U	LB<RL	K2205401
WC-SCPD40-9.0-9.5	SW8270DSIM	Benzo(a)anthracene	0.33	µg/kg	U	LB<RL	K2205401
WC-SCPD40-9.0-9.5	SW8270DSIM	Benzo(a)pyrene	1	µg/kg	J+	CCV>UCL	K2205401
WC-SCPD40-9.0-9.5	SW8270DSIM	Indeno(1,2,3-cd)pyrene	1.2	µg/kg	J+	CCV>UCL	K2205401
WC-SCPD40-9.0-9.5	SW8270DSIM	Pyrene	0.45	µg/kg	U	LB<RL	K2205401
WC-SCPD41-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00046	µg/kg	J	IonRatio	L2608826
WC-SCPD41-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00022	µg/kg	J	IonRatio	L2608826
WC-SCPD41-1.0-2.0	E1699M	2,4'-DDD	0.61	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	E1699M	2,4'-DDE	0.76	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	E1699M	2,4'-DDT	0.9	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	E1699M	4,4'-DDD	1.1	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	E1699M	4,4'-DDE	1.7	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	E1699M	4,4'-DDT	0.45	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8082A	Aroclor 1016	1.1	µg/kg	UJ	Sur<LCL|LCS<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8082A	Aroclor 1221	1.1	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8082A	Aroclor 1232	1.1	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8082A	Aroclor 1242	1.1	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8082A	Aroclor 1248	2.3	µg/kg	J-	Sur<LCL|CF>RPD	K2107340
WC-SCPD41-1.0-2.0	SW8082A	Aroclor 1254	3.9	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8082A	Aroclor 1260	4.3	µg/kg	J-	Sur<LCL|LCS<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8082A	Aroclor 1262	1.1	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8082A	Aroclor 1268	1.1	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	2-Methylnaphthalene	4.2	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Acenaphthene	9.5	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Acenaphthylene	3	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Anthracene	12	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Benzo(a)anthracene	32	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Benzo(a)pyrene	21	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Benzo(b)fluoranthene	33	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Benzo(g,h,i)perylene	18	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Benzo(k)fluoranthene	12	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Chrysene	66	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Dibenzo(a,h)anthracene	3.1	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Dibenzofuran	7	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Fluoranthene	120	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Fluorene	15	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	15	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Naphthalene	5.7	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Phenanthrene	66	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-1.0-2.0	SW8270DSIM	Pyrene	130	µg/kg	J-	Sur<LCL|CCV>UCL	K2107340
WC-SCPD41-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.0043	µg/kg	J	Coelute	L2608826
WC-SCPD41-2.0-3.0	E1613B	2,3,7,8-TCDD	0.0003	µg/kg	J	IonRatio	L2608826
WC-SCPD41-2.0-3.0	E1699M	2,4'-DDD	0.78	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-2.0-3.0	E1699M	2,4'-DDE	0.68	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-2.0-3.0	E1699M	2,4'-DDT	0.81	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-2.0-3.0	E1699M	4,4'-DDD	2.6	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-2.0-3.0	E1699M	4,4'-DDE	2.6	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-2.0-3.0	E1699M	4,4'-DDT	0.49	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-2.0-3.0	SW8082A	Aroclor 1016	0.92	µg/kg	UJ	LCS<LCL	K2107340
WC-SCPD41-2.0-3.0	SW8082A	Aroclor 1260	7.5	µg/kg	J-	LCS<LCL	K2107340
WC-SCPD41-2.0-3.0	SW8270DSIM	Pyrene	380	µg/kg	J+	CCV>UCL	K2107340
WC-SCPD41-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0068	µg/kg	J	IonRatio	L2608826
WC-SCPD41-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.0045	µg/kg	J	IonRatio	L2608826
WC-SCPD41-3.0-4.0	E1699M	2,4'-DDD	0.73	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-3.0-4.0	E1699M	2,4'-DDE	0.74	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-3.0-4.0	E1699M	2,4'-DDT	0.87	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-3.0-4.0	E1699M	4,4'-DDD	3.1	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-3.0-4.0	E1699M	4,4'-DDE	3.2	µg/kg	J-	Sur<LCL	K2107340

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD41-3.0-4.0	E1699M	4,4'-DDT	0.44	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-3.0-4.0	SW8082A	Aroclor 1016	0.92	µg/kg	UJ	LCS<LCL	K2107340
WC-SCPD41-3.0-4.0	SW8082A	Aroclor 1260	15	µg/kg	J-	LCS<LCL	K2107340
WC-SCPD41-3.0-4.0	SW8270DSIM	Pyrene	420	µg/kg	J+	CCV>UCL	K2107340
WC-SCPD41-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.307	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD41-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00552	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD41-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.00137	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD41-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.00742	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD41-4.0-5.0	E1613B	2,3,4,7,8-PeCDF	0.00518	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD41-4.0-5.0	E1613B	2,3,7,8-TCDD	0.00063	µg/kg	J-	IonRatio|Sur<LCL	L2608826
WC-SCPD41-4.0-5.0	E1613B	2,3,7,8-TCDF	0.00699	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD41-4.0-5.0	E1613B	OCDD	3	µg/kg	J-	Sur<LCL	L2608826
WC-SCPD41-4.0-5.0	E1699M	2,4'-DDD	0.88	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-4.0-5.0	E1699M	2,4'-DDE	0.71	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-4.0-5.0	E1699M	2,4'-DDT	0.85	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-4.0-5.0	E1699M	4,4'-DDD	3.5	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-4.0-5.0	E1699M	4,4'-DDE	3.4	µg/kg	J-	Sur<LCL	K2107340
WC-SCPD41-4.0-5.0	E1699M	4,4'-DDT	0.43	µg/kg	UJ	Sur<LCL	K2107340
WC-SCPD41-4.0-5.0	SW8082A	Aroclor 1016	0.9	µg/kg	UJ	LCS<LCL	K2107340
WC-SCPD41-4.0-5.0	SW8082A	Aroclor 1260	17	µg/kg	J-	LCS<LCL	K2107340
WC-SCPD41-4.0-5.0	SW8270DSIM	Pyrene	410	µg/kg	J+	CCV>UCL	K2107340
WC-SCPD41-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00505	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00144	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000126	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	1,2,3,4,7,8-HxCDF	0.000479	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	1,2,3,6,7,8-HxCDD	0.000433	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD41-7.0-8.0	E1613B	1,2,3,6,7,8-HxCDF	0.000176	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	1,2,3,7,8,9-HxCDD	0.000186	µg/kg	J	IonRatio	K2203194
WC-SCPD41-7.0-8.0	E1613B	1,2,3,7,8,9-HxCDF	0.000154	µg/kg	UJ	LB<RL|Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	1,2,3,7,8-PeCDF	0.000153	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	2,3,4,6,7,8-HxCDF	0.000132	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	2,3,4,7,8-PeCDF	0.000129	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	2,3,7,8-TCDD	0.00041	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	2,3,7,8-TCDF	0.00043	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD41-7.0-8.0	E1613B	OCDD	0.0518	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD41-7.0-8.0	SW8082A	Aroclor 1242	1.7	µg/kg	J	CF>RPD	K2203194
WC-SCPD41-7.0-8.0	SW8082A	Aroclor 1254	2.5	µg/kg	J	CF>RPD	K2203194
WC-SCPD41-7.0-8.0	SW8082A	Aroclor 1260	1	µg/kg	J	CF>RPD	K2203194
WC-SCPD41-7.0-8.0	SW8270DSIM	2-Methylnaphthalene	0.48	µg/kg	U	LB<RL	K2203194
WC-SCPD41-7.0-8.0	SW8270DSIM	Anthracene	0.38	µg/kg	U	LB<RL	K2203194
WC-SCPD41-7.0-8.0	SW8270DSIM	Benzo(a)anthracene	0.3	µg/kg	U	LB<RL	K2203194
WC-SCPD41-7.0-8.0	SW8270DSIM	Naphthalene	0.61	µg/kg	U	LB<RL	K2203194
WC-SCPD41-8.0-8.8	E1613B	1,2,3,7,8,9-HxCDD	0.000439	µg/kg	J	IonRatio	K2203194
WC-SCPD41-8.0-8.8	E1613B	1,2,3,7,8,9-HxCDF	0.000243	µg/kg	J	IonRatio	K2203194
WC-SCPD41-8.0-8.8	E1613B	1,2,3,7,8-PeCDD	0.000163	µg/kg	J	IonRatio	K2203194
WC-SCPD41-8.0-8.8	E1613B	2,3,7,8-TCDF	0.000693	µg/kg	J	IonRatio	K2203194
WC-SCPD41-8.0-8.8	SW8082A	Aroclor 1254	6	µg/kg	J	CF>RPD	K2203194
WC-SCPD41-8.0-8.8	SW8082A	Aroclor 1260	4.6	µg/kg	J	CF>RPD	K2203194
WC-SCPD41-8.0-8.8	SW8270DSIM	2-Methylnaphthalene	0.99	µg/kg	U	LB<RL	K2203194
WC-SCPD41-8.0-8.8	SW8270DSIM	Benzo(a)anthracene	0.62	µg/kg	U	LB<RL	K2203194
WC-SCPD41-8.0-8.8	SW8270DSIM	Naphthalene	1.3	µg/kg	U	LB<RL	K2203194
WC-SCPD42-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.002	µg/kg	J	IonRatio	L2606306
WC-SCPD42-3.0-4.0	SW8082A	Aroclor 1016	7.6	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-3.0-4.0	SW8082A	Aroclor 1221	13	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-3.0-4.0	SW8082A	Aroclor 1232	11	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-3.0-4.0	SW8082A	Aroclor 1242	8.3	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-3.0-4.0	SW8082A	Aroclor 1248	8.4	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-3.0-4.0	SW8082A	Aroclor 1254	17	µg/kg	J-	Sur<LCL	K2107158
WC-SCPD42-3.0-4.0	SW8082A	Aroclor 1260	14	µg/kg	J-	Sur<LCL	K2107158
WC-SCPD42-3.0-4.0	SW8082A	Aroclor 1262	0.87	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-3.0-4.0	SW8082A	Aroclor 1268	0.87	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-3.0-4.0	SW8270DSIM	Pyrene	5900	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD42-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000046	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.000034	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.000035	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.000038	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.000022	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.000057	µg/kg	J	IonRatio|Coelute	L2606306
WC-SCPD42-4.0-5.0	E1613B	2,3,4,7,8-PeCDF	0.00002	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1613B	2,3,7,8-TCDF	0.000021	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1613B	OCDD	0.0745	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD42-4.0-5.0	E1613B	OCDF	0.00012	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1613B	Total HpCDF	0.000071	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1613B	Total HxCDF	0.00005	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1613B	Total PeCDF	0.000022	µg/kg	U	LB<RL	L2606306
WC-SCPD42-4.0-5.0	E1699M	2,4'-DDD	0.36	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-4.0-5.0	E1699M	2,4'-DDE	0.45	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-4.0-5.0	E1699M	2,4'-DDT	0.53	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-4.0-5.0	E1699M	4,4'-DDD	0.59	µg/kg	J-	IS>UCL	K2107158
WC-SCPD42-4.0-5.0	E1699M	4,4'-DDE	0.4	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-4.0-5.0	E1699M	4,4'-DDT	0.27	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-4.0-5.0	SW8270DSIM	Pyrene	23	µg/kg	J+	CCV>UCL	K2107158

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD42-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000047	µg/kg	U	LB<RL	L2606306
WC-SCPD42-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDD	0.000082	µg/kg	U	LB<RL	L2606306
WC-SCPD42-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDD	0.000086	µg/kg	U	LB<RL	L2606306
WC-SCPD42-5.0-6.0	E1613B	1,2,3,7,8-PeCDD	0.000044	µg/kg	U	LB<RL	L2606306
WC-SCPD42-5.0-6.0	E1613B	2,3,4,7,8-PeCDF	0.000021	µg/kg	U	LB<RL	L2606306
WC-SCPD42-5.0-6.0	E1613B	OCDD	0.00027	µg/kg	UJ	LB<RL|Sur<LCL	L2606306
WC-SCPD42-5.0-6.0	E1613B	OCDF	0.00012	µg/kg	U	LB<RL	L2606306
WC-SCPD42-5.0-6.0	E1613B	Total HpCDF	0.000069	µg/kg	U	LB<RL	L2606306
WC-SCPD42-5.0-6.0	E1613B	Total PeCDF	0.000023	µg/kg	U	LB<RL	L2606306
WC-SCPD42-5.0-6.0	E1699M	2,4'-DDD	0.4	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-5.0-6.0	E1699M	2,4'-DDE	0.5	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-5.0-6.0	E1699M	2,4'-DDT	0.6	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-5.0-6.0	E1699M	4,4'-DDD	0.22	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-5.0-6.0	E1699M	4,4'-DDE	0.44	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-5.0-6.0	E1699M	4,4'-DDT	0.3	µg/kg	UJ	IS>UCL	K2107158
WC-SCPD42-5.0-6.0	SW8082A	Aroclor 1016	0.66	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-5.0-6.0	SW8082A	Aroclor 1221	0.66	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-5.0-6.0	SW8082A	Aroclor 1232	0.66	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-5.0-6.0	SW8082A	Aroclor 1242	0.66	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-5.0-6.0	SW8082A	Aroclor 1248	0.66	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-5.0-6.0	SW8082A	Aroclor 1254	0.66	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-5.0-6.0	SW8082A	Aroclor 1260	0.66	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-5.0-6.0	SW8082A	Aroclor 1262	0.66	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-5.0-6.0	SW8082A	Aroclor 1268	0.66	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-5.0-6.0	SW8270DSIM	Pyrene	19	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD42-6.0-7.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00014	µg/kg	U	LB<RL	L2606306
WC-SCPD42-6.0-7.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.000045	µg/kg	U	LB<RL	L2606306
WC-SCPD42-6.0-7.0	E1613B	OCDD	0.00036	µg/kg	U	LB<RL|Sur<LCL	L2606306
WC-SCPD42-6.0-7.0	E1613B	OCDF	0.00016	µg/kg	U	LB<RL	L2606306
WC-SCPD42-6.0-7.0	E1613B	Total HpCDF	0.000066	µg/kg	U	LB<RL	L2606306
WC-SCPD42-6.0-7.0	E1699M	2,4'-DDD	0.34	µg/kg	UJ	Sur<LCL|IS>UCL	K2107158
WC-SCPD42-6.0-7.0	E1699M	2,4'-DDE	0.43	µg/kg	UJ	Sur<LCL|IS>UCL	K2107158
WC-SCPD42-6.0-7.0	E1699M	2,4'-DDT	0.51	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-6.0-7.0	E1699M	4,4'-DDD	0.19	µg/kg	UJ	Sur<LCL|IS>UCL	K2107158
WC-SCPD42-6.0-7.0	E1699M	4,4'-DDE	0.38	µg/kg	UJ	Sur<LCL|IS>UCL	K2107158
WC-SCPD42-6.0-7.0	E1699M	4,4'-DDT	0.26	µg/kg	UJ	Sur<LCL|IS>UCL	K2107158
WC-SCPD42-6.0-7.0	SW8082A	Aroclor 1016	0.63	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-6.0-7.0	SW8082A	Aroclor 1221	0.63	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-6.0-7.0	SW8082A	Aroclor 1232	0.63	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-6.0-7.0	SW8082A	Aroclor 1242	0.63	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-6.0-7.0	SW8082A	Aroclor 1248	0.63	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-6.0-7.0	SW8082A	Aroclor 1254	0.63	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-6.0-7.0	SW8082A	Aroclor 1260	0.63	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-6.0-7.0	SW8082A	Aroclor 1262	0.63	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD42-6.0-7.0	SW8082A	Aroclor 1268	0.63	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD43A-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.665	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.223	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0169	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.00367	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.0408	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.0175	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.0142	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.00574	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00339	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.0232	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.00931	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.015	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00323	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	2,3,7,8-TCDF	0.0159	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-1.0-2.0	E1613B	OCDD	9.02	µg/kg	J-	Sur<LCL|ICRange	K2203345
WC-SCPD43A-1.0-2.0	SW8270DSIM	Acenaphthylene	140	µg/kg	J+	Inter	K2203345
WC-SCPD43A-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.263	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.108	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0101	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.0129	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-2.0-3.0	E1613B	2,3,7,8-TCDD	0.000833	µg/kg	J	IonRatio	K2203345
WC-SCPD43A-2.0-3.0	E1613B	OCDD	3.45	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-2.0-3.0	E1699M	2,4'-DDE	11	µg/kg	J+	Sur>UCL	K2203345
WC-SCPD43A-2.0-3.0	E1699M	4,4'-DDE	74	µg/kg	J+	Sur>UCL	K2203345
WC-SCPD43A-2.0-3.0	SW8270DSIM	Acenaphthylene	100	µg/kg	J+	Inter	K2203345
WC-SCPD43A-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.141	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0788	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00983	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-3.0-4.0	E1613B	2,3,7,8-TCDD	0.000614	µg/kg	J	IonRatio	K2203345
WC-SCPD43A-3.0-4.0	E1613B	OCDD	1.64	µg/kg	J-	Sur<LCL	K2203345
WC-SCPD43A-3.0-4.0	SW8270DSIM	Acenaphthylene	140	µg/kg	J+	Inter	K2203345
WC-SCPD44-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.0021	µg/kg	J	IonRatio	L2606446
WC-SCPD44-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00031	µg/kg	J	IonRatio	L2606446
WC-SCPD44-1.0-2.0	E1613B	2,3,7,8-TCDF	0.0019	µg/kg	J	IonRatio	L2606446
WC-SCPD44-1.0-2.0	SW8082A	Aroclor 1242	9.7	µg/kg	J	CF>RPD	K2107222
WC-SCPD44-1.0-2.0	SW8270DSIM	Pyrene	380	µg/kg	J+	CCV>UCL	K2107222
WC-SCPD44-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.0046	µg/kg	J	IonRatio	L2606446

Table H-4. Overall Validation Findings
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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD44-2.0-3.0	E1613B	2,3,7,8-TCDD	0.00039	µg/kg	J	IonRatio	L2606446
WC-SCPD44-2.0-3.0	E1613B	OCDD	2.11	µg/kg	J-	Sur<LCL	L2606446
WC-SCPD44-2.0-3.0	SW8082A	Aroclor 1242	10	µg/kg	J	CF>RPD	K2107222
WC-SCPD44-2.0-3.0	SW8270DSIM	Pyrene	7100	µg/kg	J+	CCV>UCL	K2107222
WC-SCPD44-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.005	µg/kg	J	Coelute	L2606446
WC-SCPD44-3.0-4.0	SW8270DSIM	Pyrene	390	µg/kg	J+	CCV>UCL	K2107222
WC-SCPD44-4.0-5.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0011	µg/kg	J	IonRatio	L2606446
WC-SCPD44-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.0013	µg/kg	J	IonRatio	L2606446
WC-SCPD44-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDF	0.00052	µg/kg	J	IonRatio	L2606446
WC-SCPD44-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.00082	µg/kg	J	IonRatio	L2606446
WC-SCPD44-4.0-5.0	E1613B	2,3,7,8-TCDD	0.00013	µg/kg	J	IonRatio	L2606446
WC-SCPD44-4.0-5.0	E1613B	OCDD	0.736	µg/kg	J-	Sur<LCL	L2606446
WC-SCPD44-4.0-5.0	SW8270DSIM	Pyrene	93	µg/kg	J+	CCV>UCL	K2107222
WC-SCPD44-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.000444	µg/kg	J	IonRatio	K2203194
WC-SCPD44-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0000299	µg/kg	UJ	LB<RL|Sur<LCL	K2203194
WC-SCPD44-7.0-8.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0000609	µg/kg	J	IonRatio	K2203194
WC-SCPD44-7.0-8.0	E1613B	1,2,3,4,7,8-HxCDF	0.0000804	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD44-7.0-8.0	E1613B	1,2,3,6,7,8-HxCDD	0.0000471	µg/kg	U	LB<RL	K2203194
WC-SCPD44-7.0-8.0	E1613B	1,2,3,6,7,8-HxCDF	0.0000874	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD44-7.0-8.0	E1613B	1,2,3,7,8,9-HxCDF	0.0000991	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD44-7.0-8.0	E1613B	1,2,3,7,8-PeCDD	0.000133	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD44-7.0-8.0	E1613B	1,2,3,7,8-PeCDF	0.000108	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD44-7.0-8.0	E1613B	2,3,4,7,8-PeCDF	0.000213	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD44-7.0-8.0	E1613B	2,3,7,8-TCDD	0.000562	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD44-7.0-8.0	E1613B	2,3,7,8-TCDF	0.00048	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD44-7.0-8.0	E1613B	OCDD	0.00331	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD44-7.0-8.0	SW8270DSIM	2-Methylnaphthalene	0.52	µg/kg	U	LB<RL	K2203194
WC-SCPD44-7.0-8.0	SW8270DSIM	Benzo(a)anthracene	0.33	µg/kg	U	LB<RL	K2203194
WC-SCPD44-7.0-8.0	SW8270DSIM	Naphthalene	0.66	µg/kg	U	LB<RL	K2203194
WC-SCPD44-7.0-8.0	SW8270DSIM	Phenanthrene	0.83	µg/kg	U	LB<RL	K2203194
WC-SCPD44-7.0-8.0	SW8270DSIM	Pyrene	0.45	µg/kg	U	LB<RL	K2203194
WC-SCPD44-8.0-8.9	E1613B	1,2,3,4,6,7,8-HpCDF	0.00132	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD44-8.0-8.9	E1613B	1,2,3,4,7,8,9-HpCDF	0.000208	µg/kg	J	IonRatio	K2203194
WC-SCPD44-8.0-8.9	E1613B	1,2,3,4,7,8-HxCDD	0.0000992	µg/kg	J	IonRatio	K2203194
WC-SCPD44-8.0-8.9	E1613B	1,2,3,4,7,8-HxCDF	0.000338	µg/kg	J	IonRatio	K2203194
WC-SCPD44-8.0-8.9	E1613B	1,2,3,6,7,8-HxCDD	0.000438	µg/kg	J	IonRatio	K2203194
WC-SCPD44-8.0-8.9	E1613B	1,2,3,7,8,9-HxCDF	0.000123	µg/kg	U	LB<RL	K2203194
WC-SCPD44-8.0-8.9	E1613B	1,2,3,7,8-PeCDF	0.000178	µg/kg	J	IonRatio	K2203194
WC-SCPD44-8.0-8.9	SW8270DSIM	2-Methylnaphthalene	0.49	µg/kg	U	LB<RL	K2203194
WC-SCPD44-8.0-8.9	SW8270DSIM	Benzo(a)anthracene	0.3	µg/kg	U	LB<RL	K2203194
WC-SCPD44-8.0-8.9	SW8270DSIM	Naphthalene	0.62	µg/kg	U	LB<RL	K2203194
WC-SCPD44-8.0-8.9	SW8270DSIM	Phenanthrene	0.77	µg/kg	U	LB<RL	K2203194
WC-SCPD44-8.0-8.9	SW8270DSIM	Pyrene	0.42	µg/kg	U	LB<RL	K2203194
WC-SCPD45-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.0013	µg/kg	J	IonRatio	L2658841
WC-SCPD45-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00018	µg/kg	J	IonRatio	L2658841
WC-SCPD45-1.0-2.0	SW8082A	Aroclor 1242	3.5	µg/kg	J	CF>RPD	K2111955
WC-SCPD45-1.0-2.0	SW8082A	Aroclor 1254	10	µg/kg	J	CF>RPD	K2111955
WC-SCPD45-1.0-2.0	SW8270DSIM	2-Methylnaphthalene	0.73	µg/kg	U	LB<RL	K2111955
WC-SCPD45-1.0-2.0	SW8270DSIM	Acenaphthylene	0.55	µg/kg	U	LB<RL	K2111955
WC-SCPD45-1.0-2.0	SW8270DSIM	Anthracene	13	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD45-1.0-2.0	SW8270DSIM	Dibenzo(a,h)anthracene	0.46	µg/kg	U	LB<RL	K2111955
WC-SCPD45-1.0-2.0	SW8270DSIM	Dibenzofuran	1.2	µg/kg	U	LB<RL	K2111955
WC-SCPD45-1.0-2.0	SW8270DSIM	Naphthalene	0.93	µg/kg	U	LB<RL	K2111955
WC-SCPD45-2.0-3.0	SW8270DSIM	Anthracene	31	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8082A	Aroclor 1242	15	µg/kg	J	CF>RPD	K2111955
WC-SCPD45-3.0-4.0	SW8082A	Aroclor 1254	11	µg/kg	J	CF>RPD	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	2-Methylnaphthalene	18	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Acenaphthene	24	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Acenaphthylene	4.1	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Anthracene	31	µg/kg	J-	Sur<LCL|CCV<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Benzo(a)anthracene	55	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Benzo(a)pyrene	47	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Benzo(b)fluoranthene	53	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Benzo(g,h,i)perylene	21	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Benzo(k)fluoranthene	22	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Chrysene	66	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Dibenzo(a,h)anthracene	4.7	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Dibenzofuran	0.92	µg/kg	UJ	LB<RL|Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Fluoranthene	170	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Fluorene	27	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	23	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Naphthalene	0.72	µg/kg	UJ	LB<RL|Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Phenanthrene	160	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-3.0-4.0	SW8270DSIM	Pyrene	150	µg/kg	J-	Sur<LCL	K2111955
WC-SCPD45-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0017	µg/kg	J	IonRatio	L2658841
WC-SCPD45-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00002	µg/kg	U	LB<RL	L2658841
WC-SCPD45-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.000036	µg/kg	J	IonRatio	L2658841
WC-SCPD45-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDD	0.00006	µg/kg	J	IonRatio	L2658841
WC-SCPD45-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.00014	µg/kg	J	IonRatio	L2658841
WC-SCPD45-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.000022	µg/kg	J	IonRatio	L2658841
WC-SCPD45-4.0-5.0	SW8270DSIM	2-Methylnaphthalene	0.64	µg/kg	U	LB<RL	K2111955
WC-SCPD45-4.0-5.0	SW8270DSIM	Acenaphthene	0.52	µg/kg	U	LB<RL	K2111955

Table H-4. Overall Validation Findings
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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD45-4.0-5.0	SW8270DSIM	Anthracene	0.51	µg/kg	UJ	CCV<LCL	K2111955
WC-SCPD45-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	0.4	µg/kg	U	LB<RL	K2111955
WC-SCPD45-4.0-5.0	SW8270DSIM	Benzo(b)fluoranthene	0.66	µg/kg	U	LB<RL	K2111955
WC-SCPD45-4.0-5.0	SW8270DSIM	Chrysene	0.54	µg/kg	U	LB<RL	K2111955
WC-SCPD45-4.0-5.0	SW8270DSIM	Fluoranthene	1.1	µg/kg	U	LB<RL	K2111955
WC-SCPD45-4.0-5.0	SW8270DSIM	Fluorene	0.99	µg/kg	U	LB<RL	K2111955
WC-SCPD45-4.0-5.0	SW8270DSIM	Naphthalene	0.82	µg/kg	U	LB<RL	K2111955
WC-SCPD45-4.0-5.0	SW8270DSIM	Phenanthrene	1.1	µg/kg	U	LB<RL	K2111955
WC-SCPD45-4.0-5.0	SW8270DSIM	Pyrene	0.56	µg/kg	U	LB<RL	K2111955
WC-SCPD46-1.0-2.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0043	µg/kg	J	IonRatio	L2608839
WC-SCPD46-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0018	µg/kg	J	IonRatio	L2608839
WC-SCPD46-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00046	µg/kg	J	IonRatio	L2608839
WC-SCPD46-1.0-2.0	SW8270DSIM	Pyrene	170	µg/kg	J+	CCV>UCL	K2107395
WC-SCPD45-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.00367	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0000422	ug/kg	UJ	LB<RL|Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0000627	ug/kg	UJ	LB<RL|Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDD	0.000197	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	1,2,3,4,7,8-HxCDF	0.0000638	ug/kg	UJ	LB<RL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDD	0.0000658	ug/kg	UJ	LB<RL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	1,2,3,6,7,8-HxCDF	0.0000689	ug/kg	UJ	LB<RL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDD	0.0000669	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	1,2,3,7,8,9-HxCDF	0.000106	ug/kg	UJ	Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	1,2,3,7,8-PeCDD	0.000133	ug/kg	UJ	Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	1,2,3,7,8-PeCDF	0.000191	ug/kg	J-	IonRatio|Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	2,3,4,6,7,8-HxCDF	0.0000628	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	2,3,4,7,8-PeCDF	0.0000976	ug/kg	UJ	Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	2,3,7,8-TCDD	0.000495	ug/kg	UJ	Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	2,3,7,8-TCDF	0.000176	ug/kg	UJ	Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	OCDD	0.0582	ug/kg	J-	Sur<LCL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	OCDF	0.00404	ug/kg	J-	IonRatio|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	Total HpCDD	0.00367	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	Total HpCDF	0.00172	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	Total HxCDD	0.0000686	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	Total HxCDF	0.0000726	ug/kg	UJ	LB<RL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	Total PeCDD	0.00023	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	Total PeCDF	0.000103	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	Total TCDD	0.000495	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1613B	Total TCDF	0.000176	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1699M	2,4'-DDD	0.58	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1699M	2,4'-DDE	0.72	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1699M	2,4'-DDT	0.86	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1699M	4,4'-DDD	0.32	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1699M	4,4'-DDE	0.64	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	E1699M	4,4'-DDT	0.43	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8082A	Aroclor 1016	0.93	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8082A	Aroclor 1221	0.93	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8082A	Aroclor 1232	0.93	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8082A	Aroclor 1242	0.93	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8082A	Aroclor 1248	0.93	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8082A	Aroclor 1254	0.93	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8082A	Aroclor 1260	0.93	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	2-Methylnaphthalene	0.63	ug/kg	UJ	LB<RL|HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Acenaphthene	3.5	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Acenaphthylene	0.48	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Anthracene	5.8	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Benzo(a)anthracene	3.1	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Benzo(a)pyrene	0.65	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Benzo(b)fluoranthene	2.2	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Benzo(g,h,i)perylene	0.68	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Benzo(k)fluoranthene	0.65	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Chrysene	3.2	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Dibenzo(a,h)anthracene	0.4	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Dibenzofuran	1.4	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Fluoranthene	10	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Fluorene	4.9	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.62	ug/kg	UJ	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Naphthalene	0.93	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Phenanthrene	28	ug/kg	J-	HT>UCL	K2208213
WC-SCPD45-5.0-6.0	SW8270DSIM	Pyrene	11	ug/kg	J-	HT>UCL	K2208213
WC-SCPD46-12.0-13.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.135	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-12.0-13.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0367	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-12.0-13.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00252	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD46-12.0-13.0	E1613B	1,2,3,4,7,8-HxCDD	0.000859	µg/kg	J	IonRatio	K2203194
WC-SCPD46-12.0-13.0	E1613B	1,2,3,4,7,8-HxCDF	0.00772	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-12.0-13.0	E1613B	1,2,3,6,7,8-HxCDD	0.0048	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-12.0-13.0	E1613B	1,2,3,6,7,8-HxCDF	0.00318	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD46-12.0-13.0	E1613B	1,2,3,7,8,9-HxCDF	0.00141	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD46-12.0-13.0	E1613B	1,2,3,7,8-PeCDD	0.000865	µg/kg	J	IonRatio	K2203194
WC-SCPD46-12.0-13.0	E1613B	2,3,4,6,7,8-HxCDF	0.00228	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-12.0-13.0	E1613B	2,3,7,8-TCDD	0.000413	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD46-12.0-13.0	E1613B	2,3,7,8-TCDF	0.00246	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD46-12.0-13.0	E1613B	OCDD	1.88	µg/kg	J-	Sur<LCL	K2203194

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD46-12.0-13.0	SW8082A	Aroclor 1242	80	µg/kg	J	CF>RPD	K2203194
WC-SCPD46-12.0-13.0	SW8082A	Aroclor 1254	69	µg/kg	J	CF>RPD	K2203194
WC-SCPD46-12.0-13.0	SW8082A	Aroclor 1260	65	µg/kg	J	CF>RPD	K2203194
WC-SCPD46-13.0-14.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.108	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-13.0-14.0	E1613B	1,2,3,4,7,8-HxCDD	0.0258	µg/kg	J	IonRatio	K2203194
WC-SCPD46-13.0-14.0	E1613B	1,2,3,4,7,8-HxCDF	0.0876	µg/kg	J	Coelute	K2203194
WC-SCPD46-13.0-14.0	E1613B	1,2,3,6,7,8-HxCDD	0.00928	µg/kg	J	IonRatio	K2203194
WC-SCPD46-13.0-14.0	E1613B	1,2,3,7,8,9-HxCDD	0.0255	µg/kg	J	IonRatio	K2203194
WC-SCPD46-13.0-14.0	E1613B	2,3,7,8-TCDF	0.00355	µg/kg	J	IonRatio	K2203194
WC-SCPD46-13.0-14.0	E1613B	OCDD	2.06	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-13.0-14.0	SW8082A	Aroclor 1254	23	µg/kg	J	CF>RPD	K2203194
WC-SCPD46-13.0-14.0	SW8082A	Aroclor 1260	37	µg/kg	J	CF>RPD	K2203194
WC-SCPD46-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.001	µg/kg	J	IonRatio	L2608839
WC-SCPD46-2.0-3.0	E1613B	2,3,7,8-TCDD	0.00038	µg/kg	J-	IonRatio|Sur<LCL	L2608839
WC-SCPD46-2.0-3.0	E1613B	2,3,7,8-TCDF	0.0148	µg/kg	J-	Sur<LCL	L2608839
WC-SCPD46-2.0-3.0	SW8082A	Aroclor 1254	16	µg/kg	J	CF>RPD	K2107395
WC-SCPD46-2.0-3.0	SW8270DSIM	Pyrene	220	µg/kg	J+	CCV>UCL	K2107395
WC-SCPD46-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.0011	µg/kg	J	IonRatio	L2608839
WC-SCPD46-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.0044	µg/kg	J	Coelute	L2608839
WC-SCPD46-3.0-4.0	SW8270DSIM	Pyrene	390	µg/kg	J+	CCV>UCL	K2107395
WC-SCPD46-4.0-5.0	E1613B	2,3,7,8-TCDD	0.00045	µg/kg	J	IonRatio	L2608839
WC-SCPD46-4.0-5.0	SW8270DSIM	Pyrene	240	µg/kg	J+	CCV>UCL	K2107395
WC-SCPD46-5.0-6.0	E1613B	2,3,7,8-TCDD	0.00099	µg/kg	J	IonRatio	L2658841
WC-SCPD46-5.0-6.0	SW8082A	Aroclor 1242	13	µg/kg	J	CF>RPD	K2111955
WC-SCPD46-5.0-6.0	SW8270DSIM	Anthracene	29	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD46-6.0-7.0	E1613B	2,3,4,6,7,8-HxCDF	0.0069	µg/kg	J	Coelute	L2658841
WC-SCPD46-6.0-7.0	E1613B	2,3,7,8-TCDD	0.001	µg/kg	J	IonRatio	L2658841
WC-SCPD46-6.0-7.0	SW8082A	Aroclor 1242	9.6	µg/kg	J	CF>RPD	K2111955
WC-SCPD46-6.0-7.0	SW8082A	Aroclor 1254	22	µg/kg	J	CF>RPD	K2111955
WC-SCPD46-6.0-7.0	SW8270DSIM	Anthracene	18	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD46-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0285	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00433	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-8.0-9.0	E1613B	1,2,3,4,7,8-HxCDD	0.000211	µg/kg	J	IonRatio	K2203194
WC-SCPD46-8.0-9.0	E1613B	1,2,3,4,7,8-HxCDF	0.000797	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-8.0-9.0	E1613B	1,2,3,6,7,8-HxCDD	0.00121	µg/kg	J	IonRatio	K2203194
WC-SCPD46-8.0-9.0	E1613B	1,2,3,6,7,8-HxCDF	0.000277	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SCPD46-8.0-9.0	E1613B	1,2,3,7,8-PeCDD	0.000259	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-8.0-9.0	E1613B	1,2,3,7,8-PeCDF	0.000591	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-8.0-9.0	E1613B	2,3,4,6,7,8-HxCDF	0.00029	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-8.0-9.0	E1613B	2,3,4,7,8-PeCDF	0.000187	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD46-8.0-9.0	E1613B	2,3,7,8-TCDD	0.000704	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD46-8.0-9.0	E1613B	2,3,7,8-TCDF	0.000552	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD46-8.0-9.0	E1613B	OCDD	0.329	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD46-8.0-9.0	SW8082A	Aroclor 1242	68	µg/kg	J	CF>RPD	K2203194
WC-SCPD46-8.0-9.0	SW8082A	Aroclor 1260	48	µg/kg	J	CF>RPD	K2203194
WC-SCPD46-9.0-10.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0172	µg/kg	J	Coelute	K2203194
WC-SCPD46-9.0-10.0	E1613B	1,2,3,4,7,8-HxCDD	0.00031	µg/kg	J	IonRatio	K2203194
WC-SCPD46-9.0-10.0	E1613B	1,2,3,7,8,9-HxCDD	0.000839	µg/kg	J	IonRatio	K2203194
WC-SCPD46-9.0-10.0	SW8082A	Aroclor 1242	370	µg/kg	J	CF>RPD	K2203194
WC-SCPD46-9.0-10.0	SW8082A	Aroclor 1254	220	µg/kg	J	CF>RPD	K2203194
WC-SCPD46-9.0-10.0	SW8082A	Aroclor 1260	58	µg/kg	J	CF>RPD	K2203194
WC-SCPD46-9.0-10.0	SW8270DSIM	Fluoranthene	530	µg/kg	J	MSRPD	K2203194
WC-SCPD46-9.0-10.0	SW8270DSIM	Phenanthrene	930	µg/kg	J-	MSD<LCL|MSRPD	K2203194
WC-SCPD46-9.0-10.0	SW8270DSIM	Pyrene	700	µg/kg	J-	MSD<LCL|MSRPD	K2203194
WC-SCPD47-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.0393	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00728	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.000441	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDF	0.00251	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.000969	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDD	0.00126	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.00047	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.000245	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	1,2,3,7,8-PeCDF	0.0013	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.000634	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	2,3,4,7,8-PeCDF	0.00105	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00009	µg/kg	J	IonRatio	L2611545
WC-SCPD47-1.0-2.0	E1613B	2,3,7,8-TCDF	0.00103	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	OCDD	0.344	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	OCDF	0.019	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	Total HpCDD	0.0975	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	Total HpCDF	0.0203	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	Total HxCDD	0.0159	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	Total HxCDF	0.0153	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	Total PeCDD	0.00199	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	Total TCDD	0.000541	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	E1613B	Total TCDF	0.00445	µg/kg	J	LabDupRPD	L2611545
WC-SCPD47-1.0-2.0	SW8270DSIM	Pyrene	200	µg/kg	J+	CCV>UCL	K2107598
WC-SCPD47-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0029	µg/kg	J	IonRatio	L2611545
WC-SCPD47-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.00014	µg/kg	J	IonRatio	L2611545
WC-SCPD47-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.00061	µg/kg	J	IonRatio	L2611545
WC-SCPD47-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.0004	µg/kg	J	IonRatio	L2611545
WC-SCPD47-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.000087	µg/kg	U	LB<RL	L2611545

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD47-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.00013	µg/kg	J	IonRatio	L2611545
WC-SCPD47-2.0-3.0	SW8270DSIM	Pyrene	93	µg/kg	J+	CCV>UCL	K2107598
WC-SCPD47-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000044	µg/kg	J	IonRatio	L2611545
WC-SCPD47-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDF	0.00011	µg/kg	J	IonRatio	L2611545
WC-SCPD47-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.000026	µg/kg	U	LB<RL	L2611545
WC-SCPD47-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.000032	µg/kg	U	LB<RL	L2611545
WC-SCPD47-3.0-4.0	E1613B	Total PeCDF	0.000032	µg/kg	U	LB<RL	L2611545
WC-SCPD47-3.0-4.0	SW8270DSIM	2-Methylnaphthalene	0.53	µg/kg	U	LB<RL	K2107598
WC-SCPD47-3.0-4.0	SW8270DSIM	Naphthalene	0.67	µg/kg	U	LB<RL	K2107598
WC-SCPD47-3.0-4.0	SW8270DSIM	Phenanthrene	0.84	µg/kg	U	LB<RL	K2107598
WC-SCPD47-3.0-4.0	SW8270DSIM	Pyrene	7.7	µg/kg	J+	CCV>UCL	K2107598
WC-SCPD47-4.0-5.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00019	µg/kg	J	IonRatio	L2611545
WC-SCPD47-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDD	0.000035	µg/kg	J	IonRatio	L2611545
WC-SCPD47-4.0-5.0	E1613B	1,2,3,4,7,8-HxCDF	0.00007	µg/kg	J	IonRatio	L2611545
WC-SCPD47-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDD	0.00012	µg/kg	J	IonRatio	L2611545
WC-SCPD47-4.0-5.0	E1613B	1,2,3,6,7,8-HxCDF	0.000018	µg/kg	J	IonRatio	L2611545
WC-SCPD47-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.00024	µg/kg	J	IonRatio	L2611545
WC-SCPD47-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDF	0.000021	µg/kg	U	LB<RL	L2611545
WC-SCPD47-4.0-5.0	E1613B	1,2,3,7,8-PeCDD	0.000041	µg/kg	J	IonRatio	L2611545
WC-SCPD47-4.0-5.0	E1613B	1,2,3,7,8-PeCDF	0.000017	µg/kg	U	LB<RL	L2611545
WC-SCPD47-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.000021	µg/kg	J	IonRatio	L2611545
WC-SCPD47-4.0-5.0	E1613B	2,3,4,7,8-PeCDF	0.000019	µg/kg	J	IonRatio	L2611545
WC-SCPD47-4.0-5.0	E1613B	OCDF	0.000039	µg/kg	U	LB<RL	L2611545
WC-SCPD47-4.0-5.0	E1613B	Total PeCDF	0.000017	µg/kg	U	LB<RL	L2611545
WC-SCPD47-4.0-5.0	SW8270DSIM	2-Methylnaphthalene	0.48	µg/kg	U	LB<RL	K2107598
WC-SCPD47-4.0-5.0	SW8270DSIM	Benzo(a)anthracene	0.3	µg/kg	U	LB<RL	K2107598
WC-SCPD47-4.0-5.0	SW8270DSIM	Naphthalene	0.61	µg/kg	U	LB<RL	K2107598
WC-SCPD47-4.0-5.0	SW8270DSIM	Pyrene	4.9	µg/kg	J+	CCV>UCL	K2107598
WC-SCPD48-1.0-2.0	E1613B	OCDD	5.57	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD48-1.0-2.0	E1699M	2,4'-DDD	2.3	µg/kg	J-	Sur<LCL	K2107158
WC-SCPD48-1.0-2.0	E1699M	2,4'-DDE	1.2	µg/kg	J-	Sur<LCL	K2107158
WC-SCPD48-1.0-2.0	E1699M	2,4'-DDT	0.62	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD48-1.0-2.0	E1699M	4,4'-DDD	8.4	µg/kg	J-	Sur<LCL	K2107158
WC-SCPD48-1.0-2.0	E1699M	4,4'-DDE	8.2	µg/kg	J-	Sur<LCL	K2107158
WC-SCPD48-1.0-2.0	E1699M	4,4'-DDT	0.31	µg/kg	UJ	Sur<LCL	K2107158
WC-SCPD48-1.0-2.0	SW8082A	Aroclor 1248	530	µg/kg	J+	Sur>UCL	K2107158
WC-SCPD48-1.0-2.0	SW8082A	Aroclor 1254	210	µg/kg	J+	Sur>UCL	K2107158
WC-SCPD48-1.0-2.0	SW8082A	Aroclor 1260	82	µg/kg	J+	Sur>UCL	K2107158
WC-SCPD48-1.0-2.0	SW8270DSIM	Pyrene	300	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD48-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.547	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.199	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0279	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.139	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.0395	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.0162	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.00348	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1613B	1,2,3,7,8-PeCDF	0.0687	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.0338	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1613B	2,3,7,8-TCDF	0.0244	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1613B	OCDD	5.78	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD48-2.0-3.0	E1613B	OCDF	0.511	µg/kg	J	MSRPD	L2606306
WC-SCPD48-2.0-3.0	E1699M	2,4'-DDE	1.5	µg/kg	J-	MS<LCL	K2107158
WC-SCPD48-2.0-3.0	E1699M	4,4'-DDD	19	µg/kg	J+	MS>UCL|MSRPD	K2107158
WC-SCPD48-2.0-3.0	SW8082A	Aroclor 1260	60	µg/kg	J+	MS>UCL	K2107158
WC-SCPD48-2.0-3.0	SW8270DSIM	Acenaphthene	89	µg/kg	J	MSRPD	K2107158
WC-SCPD48-2.0-3.0	SW8270DSIM	Benzo(a)pyrene	79	µg/kg	J	MSRPD	K2107158
WC-SCPD48-2.0-3.0	SW8270DSIM	Benzo(b)fluoranthene	100	µg/kg	J	MSRPD	K2107158
WC-SCPD48-2.0-3.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	58	µg/kg	J	MSRPD	K2107158
WC-SCPD48-2.0-3.0	SW8270DSIM	Pyrene	440	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD48-2.0-3.0	SW9060	Total Organic Carbon	1.71	µg/kg	J+	MS>UCL|MSRPD	K2107158
WC-SCPD48-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDD	0.254	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0947	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0258	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD48-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDD	0.012	µg/kg	J	FD>RPD|IonRatio	L2606306
WC-SCPD48-3.0-4.0	E1613B	1,2,3,6,7,8-HxCDF	0.016	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00918	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDF	0.00675	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.0246	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.0212	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.0195	µg/kg	J-	Sur<LCL	L2606306
WC-SCPD48-3.0-4.0	E1613B	2,3,7,8-TCDF	0.0164	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	OCDD	2.41	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	OCDF	0.24	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	Total HpCDD	0.541	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	Total HpCDF	0.318	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	Total HxCDD	0.0989	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	Total HxCDF	0.324	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	E1613B	Total PeCDD	0.018	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0	SW8270DSIM	Pyrene	740	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD48-3.0-4.0	SW9060	Total Organic Carbon	0.84	µg/kg	J	FD>RPD	K2107158
WC-SCPD48-3.0-4.0FD	E1613B	1,2,3,4,6,7,8-HpCDD	0.591	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	1,2,3,4,6,7,8-HpCDF	0.221	µg/kg	J	FD>RPD	L2606306

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD48-3.0-4.0FD	E1613B	1,2,3,6,7,8-HxCDD	0.0204	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	1,2,3,6,7,8-HxCDF	0.0236	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	1,2,3,7,8,9-HxCDD	0.0151	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	1,2,3,7,8,9-HxCDF	0.0104	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	1,2,3,7,8-PeCDF	0.0371	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	2,3,4,6,7,8-HxCDF	0.00672	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	2,3,7,8-TCDF	0.0201	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	OCDD	5.48	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	OCDF	0.657	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	Total HpCDD	1.22	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	Total HpCDF	0.757	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	Total HxCDD	0.187	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	Total HxCDF	0.411	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	E1613B	Total PeCDD	0.0273	µg/kg	J	FD>RPD	L2606306
WC-SCPD48-3.0-4.0FD	SW8082A	Aroclor 1254	130	µg/kg	J	CF>RPD	K2107158
WC-SCPD48-3.0-4.0FD	SW8270DSIM	Pyrene	790	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD48-3.0-4.0FD	SW9060	Total Organic Carbon	1.76	µg/kg	J	FD>RPD	K2107158
WC-SCPD48-4.0-5.0	SW8270DSIM	Pyrene	890	µg/kg	J+	CCV>UCL	K2107158
WC-SCPD48-5.0-6.0	SW8082A	Aroclor 1254	42	µg/kg	J	CF>RPD	K2111955
WC-SCPD48-5.0-6.0	SW8270DSIM	Anthracene	92	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD48-6.0-7.0	SW8082A	Aroclor 1254	40	µg/kg	J	CF>RPD	K2111955
WC-SCPD48-6.0-7.0	SW8270DSIM	Anthracene	73	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD48-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0601	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD48-7.0-8.0	E1613B	OCDD	2.71	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD48-7.0-8.0	E1699M	2,4'-DDD	7.2	µg/kg	J+	LCS>UCL	K2200746
WC-SCPD48-7.0-8.0	SW8082A	Aroclor 1016	0.71	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD48-7.0-8.0	SW8082A	Aroclor 1221	0.71	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD48-7.0-8.0	SW8082A	Aroclor 1232	0.71	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD48-7.0-8.0	SW8082A	Aroclor 1242	20	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD48-7.0-8.0	SW8082A	Aroclor 1248	0.71	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD48-7.0-8.0	SW8082A	Aroclor 1254	15	µg/kg	J-	Sur<LCL|CF>RPD	K2200746
WC-SCPD48-7.0-8.0	SW8082A	Aroclor 1260	14	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD48-7.0-8.0	SW8082A	Aroclor 1262	0.71	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD48-7.0-8.0	SW8082A	Aroclor 1268	0.71	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD48-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0126	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD48-8.0-9.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.000922	µg/kg	J	IonRatio	K2200746
WC-SCPD48-8.0-9.0	E1613B	1,2,3,4,7,8-HxCDD	0.000375	µg/kg	J	IonRatio	K2200746
WC-SCPD48-8.0-9.0	E1613B	1,2,3,4,7,8-HxCDF	0.0017	µg/kg	J	IonRatio	K2200746
WC-SCPD48-8.0-9.0	E1613B	1,2,3,7,8,9-HxCDF	0.000292	µg/kg	J	IonRatio	K2200746
WC-SCPD48-8.0-9.0	E1613B	1,2,3,7,8-PeCDD	0.000176	µg/kg	J	IonRatio	K2200746
WC-SCPD48-8.0-9.0	E1613B	2,3,7,8-TCDF	0.000717	µg/kg	J	IonRatio	K2200746
WC-SCPD48-8.0-9.0	E1613B	OCDD	0.388	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD48-8.0-9.0	E1699M	2,4'-DDD	2.4	µg/kg	J+	LCS>UCL	K2200746
WC-SCPD48-8.0-9.0	SW8270DSIM	Naphthalene	0.7	µg/kg	U	LB<RL	K2200746
WC-SCPD48-9.0-9.5	E1613B	1,2,3,4,6,7,8-HpCDF	0.000164	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD48-9.0-9.5	E1613B	1,2,3,4,7,8-HxCDD	0.0000762	µg/kg	J	IonRatio	K2200746
WC-SCPD48-9.0-9.5	E1613B	1,2,3,7,8,9-HxCDD	0.000197	µg/kg	J	IonRatio	K2200746
WC-SCPD48-9.0-9.5	E1613B	OCDD	0.0221	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD48-9.0-9.5	SW8270DSIM	2-Methylnaphthalene	0.49	µg/kg	U	LB<RL	K2200746
WC-SCPD48-9.0-9.5	SW8270DSIM	Benzo(a)anthracene	0.31	µg/kg	U	LB<RL	K2200746
WC-SCPD48-9.0-9.5	SW8270DSIM	Naphthalene	0.62	µg/kg	U	LB<RL	K2200746
WC-SCPD50-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDD	0.0021	µg/kg	J	IonRatio	L2608839
WC-SCPD50-1.0-2.0	E1613B	1,2,3,6,7,8-HxCDF	0.0041	µg/kg	J	IonRatio	L2608839
WC-SCPD50-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00059	µg/kg	J	IonRatio	L2608839
WC-SCPD50-1.0-2.0	E1613B	2,3,4,6,7,8-HxCDF	0.0039	µg/kg	J	IonRatio	L2608839
WC-SCPD50-1.0-2.0	E1613B	2,3,7,8-TCDD	0.00018	µg/kg	J	IonRatio	L2608839
WC-SCPD50-1.0-2.0	E1699M	2,4'-DDD	71	µg/kg	J-	IS>UCL	K2107395
WC-SCPD50-1.0-2.0	E1699M	2,4'-DDE	4	µg/kg	J-	MS<LCL|MSD<LCL|IS>UCL	K2107395
WC-SCPD50-1.0-2.0	E1699M	2,4'-DDT	0.59	µg/kg	UJ	IS>UCL	K2107395
WC-SCPD50-1.0-2.0	E1699M	4,4'-DDD	150	µg/kg	J-	IS>UCL	K2107395
WC-SCPD50-1.0-2.0	E1699M	4,4'-DDE	20	µg/kg	J-	MS<LCL|MSD<LCL|IS>UCL	K2107395
WC-SCPD50-1.0-2.0	E1699M	4,4'-DDT	0.3	µg/kg	UJ	IS>UCL	K2107395
WC-SCPD50-1.0-2.0	SW8082A	Aroclor 1254	12	µg/kg	J	CF>RPD	K2107395
WC-SCPD50-1.0-2.0	SW8270DSIM	Pyrene	280	µg/kg	J+	CCV>UCL	K2107395
WC-SCPD50-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00043	µg/kg	J	IonRatio	L2608839
WC-SCPD50-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDF	0.00065	µg/kg	J	IonRatio	L2608839
WC-SCPD50-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.00041	µg/kg	J	IonRatio	L2608839
WC-SCPD50-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.0003	µg/kg	J	IonRatio	L2608839
WC-SCPD50-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.00025	µg/kg	J	IonRatio	L2608839
WC-SCPD50-2.0-3.0	E1613B	1,2,3,7,8-PeCDD	0.0001	µg/kg	J	IonRatio	L2608839
WC-SCPD50-2.0-3.0	E1613B	2,3,7,8-TCDF	0.00026	µg/kg	J	IonRatio	L2608839
WC-SCPD50-2.0-3.0	SW8082A	Aroclor 1254	1.7	µg/kg	J	CF>RPD	K2107395
WC-SCPD50-2.0-3.0	SW8270DSIM	Pyrene	290	µg/kg	J+	CCV>UCL	K2107395
WC-SCPD50-3.0-4.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.00072	µg/kg	J	IonRatio	L2608839
WC-SCPD50-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.000081	µg/kg	J	IonRatio	L2608839
WC-SCPD50-3.0-4.0	E1613B	1,2,3,7,8,9-HxCDD	0.00027	µg/kg	J	IonRatio	L2608839
WC-SCPD50-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.000103	µg/kg	J+	Sur>UCL	L2608839
WC-SCPD50-3.0-4.0	E1613B	1,2,3,7,8-PeCDF	0.00023	µg/kg	J+	Sur>UCL|IonRatio	L2608839
WC-SCPD50-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.00007	µg/kg	J	IonRatio	L2608839
WC-SCPD50-3.0-4.0	E1613B	2,3,4,7,8-PeCDF	0.000221	µg/kg	J+	Sur>UCL	L2608839
WC-SCPD50-3.0-4.0	SW8270DSIM	Naphthalene	0.68	µg/kg	U	LB<RL	K2107395
WC-SCPD50-3.0-4.0	SW8270DSIM	Pyrene	21	µg/kg	J+	CCV>UCL	K2107395

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD50-4.0-5.0	E1613B	1,2,3,7,8,9-HxCDD	0.0003	µg/kg	J	IonRatio	L2608839
WC-SCPD50-4.0-5.0	E1613B	OCDF	0.00032	µg/kg	J	IonRatio	L2608839
WC-SCPD50-4.0-5.0	SW8270DSIM	Pyrene	7.9	µg/kg	J+	CCV>UCL	K2107395
WC-SCPD52-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0014	µg/kg	J	IonRatio	L2611560
WC-SCPD52-1.0-2.0	E1613B	1,2,3,7,8,9-HxCDF	0.0013	µg/kg	J	IonRatio	L2611560
WC-SCPD52-1.0-2.0	E1613B	2,3,7,8-TCDF	0.0041	µg/kg	J	IonRatio	L2611560
WC-SCPD52-1.0-2.0	SW8082A	Aroclor 1242	11	µg/kg	J	CF>RPD	K2107489
WC-SCPD52-1.0-2.0	SW8270DSIM	Pyrene	200	µg/kg	J+	CCV>UCL	K2107489
WC-SCPD52-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDD	0.0065	µg/kg	J	IonRatio	L2611560
WC-SCPD52-2.0-3.0	E1613B	1,2,3,6,7,8-HxCDF	0.0025	µg/kg	J	IonRatio	L2611560
WC-SCPD52-2.0-3.0	E1613B	2,3,4,7,8-PeCDF	0.0023	µg/kg	J	IonRatio	L2611560
WC-SCPD52-2.0-3.0	E1613B	2,3,7,8-TCDF	0.002	µg/kg	J	IonRatio	L2611560
WC-SCPD52-2.0-3.0	SW8270DSIM	Pyrene	280	µg/kg	J+	CCV>UCL	K2107489
WC-SCPD52-3.0-4.0	E1613B	1,2,3,4,7,8-HxCDD	0.0016	µg/kg	J	IonRatio	L2611560
WC-SCPD52-3.0-4.0	E1613B	1,2,3,7,8-PeCDD	0.00091	µg/kg	J	IonRatio	L2611560
WC-SCPD52-3.0-4.0	E1613B	2,3,7,8-TCDF	0.0165	µg/kg	J-	MS<LCL	L2611560
WC-SCPD52-3.0-4.0	E1613B	OCDD	1.44	µg/kg	J-	MS<LCL|MSD<LCL	L2611560
WC-SCPD52-3.0-4.0	E1613B	OCDF	0.125	µg/kg	J-	MS<LCL	L2611560
WC-SCPD52-3.0-4.0	SW8270DSIM	Benzo(a)anthracene	220	µg/kg	J-	MSD<LCL	K2107489
WC-SCPD52-3.0-4.0	SW8270DSIM	Benzo(a)pyrene	180	µg/kg	J-	MSD<LCL	K2107489
WC-SCPD52-3.0-4.0	SW8270DSIM	Benzo(b)fluoranthene	260	µg/kg	J-	MS<LCL|MSD<LCL	K2107489
WC-SCPD52-3.0-4.0	SW8270DSIM	Chrysene	340	µg/kg	J-	MS<LCL|MSD<LCL	K2107489
WC-SCPD52-3.0-4.0	SW8270DSIM	Fluoranthene	410	µg/kg	J-	MS<LCL|MSD<LCL	K2107489
WC-SCPD52-3.0-4.0	SW8270DSIM	Phenanthrene	930	µg/kg	J-	MS<LCL|MSD<LCL	K2107489
WC-SCPD52-3.0-4.0	SW8270DSIM	Pyrene	410	µg/kg	J-	CCV>UCL|MSD<LCL	K2107489
WC-SCPD52-4.0-5.0	E1613B	2,3,4,6,7,8-HxCDF	0.0047	µg/kg	J	Coelute	L2611560
WC-SCPD52-4.0-5.0	SW8270DSIM	Naphthalene	0.62	µg/kg	U	LB<RL	K2107489
WC-SCPD52-4.0-5.0	SW8270DSIM	Pyrene	13	µg/kg	J+	CCV>UCL	K2107489
WC-SCPD52-5.0-6.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.0041	µg/kg	J	IonRatio	L2658841
WC-SCPD52-5.0-6.0	E1613B	2,3,4,6,7,8-HxCDF	0.0075	µg/kg	J	Coelute	L2658841
WC-SCPD52-5.0-6.0	SW8270DSIM	Anthracene	39	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD52-5.0-6.0	SW8270DSIM	Naphthalene	0.66	µg/kg	U	LB<RL	K2111955
WC-SCPD52-6.0-7.0	E1613B	1,2,3,7,8,9-HxCDF	0.00055	µg/kg	J	IonRatio	L2658841
WC-SCPD52-6.0-7.0	E1613B	1,2,3,7,8-PeCDD	0.0003	µg/kg	J	IonRatio	L2658841
WC-SCPD52-6.0-7.0	SW8082A	Aroclor 1254	44	µg/kg	J	CF>RPD	K2111955
WC-SCPD52-6.0-7.0	SW8270DSIM	Anthracene	42	µg/kg	J-	CCV<LCL	K2111955
WC-SCPD52-6.0-7.0	SW8270DSIM	Naphthalene	0.66	µg/kg	U	LB<RL	K2111955
WC-SCPD52-7.0-8.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0263	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	E1613B	1,2,3,7,8-PeCDD	0.000613	µg/kg	J	IonRatio	K2200746
WC-SCPD52-7.0-8.0	E1613B	2,3,4,7,8-PeCDF	0.00246	µg/kg	J	IonRatio	K2200746
WC-SCPD52-7.0-8.0	E1613B	2,3,7,8-TCDD	0.000441	µg/kg	J	IonRatio	K2200746
WC-SCPD52-7.0-8.0	SW8082A	Aroclor 1254	59	µg/kg	J	CF>RPD	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	2-Methylnaphthalene	5.3	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Acenaphthene	0.41	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Acenaphthylene	0.38	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Anthracene	32	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Benzo(a)anthracene	22	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Benzo(a)pyrene	13	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Benzo(b)fluoranthene	14	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Benzo(g,h,i)perylene	11	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Benzo(k)fluoranthene	4	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Chrysene	37	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Dibenzo(a,h)anthracene	0.31	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Dibenzofuran	0.81	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Fluoranthene	45	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Fluorene	0.77	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	7.3	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Naphthalene	0.64	µg/kg	UJ	LB<RL|Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Phenanthrene	210	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-7.0-8.0	SW8270DSIM	Pyrene	74	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.026	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	E1613B	1,2,3,6,7,8-HxCDF	0.00181	µg/kg	J	IonRatio	K2200746
WC-SCPD52-8.0-9.0	E1613B	2,3,4,6,7,8-HxCDF	0.00132	µg/kg	J	IonRatio	K2200746
WC-SCPD52-8.0-9.0	E1613B	OCDD	1.35	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	E1699M	2,4'-DDD	2.5	µg/kg	J+	LCS>UCL	K2200746
WC-SCPD52-8.0-9.0	SW8082A	Aroclor 1254	32	µg/kg	J	CF>RPD	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	2-Methylnaphthalene	3.2	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Acenaphthene	0.4	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Acenaphthylene	0.37	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Anthracene	21	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Benzo(a)anthracene	13	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Benzo(a)pyrene	7.1	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Benzo(b)fluoranthene	7.3	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Benzo(g,h,i)perylene	6.5	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Benzo(k)fluoranthene	2.1	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Chrysene	21	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Dibenzo(a,h)anthracene	1.6	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Dibenzofuran	0.79	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Fluoranthene	22	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Fluorene	0.75	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Indeno(1,2,3-cd)pyrene	3.7	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Naphthalene	0.62	µg/kg	UJ	LB<RL|Sur<LCL	K2200746

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SCPD52-8.0-9.0	SW8270DSIM	Phenanthrene	140	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-8.0-9.0	SW8270DSIM	Pyrene	37	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-9.0-9.2	E1613B	1,2,3,4,6,7,8-HpCDD	0.0113	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-9.0-9.2	E1613B	1,2,3,4,6,7,8-HpCDF	0.00224	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-9.0-9.2	E1613B	1,2,3,4,7,8,9-HpCDF	0.000222	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD52-9.0-9.2	E1613B	1,2,3,4,7,8-HxCDD	0.000183	µg/kg	J	IonRatio	K2200746
WC-SCPD52-9.0-9.2	E1613B	1,2,3,6,7,8-HxCDF	0.000255	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD52-9.0-9.2	E1613B	1,2,3,7,8-PeCDD	0.000161	µg/kg	J	IonRatio	K2200746
WC-SCPD52-9.0-9.2	E1613B	1,2,3,7,8-PeCDF	0.0002	µg/kg	J	IonRatio	K2200746
WC-SCPD52-9.0-9.2	E1613B	2,3,4,6,7,8-HxCDF	0.00028	µg/kg	J	IonRatio	K2200746
WC-SCPD52-9.0-9.2	E1613B	2,3,4,7,8-PeCDF	0.000281	µg/kg	J-	IonRatio|Sur<LCL	K2200746
WC-SCPD52-9.0-9.2	E1613B	2,3,7,8-TCDF	0.000201	µg/kg	UJ	Sur<LCL	K2200746
WC-SCPD52-9.0-9.2	E1613B	OCDD	0.108	µg/kg	J-	Sur<LCL	K2200746
WC-SCPD52-9.0-9.2	E1613B	OCDF	0.00555	µg/kg	J	IonRatio	K2200746
WC-SCPD52-9.0-9.2	SW8082A	Aroclor 1254	3.1	µg/kg	J	CF>RPD	K2200746
WC-SCPD52-9.0-9.2	SW8270DSIM	2-Methylnaphthalene	0.49	µg/kg	U	LB<RL	K2200746
WC-SCPD52-9.0-9.2	SW8270DSIM	Benzo(a)anthracene	0.31	µg/kg	U	LB<RL	K2200746
WC-SCPD52-9.0-9.2	SW8270DSIM	Naphthalene	0.62	µg/kg	U	LB<RL	K2200746
WC-SCPD53A-1.0-2.0	E1613B	1,2,3,4,7,8-HxCDD	0.0013	µg/kg	J	IonRatio	L2611545
WC-SCPD53A-1.0-2.0	E1613B	1,2,3,7,8-PeCDD	0.00083	µg/kg	J	IonRatio	L2611545
WC-SCPD53A-1.0-2.0	SW8270DSIM	Pyrene	380	µg/kg	J+	CCV>UCL	K2107598
WC-SCPD53A-2.0-3.0	E1613B	1,2,3,4,7,8,9-HpCDF	0.00043	µg/kg	J	IonRatio	L2611545
WC-SCPD53A-2.0-3.0	E1613B	1,2,3,4,7,8-HxCDD	0.0002	µg/kg	J	IonRatio	L2611545
WC-SCPD53A-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDD	0.00066	µg/kg	J	IonRatio	L2611545
WC-SCPD53A-2.0-3.0	E1613B	1,2,3,7,8,9-HxCDF	0.00047	µg/kg	J	IonRatio	L2611545
WC-SCPD53A-2.0-3.0	E1613B	2,3,4,6,7,8-HxCDF	0.00047	µg/kg	J	IonRatio	L2611545
WC-SCPD53A-2.0-3.0	SW8082A	Aroclor 1254	13	µg/kg	J	CF>RPD	K2107598
WC-SCPD53A-2.0-3.0	SW8270DSIM	Pyrene	280	µg/kg	J+	CCV>UCL	K2107598
WC-SCPD53A-3.0-4.0	E1613B	2,3,4,6,7,8-HxCDF	0.0037	µg/kg	J	Coelute	L2611545
WC-SCPD53A-3.0-4.0	SW8270DSIM	Pyrene	260	µg/kg	J+	CCV>UCL	K2107598
WC-SCPD53A-4.0-5.0	E1613B	2,3,7,8-TCDD	0.00059	µg/kg	J	IonRatio	L2611545
WC-SCPD53A-4.0-5.0	E1699M	2,4'-DDD	0.76	µg/kg	J-	IS>UCL	K2107598
WC-SCPD53A-4.0-5.0	E1699M	2,4'-DDE	0.61	µg/kg	UJ	IS>UCL	K2107598
WC-SCPD53A-4.0-5.0	E1699M	2,4'-DDT	0.72	µg/kg	UJ	IS>UCL	K2107598
WC-SCPD53A-4.0-5.0	E1699M	4,4'-DDD	3.4	µg/kg	J-	IS>UCL	K2107598
WC-SCPD53A-4.0-5.0	E1699M	4,4'-DDE	4.2	µg/kg	J-	IS>UCL	K2107598
WC-SCPD53A-4.0-5.0	E1699M	4,4'-DDT	1.3	µg/kg	J-	IS>UCL	K2107598
WC-SCPD53A-4.0-5.0	SW8270DSIM	Pyrene	520	µg/kg	J+	CCV>UCL	K2107598
WC-SCPD53A-8.0-9.0	E1613B	1,2,3,4,6,7,8-HpCDF	0.0212	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD53A-8.0-9.0	E1613B	1,2,3,7,8,9-HxCDF	0.000912	µg/kg	J	IonRatio	K2203194
WC-SCPD53A-8.0-9.0	E1613B	2,3,4,6,7,8-HxCDF	0.00156	µg/kg	J	IonRatio	K2203194
WC-SCPD53A-8.0-9.0	E1613B	OCDD	1.38	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD53A-8.0-9.0	SW8082A	Aroclor 1242	14	µg/kg	J	CF>RPD	K2203194
WC-SCPD53A-8.0-9.0	SW8082A	Aroclor 1254	26	µg/kg	J	CF>RPD	K2203194
WC-SCPD53A-8.0-9.0	SW8082A	Aroclor 1260	18	µg/kg	J	CF>RPD	K2203194
WC-SCPD53A-9.0-9.4	E1613B	1,2,3,4,6,7,8-HpCDF	0.0515	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD53A-9.0-9.4	E1613B	1,2,3,4,7,8-HxCDD	0.00117	µg/kg	J	IonRatio	K2203194
WC-SCPD53A-9.0-9.4	E1613B	1,2,3,7,8,9-HxCDF	0.00098	µg/kg	J	IonRatio	K2203194
WC-SCPD53A-9.0-9.4	E1613B	OCDD	2.61	µg/kg	J-	Sur<LCL	K2203194
WC-SCPD53A-9.0-9.4	E1699M	2,4'-DDD	0.49	µg/kg	J+	Sur>UCL	K2203194
WC-SCPD53A-9.0-9.4	E1699M	4,4'-DDD	2.9	µg/kg	J+	Sur>UCL	K2203194
WC-SCPD53A-9.0-9.4	E1699M	4,4'-DDE	5	µg/kg	J+	Sur>UCL	K2203194
WC-SCPD53A-9.0-9.4	SW8082A	Aroclor 1016	0.77	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD53A-9.0-9.4	SW8082A	Aroclor 1221	0.77	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD53A-9.0-9.4	SW8082A	Aroclor 1232	0.77	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD53A-9.0-9.4	SW8082A	Aroclor 1242	14	µg/kg	J-	Sur<LCL|CF>RPD	K2203194
WC-SCPD53A-9.0-9.4	SW8082A	Aroclor 1248	0.77	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD53A-9.0-9.4	SW8082A	Aroclor 1254	25	µg/kg	J-	Sur<LCL|CF>RPD	K2203194
WC-SCPD53A-9.0-9.4	SW8082A	Aroclor 1260	18	µg/kg	J-	Sur<LCL|CF>RPD	K2203194
WC-SCPD53A-9.0-9.4	SW8082A	Aroclor 1262	0.77	µg/kg	UJ	Sur<LCL	K2203194
WC-SCPD53A-9.0-9.4	SW8082A	Aroclor 1268	0.77	µg/kg	UJ	Sur<LCL	K2203194
WC-SGPD01	E1613B	1,2,3,4,6,7,8-HpCDD	0.234	µg/kg	J-	Sur<LCL	K2203181
WC-SGPD01	E1613B	1,2,3,4,6,7,8-HpCDF	0.00688	µg/kg	J-	Sur<LCL	K2203181
WC-SGPD01	E1613B	1,2,3,4,7,8,9-HpCDF	0.00109	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SGPD01	E1613B	1,2,3,4,7,8-HxCDD	0.00155	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SGPD01	E1613B	1,2,3,4,7,8-HxCDF	0.000872	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SGPD01	E1613B	1,2,3,6,7,8-HxCDD	0.00561	µg/kg	J-	Sur<LCL	K2203181
WC-SGPD01	E1613B	1,2,3,6,7,8-HxCDF	0.000318	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD01	E1613B	1,2,3,7,8,9-HxCDF	0.000339	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD01	E1613B	1,2,3,7,8-PeCDD	0.000751	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SGPD01	E1613B	2,3,4,6,7,8-HxCDF	0.000348	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SGPD01	E1613B	2,3,7,8-TCDD	0.00098	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD01	E1613B	2,3,7,8-TCDF	0.000722	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD01	E1613B	OCDD	1.21	µg/kg	J-	Sur<LCL	K2203181
WC-SGPD01	E1699M	2,4'-DDD	0.42	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD01	E1699M	2,4'-DDE	0.52	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD01	E1699M	2,4'-DDT	0.62	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD01	E1699M	4,4'-DDD	0.89	µg/kg	J-	IS>UCL	K2203181
WC-SGPD01	E1699M	4,4'-DDE	2.1	µg/kg	J-	IS>UCL	K2203181
WC-SGPD01	E1699M	4,4'-DDT	0.31	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD01	SW8082A	Aroclor 1260	6.4	µg/kg	J	CF>RPD	K2203181
WC-SGPD02	E1613B	1,2,3,4,6,7,8-HpCDD	0.131	µg/kg	J	LabDupRPD	L2611632

Table H-4. Overall Validation Findings
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Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD02	E1613B	1,2,3,4,6,7,8-HpCDF	0.0112	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	1,2,3,4,7,8,9-HpCDF	0.00099	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	1,2,3,4,7,8-HxCDD	0.000799	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	1,2,3,4,7,8-HxCDF	0.00144	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	1,2,3,6,7,8-HxCDD	0.00328	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	1,2,3,6,7,8-HxCDF	0.000766	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	1,2,3,7,8,9-HxCDD	0.00167	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	1,2,3,7,8,9-HxCDF	0.000478	µg/kg	U	LB<RL	L2611632
WC-SGPD02	E1613B	1,2,3,7,8-PeCDD	0.000444	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	1,2,3,7,8-PeCDF	0.000596	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	2,3,4,6,7,8-HxCDF	0.000892	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	2,3,4,7,8-PeCDF	0.000881	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	2,3,7,8-TCDD	0.000135	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	2,3,7,8-TCDF	0.000584	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	OCDD	1.13	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	OCDF	0.0382	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	Total HpCDD	0.4	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	Total HpCDF	0.0312	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	Total HxCDD	0.0436	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	Total HxCDF	0.0209	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	Total PeCDD	0.00364	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	Total PeCDF	0.00883	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1613B	Total TCDD	0.000354	µg/kg	J	LabDupRPD	L2611632
WC-SGPD02	E1699M	2,4'-DDD	0.52	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD02	E1699M	2,4'-DDE	0.66	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD02	E1699M	2,4'-DDT	0.78	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD02	E1699M	4,4'-DDD	0.79	µg/kg	J-	IS>UCL	K2107700
WC-SGPD02	E1699M	4,4'-DDE	1.2	µg/kg	J-	IS>UCL	K2107700
WC-SGPD02	E1699M	4,4'-DDT	0.39	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD02	SW8082A	Aroclor 1242	4.6	µg/kg	J	CF>RPD	K2107700
WC-SGPD02	SW8270DSIM	Pyrene	280	µg/kg	J+	CCV>UCL	K2107700
WC-SGPD03	E1699M	2,4'-DDD	0.7	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD03	E1699M	2,4'-DDE	0.87	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD03	E1699M	2,4'-DDT	1.1	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD03	E1699M	4,4'-DDD	1.1	µg/kg	J-	IS>UCL	K2107700
WC-SGPD03	E1699M	4,4'-DDE	1.5	µg/kg	J-	IS>UCL	K2107700
WC-SGPD03	E1699M	4,4'-DDT	0.52	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD03	SW8082A	Aroclor 1242	6.3	µg/kg	J	CF>RPD	K2107700
WC-SGPD03	SW8082A	Aroclor 1260	5.5	µg/kg	J	CF>RPD	K2107700
WC-SGPD03	SW8270DSIM	Pyrene	140	µg/kg	J+	CCV>UCL	K2107700
WC-SGPD04	E1613B	OCDD	0.658	µg/kg	J-	Sur<LCL	L2611632
WC-SGPD04	E1699M	2,4'-DDD	0.68	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD04	E1699M	2,4'-DDE	0.85	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD04	E1699M	2,4'-DDT	1.1	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD04	E1699M	4,4'-DDD	0.73	µg/kg	J-	IS>UCL	K2107700
WC-SGPD04	E1699M	4,4'-DDE	1.4	µg/kg	J-	IS>UCL	K2107700
WC-SGPD04	E1699M	4,4'-DDT	0.51	µg/kg	UJ	IS>UCL	K2107700
WC-SGPD04	SW8270DSIM	Pyrene	200	µg/kg	J+	CCV>UCL	K2107700
WC-SGPD05	E1613B	1,2,3,4,6,7,8-HpCDD	0.00735	µg/kg	J-	Sur<LCL	K2203181
WC-SGPD05	E1613B	1,2,3,4,6,7,8-HpCDF	0.00485	µg/kg	J-	Sur<LCL	K2203181
WC-SGPD05	E1613B	1,2,3,4,7,8,9-HpCDF	0.00137	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SGPD05	E1613B	1,2,3,4,7,8-HxCDD	0.000341	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD05	E1613B	1,2,3,4,7,8-HxCDF	0.00161	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SGPD05	E1613B	1,2,3,6,7,8-HxCDD	0.000349	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD05	E1613B	1,2,3,6,7,8-HxCDF	0.000362	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SGPD05	E1613B	1,2,3,7,8,9-HxCDF	0.00025	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD05	E1613B	1,2,3,7,8-PeCDD	0.000143	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SGPD05	E1613B	1,2,3,7,8-PeCDF	0.000826	µg/kg	J-	Sur<LCL|IonRatio	K2203181
WC-SGPD05	E1613B	2,3,4,6,7,8-HxCDF	0.000218	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD05	E1613B	2,3,4,7,8-PeCDF	0.000455	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD05	E1613B	2,3,7,8-TCDD	0.00067	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD05	E1613B	2,3,7,8-TCDF	0.000451	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD05	E1613B	OCDD	0.0502	µg/kg	J-	Sur<LCL	K2203181
WC-SGPD05	SW8082A	Aroclor 1254	3.8	µg/kg	J	CF>RPD	K2203181
WC-SGPD05	SW8082A	Aroclor 1260	3.4	µg/kg	J	CF>RPD	K2203181
WC-SGPD06A	E1613B	1,2,3,6,7,8-HxCDF	0.000281	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD06A	E1613B	2,3,7,8-TCDD	0.000927	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD06A	E1613B	2,3,7,8-TCDF	0.000628	µg/kg	UJ	Sur<LCL	K2203181
WC-SGPD06A	E1699M	2,4'-DDD	0.37	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD06A	E1699M	2,4'-DDE	0.46	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD06A	E1699M	2,4'-DDT	0.55	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD06A	E1699M	4,4'-DDD	0.46	µg/kg	J-	IS>UCL	K2203181
WC-SGPD06A	E1699M	4,4'-DDE	0.88	µg/kg	J-	IS>UCL	K2203181
WC-SGPD06A	E1699M	4,4'-DDT	0.28	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD06A	SW8082A	Aroclor 1242	15	µg/kg	J	CF>RPD	K2203181
WC-SGPD06A	SW8082A	Aroclor 1254	15	µg/kg	J	CF>RPD	K2203181
WC-SGPD06A	SW8082A	Aroclor 1260	13	µg/kg	J	CF>RPD	K2203181
WC-SGPD07A	E1613B	1,2,3,4,7,8,9-HpCDF	0.000181	µg/kg	U	LB<RL	K2204707
WC-SGPD07A	E1613B	1,2,3,4,7,8-HxCDD	0.0003	µg/kg	J	IonRatio	K2204707
WC-SGPD07A	E1613B	1,2,3,4,7,8-HxCDF	0.00107	µg/kg	J	IonRatio	K2204707
WC-SGPD07A	E1613B	1,2,3,6,7,8-HxCDD	0.00111	µg/kg	J	IonRatio	K2204707
WC-SGPD07A	E1613B	2,3,4,6,7,8-HxCDF	0.00018	µg/kg	U	LB<RL	K2204707

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD07A	E1613B	Total PeCDD	0.000149	µg/kg	U	LB<RL	K2204707
WC-SGPD07A	SW8270DSIM	Fluoranthene	350	µg/kg	J+	MSD>UCL|MSRPD	K2204707
WC-SGPD07A	SW8270DSIM	Phenanthrene	520	µg/kg	J+	MSD>UCL|MSRPD	K2204707
WC-SGPD07A	SW8270DSIM	Pyrene	260	µg/kg	J+	MSD>UCL|MSRPD	K2204707
WC-SGPD08	E1613B	1,2,3,4,7,8,9-HpCDF	0.000075	µg/kg	U	LB<RL	K2204707
WC-SGPD08	E1613B	1,2,3,4,7,8-HxCDD	0.000115	µg/kg	J	IonRatio	K2204707
WC-SGPD08	E1613B	1,2,3,6,7,8-HxCDD	0.000746	µg/kg	J	IonRatio	K2204707
WC-SGPD08	E1613B	1,2,3,6,7,8-HxCDF	0.000238	µg/kg	J	IonRatio	K2204707
WC-SGPD08	E1613B	1,2,3,7,8,9-HxCDD	0.0004	µg/kg	J	IonRatio	K2204707
WC-SGPD08	E1613B	1,2,3,7,8,9-HxCDF	0.0000908	µg/kg	U	LB<RL	K2204707
WC-SGPD08	E1613B	1,2,3,7,8-PeCDF	0.000233	µg/kg	J	IonRatio	K2204707
WC-SGPD08	E1613B	2,3,4,6,7,8-HxCDF	0.0000756	µg/kg	U	LB<RL	K2204707
WC-SGPD08	E1613B	2,3,4,7,8-PeCDF	0.000201	µg/kg	J	IonRatio	K2204707
WC-SGPD08	E1613B	2,3,7,8-TCDD	0.000723	µg/kg	UJ	Sur<LCL	K2204707
WC-SGPD08	E1613B	2,3,7,8-TCDF	0.000418	µg/kg	UJ	Sur<LCL	K2204707
WC-SGPD09	E1613B	1,2,3,4,6,7,8-HpCDF	0.00701	µg/kg	J	Coelute	K2203181
WC-SGPD09	E1613B	1,2,3,4,7,8,9-HpCDF	0.000358	µg/kg	J	IonRatio	K2203181
WC-SGPD09	E1613B	1,2,3,4,7,8-HxCDD	0.000344	µg/kg	J	IonRatio	K2203181
WC-SGPD09	E1613B	1,2,3,4,7,8-HxCDF	0.00114	µg/kg	J	IonRatio	K2203181
WC-SGPD09	E1613B	1,2,3,6,7,8-HxCDD	0.000712	µg/kg	J	IonRatio	K2203181
WC-SGPD09	E1613B	1,2,3,6,7,8-HxCDF	0.000382	µg/kg	J	IonRatio	K2203181
WC-SGPD09	E1613B	1,2,3,7,8,9-HxCDF	0.000149	µg/kg	U	LB<RL	K2203181
WC-SGPD09	E1613B	1,2,3,7,8-PeCDD	0.000447	µg/kg	J	IonRatio	K2203181
WC-SGPD09	E1613B	2,3,4,7,8-PeCDF	0.000543	µg/kg	J	IonRatio	K2203181
WC-SGPD09	E1613B	2,3,7,8-TCDF	0.000549	µg/kg	J	IonRatio	K2203181
WC-SGPD09	E1699M	2,4'-DDD	0.44	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD09	E1699M	2,4'-DDE	0.56	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD09	E1699M	2,4'-DDT	0.66	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD09	E1699M	4,4'-DDD	0.61	µg/kg	J-	IS>UCL	K2203181
WC-SGPD09	E1699M	4,4'-DDE	0.56	µg/kg	J-	IS>UCL	K2203181
WC-SGPD09	E1699M	4,4'-DDT	0.33	µg/kg	UJ	IS>UCL	K2203181
WC-SGPD09	SW8082A	Aroclor 1254	12	µg/kg	J	CF>RPD	K2203181
WC-SGPD09	SW8082A	Aroclor 1260	5.7	µg/kg	J	CF>RPD	K2203181
WC-SGPD10	E1613B	1,2,3,4,6,7,8-HpCDF	0.0271	µg/kg	J	LabDupRPD	L2659646
WC-SGPD10	E1613B	1,2,3,4,7,8,9-HpCDF	0.00252	µg/kg	J	LabDupRPD	L2659646
WC-SGPD10	E1613B	1,2,3,4,7,8-HxCDF	0.0047	µg/kg	J	LabDupRPD	L2659646
WC-SGPD10	E1613B	1,2,3,7,8,9-HxCDD	0.00328	µg/kg	J+	LCS>UCL	L2659646
WC-SGPD10	E1613B	OCDF	0.0932	µg/kg	J	LabDupRPD	L2659646
WC-SGPD10	E1613B	Total HpCDF	0.0799	µg/kg	J	LabDupRPD	L2659646
WC-SGPD10	E1613B	Total PeCDF	0.0176	µg/kg	J	LabDupRPD	L2659646
WC-SGPD10	SW8270DSIM	Acenaphthene	18	µg/kg	J	MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Acenaphthylene	8.9	µg/kg	J	MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Anthracene	20	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Benzo(a)anthracene	26	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Benzo(a)pyrene	28	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Benzo(b)fluoranthene	32	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Benzo(g,h,i)perylene	17	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Benzo(k)fluoranthene	11	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Chrysene	41	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Dibenzo(a,h)anthracene	2.5	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Dibenzofuran	18	µg/kg	J	MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Fluoranthene	110	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Fluorene	30	µg/kg	J	MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Indeno(1,2,3-cd)pyrene	14	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Phenanthrene	120	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD10	SW8270DSIM	Pyrene	110	µg/kg	J-	MSD<LCL|MSRPD	K2111932
WC-SGPD11	E1613B	1,2,3,4,7,8,9-HpCDF	0.0013	µg/kg	J	IonRatio	L2659646
WC-SGPD11	E1613B	1,2,3,7,8,9-HxCDD	0.0028	µg/kg	J+	IonRatio|LCS>UCL	L2659646
WC-SGPD11	E1613B	1,2,3,7,8,9-HxCDF	0.00052	µg/kg	J	IonRatio	L2659646
WC-SGPD11	E1613B	1,2,3,7,8-PeCDD	0.00068	µg/kg	J	IonRatio	L2659646
WC-SGPD11	E1613B	2,3,7,8-TCDD	0.00022	µg/kg	J	IonRatio	L2659646
WC-SGPD11	E1613B	OCDD	1.11	µg/kg	J-	Sur<LCL	L2659646
WC-SGPD12	E1613B	1,2,3,4,7,8,9-HpCDF	0.0092	µg/kg	J	IonRatio	L2611545
WC-SGPD12	E1613B	1,2,3,7,8,9-HxCDD	0.0028	µg/kg	J	IonRatio	L2611545
WC-SGPD12	E1613B	1,2,3,7,8-PeCDD	0.0015	µg/kg	J	IonRatio	L2611545
WC-SGPD12	E1613B	2,3,4,6,7,8-HxCDF	0.012	µg/kg	J	Coelute	L2611545
WC-SGPD12	E1668	Monochlorobiphenyl	0.046	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-1	0.00993	µg/kg	J-	LabDupRPD|Sur<LCL	L2675125
WC-SGPD12	E1668	PCB-103	0.0616	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-111	0.0055	µg/kg	J	IonRatio|LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-12/13	0.0149	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-120	0.0288	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-121	0.00093	µg/kg	J	IonRatio|LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-123	0.0269	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-133	0.116	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-141	0.883	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-146	1.05	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-148	0.0231	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-150	0.0135	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-154	0.0944	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-155	0.00123	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-159	0.0655	µg/kg	J	LabDupRPD	L2675125

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD12	E1668	PCB-174	2.39	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-175	0.0925	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-178	0.569	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-179	1.08	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-181	0.0237	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-184	0.0046	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-186	0.00057	µg/kg	J	IonRatio|LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-187	3.21	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-188	0.003	µg/kg	J	IonRatio|LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-189	0.0552	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-19	0.00805	µg/kg	J-	Sur<LCL|LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-191	0.0735	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-197	0.0331	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-2	0.0214	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-200	0.158	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-201	0.151	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-204	0.00081	µg/kg	J	IonRatio|LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-205	0.0414	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-25	0.0181	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-26/29	0.0317	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-27	0.0036	µg/kg	J	IonRatio|LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-3	0.0147	µg/kg	J-	LabDupRPD|Sur<LCL	L2675125
WC-SGPD12	E1668	PCB-32	0.0178	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-34	0.0022	µg/kg	J	IonRatio|LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-39	0.0035	µg/kg	J	IonRatio	L2675125
WC-SGPD12	E1668	PCB-4	0.0122	µg/kg	J-	LabDupRPD|Sur<LCL	L2675125
WC-SGPD12	E1668	PCB-44/47/65	0.729	µg/kg	J+	Inter	L2675125
WC-SGPD12	E1668	PCB-45/51	0.0332	µg/kg	J+	Inter	L2675125
WC-SGPD12	E1668	PCB-46	0.0125	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-54	0.00139	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD12	E1668	PCB-6	0.00952	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-68	0.0517	µg/kg	J+	Inter|LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-7	0.00203	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-72	0.0567	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	PCB-9	0.00241	µg/kg	J	LabDupRPD	L2675125
WC-SGPD12	E1668	Tetrachlorobiphenyl	6.59	µg/kg	J+	Inter	L2675125
WC-SGPD12	SW8270DSIM	Benzo(k)fluoranthene	88	µg/kg	J+	Sur>UCL	K2107598
WC-SGPD12	SW8270DSIM	Dibenzo(a,h)anthracene	69	µg/kg	J+	Sur>UCL	K2107598
WC-SGPD12	SW8270DSIM	Pyrene	2200	µg/kg	J+	CCV>UCL	K2107598
WC-SGPD12A	E1613B	1,2,3,4,6,7,8-HpCDD	0.12	µg/kg	J-	LabDupRPD|Sur<LCL	L2692261
WC-SGPD12A	E1613B	1,2,3,4,6,7,8-HpCDF	0.0211	µg/kg	J-	LabDupRPD|Sur<LCL	L2692261
WC-SGPD12A	E1613B	1,2,3,4,7,8,9-HpCDF	0.0026	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SGPD12A	E1613B	1,2,3,4,7,8-HxCDF	0.00803	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1613B	1,2,3,6,7,8-HxCDD	0.0037	µg/kg	J	IonRatio	L2692261
WC-SGPD12A	E1613B	1,2,3,6,7,8-HxCDF	0.0021	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SGPD12A	E1613B	1,2,3,7,8,9-HxCDF	0.0013	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SGPD12A	E1613B	1,2,3,7,8-PeCDD	0.00103	µg/kg	J-	Sur<LCL	L2692261
WC-SGPD12A	E1613B	1,2,3,7,8-PeCDF	0.0056	µg/kg	J-	Sur<LCL|IonRatio	L2692261
WC-SGPD12A	E1613B	2,3,4,6,7,8-HxCDF	0.0023	µg/kg	J-	LabDupRPD|Sur<LCL|Coelute	L2692261
WC-SGPD12A	E1613B	2,3,4,7,8-PeCDF	0.00403	µg/kg	J-	LabDupRPD|Sur<LCL	L2692261
WC-SGPD12A	E1613B	2,3,7,8-TCDD	0.000165	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1613B	2,3,7,8-TCDF	0.00471	µg/kg	J-	Sur<LCL	L2692261
WC-SGPD12A	E1613B	OCDD	1.06	µg/kg	J-	LabDupRPD|Sur<LCL	L2692261
WC-SGPD12A	E1613B	OCDF	0.0472	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1613B	Total HpCDD	0.304	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1613B	Total HpCDF	0.0548	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1613B	Total HxCDD	0.0344	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1613B	Total HxCDF	0.0328	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1613B	Total PeCDD	0.0058	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1613B	Total PeCDF	0.0225	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1613B	Total TCDD	0.00245	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1613B	Total TCDF	0.0116	µg/kg	J	LabDupRPD	L2692261
WC-SGPD12A	E1699M	2,4'-DDD	8.6	µg/kg	J-	MSD<LCL|LCS>UCL	K2202475
WC-SGPD12A	E1699M	4,4'-DDD	24	µg/kg	J-	MS<LCL|MSD<LCL	K2202475
WC-SGPD12A	E1699M	4,4'-DDE	4.7	µg/kg	J+	LCS>UCL	K2202475
WC-SGPD12A	SW8270DSIM	Acenaphthylene	3.4	µg/kg	J	MSRPD	K2202475
WC-SGPD12A	SW8270DSIM	Benzo(a)anthracene	18	µg/kg	J	MSRPD	K2202475
WC-SGPD12A	SW8270DSIM	Benzo(b)fluoranthene	20	µg/kg	J	MSRPD	K2202475
WC-SGPD12A	SW8270DSIM	Chrysene	29	µg/kg	J	MSRPD	K2202475
WC-SGPD12A	SW8270DSIM	Naphthalene	33	µg/kg	J	MSRPD	K2202475
WC-SGPD13	E1613B	1,2,3,7,8,9-HxCDF	0.000069	µg/kg	U	LB<RL	L2612314
WC-SGPD13	E1699M	2,4'-DDD	0.56	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD13	E1699M	2,4'-DDE	0.7	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD13	E1699M	2,4'-DDT	0.83	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD13	E1699M	4,4'-DDD	1.2	µg/kg	J-	Sur>UCL|IS>UCL	K2107846
WC-SGPD13	E1699M	4,4'-DDE	3	µg/kg	J-	Sur>UCL|IS>UCL	K2107846
WC-SGPD13	E1699M	4,4'-DDT	0.42	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD14	E1699M	2,4'-DDD	0.56	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD14	E1699M	2,4'-DDE	0.71	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD14	E1699M	2,4'-DDT	0.84	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD14	E1699M	4,4'-DDD	1.1	µg/kg	J-	IS>UCL	K2107846
WC-SGPD14	E1699M	4,4'-DDE	1.8	µg/kg	J-	IS>UCL	K2107846

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD14	E1699M	4,4'-DDT	0.42	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD14	SW8082A	Aroclor 1242	4.2	µg/kg	J	CF>RPD	K2107846
WC-SGPD15	E1613B	2,3,4,6,7,8-HxCDF	0.00193	µg/kg	J	Coelute	L2612314
WC-SGPD15	E1699M	2,4'-DDD	0.78	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD15	E1699M	2,4'-DDE	0.98	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD15	E1699M	2,4'-DDT	1.2	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD15	E1699M	4,4'-DDD	1.1	µg/kg	J-	IS>UCL	K2107846
WC-SGPD15	E1699M	4,4'-DDE	1.7	µg/kg	J-	IS>UCL	K2107846
WC-SGPD15	E1699M	4,4'-DDT	0.59	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD15	SW8082A	Aroclor 1242	3.9	µg/kg	J	CF>RPD	K2107846
WC-SGPD16	E1613B	1,2,3,4,7,8-HxCDD	0.0013	µg/kg	J	IonRatio	L2611545
WC-SGPD16	SW8270DSIM	Pyrene	890	µg/kg	J+	CCV>UCL	K2107598
WC-SGPD16A	E1613B	1,2,3,4,6,7,8-HpCDD	0.0351	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD16A	E1613B	1,2,3,4,6,7,8-HpCDF	0.0574	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD16A	E1613B	1,2,3,4,7,8,9-HpCDF	0.00127	µg/kg	UJ	IonRatio|Sur<LCL|TEMP	K2202673
WC-SGPD16A	E1613B	1,2,3,4,7,8-HxCDD	0.00017	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD16A	E1613B	1,2,3,4,7,8-HxCDF	0.00111	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD16A	E1613B	1,2,3,6,7,8-HxCDD	0.00149	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD16A	E1613B	1,2,3,6,7,8-HxCDF	0.00514	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1613B	1,2,3,7,8,9-HxCDD	0.000578	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD16A	E1613B	1,2,3,7,8,9-HxCDF	0.000605	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1613B	1,2,3,7,8-PeCDD	0.000293	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD16A	E1613B	1,2,3,7,8-PeCDF	0.000338	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD16A	E1613B	2,3,4,6,7,8-HxCDF	0.00196	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD16A	E1613B	2,3,4,7,8-PeCDF	0.00204	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1613B	2,3,7,8-TCDD	0.000403	µg/kg	UJ	TEMP	K2202673
WC-SGPD16A	E1613B	2,3,7,8-TCDF	0.000413	µg/kg	UJ	TEMP	K2202673
WC-SGPD16A	E1613B	OCDD	0.456	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD16A	E1613B	OCDF	0.0425	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1613B	Total HpCDD	0.11	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1613B	Total HpCDF	0.118	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1613B	Total HxCDD	0.0124	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1613B	Total HxCDF	0.0482	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1613B	Total PeCDD	0.000321	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1613B	Total PeCDF	0.0255	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1613B	Total TCDD	0.000403	µg/kg	UJ	TEMP	K2202673
WC-SGPD16A	E1613B	Total TCDF	0.0022	µg/kg	J-	TEMP	K2202673
WC-SGPD16A	E1699M	2,4'-DDD	0.63	µg/kg	UJ	IS>UCL	K2202673
WC-SGPD16A	E1699M	2,4'-DDE	0.79	µg/kg	UJ	IS>UCL	K2202673
WC-SGPD16A	E1699M	2,4'-DDT	0.93	µg/kg	UJ	IS>UCL	K2202673
WC-SGPD16A	E1699M	4,4'-DDD	1.2	µg/kg	J-	IS>UCL	K2202673
WC-SGPD16A	E1699M	4,4'-DDE	0.7	µg/kg	UJ	IS>UCL	K2202673
WC-SGPD16A	E1699M	4,4'-DDT	0.47	µg/kg	UJ	IS>UCL	K2202673
WC-SGPD17	D6913/D7928	Clay (<2 um)	16.6	µg/kg	J	LabDupRPD	K2108076
WC-SGPD17	E1613B	1,2,3,4,6,7,8-HpCDD	0.152	µg/kg	J	FD>RPD	L2615164
WC-SGPD17	E1613B	1,2,3,4,7,8-HxCDD	0.0011	µg/kg	J	IonRatio|FD>RPD	L2615164
WC-SGPD17	E1613B	1,2,3,6,7,8-HxCDD	0.00484	µg/kg	J	FD>RPD	L2615164
WC-SGPD17	E1613B	1,2,3,7,8,9-HxCDD	0.00276	µg/kg	J	FD>RPD	L2615164
WC-SGPD17	E1613B	1,2,3,7,8,9-HxCDF	0.000923	µg/kg	J	FD>RPD	L2615164
WC-SGPD17	E1613B	2,3,4,6,7,8-HxCDF	0.00238	µg/kg	J	FD>RPD	L2615164
WC-SGPD17	E1613B	2,3,7,8-TCDD	0.00017	µg/kg	J	IonRatio	L2615164
WC-SGPD17	E1613B	2,3,7,8-TCDF	0.0019	µg/kg	J	IonRatio|FD>RPD	L2615164
WC-SGPD17	E1613B	OCDD	1.15	µg/kg	J	FD>RPD	L2615164
WC-SGPD17	E1613B	Total HpCDD	0.408	µg/kg	J	FD>RPD	L2615164
WC-SGPD17	E1613B	Total HxCDD	0.0477	µg/kg	J	FD>RPD	L2615164
WC-SGPD17	E1613B	Total PeCDD	0.00574	µg/kg	J	FD>RPD	L2615164
WC-SGPD17	E1613B	Total TCDD	0.00515	µg/kg	J	FD>RPD	L2615164
WC-SGPD17	E1699M	4,4'-DDD	1.2	µg/kg	J	FD>RPD	K2108076
WC-SGPD17	SW8270DSIM	Acenaphthene	54	µg/kg	J	FD>RPD	K2108076
WC-SGPD17	SW8270DSIM	Benzo(k)fluoranthene	28	µg/kg	J	FD>RPD	K2108076
WC-SGPD17	SW8270DSIM	Chrysene	87	µg/kg	J	FD>RPD	K2108076
WC-SGPD17	SW8270DSIM	Dibenzofuran	42	µg/kg	J	FD>RPD	K2108076
WC-SGPD17	SW8270DSIM	Fluorene	88	µg/kg	J	FD>RPD	K2108076
WC-SGPD17	SW8270DSIM	Pyrene	430	µg/kg	J	FD>RPD	K2108076
WC-SGPD17FD	E1613B	1,2,3,4,6,7,8-HpCDD	0.219	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1613B	1,2,3,4,7,8-HxCDD	0.00141	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1613B	1,2,3,6,7,8-HxCDD	0.00638	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1613B	1,2,3,7,8,9-HxCDD	0.00391	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1613B	1,2,3,7,8,9-HxCDF	0.00016	µg/kg	UJ	LB<RL|FD>RPD	L2615164
WC-SGPD17FD	E1613B	2,3,4,6,7,8-HxCDF	0.00189	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1613B	2,3,7,8-TCDF	0.00249	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1613B	OCDD	1.47	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1613B	Total HpCDD	0.69	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1613B	Total HxCDD	0.0751	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1613B	Total PeCDD	0.0077	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1613B	Total TCDD	0.0011	µg/kg	J	FD>RPD	L2615164
WC-SGPD17FD	E1699M	4,4'-DDD	2.2	µg/kg	J	FD>RPD	K2108076
WC-SGPD17FD	SW8270DSIM	Acenaphthene	71	µg/kg	J	FD>RPD	K2108076
WC-SGPD17FD	SW8270DSIM	Benzo(k)fluoranthene	38	µg/kg	J	FD>RPD	K2108076
WC-SGPD17FD	SW8270DSIM	Chrysene	120	µg/kg	J	FD>RPD	K2108076
WC-SGPD17FD	SW8270DSIM	Dibenzofuran	56	µg/kg	J	FD>RPD	K2108076
WC-SGPD17FD	SW8270DSIM	Fluorene	110	µg/kg	J	FD>RPD	K2108076

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD17FD	SW8270DSIM	Pyrene	570	µg/kg	J	FD>RPD	K2108076
WC-SGPD18	E1613B	1,2,3,4,7,8-HxCDD	0.00089	µg/kg	J	IonRatio	L2615164
WC-SGPD18	E1613B	2,3,7,8-TCDD	0.00029	µg/kg	J	IonRatio	L2615164
WC-SGPD18	E1613B	2,3,7,8-TCDF	0.00709	µg/kg	J	MSRPD	L2615164
WC-SGPD18	E1699M	2,4'-DDD	5.7	µg/kg	J-	MS<LCL	K2108076
WC-SGPD20	E1613B	1,2,3,4,7,8-HxCDD	0.0029	µg/kg	J	IonRatio	L2611545
WC-SGPD20	E1613B	1,2,3,7,8,9-HxCDD	0.0064	µg/kg	J	IonRatio	L2611545
WC-SGPD20	E1668	Decachlorobiphenyl	2.6	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	Decachlorobiphenyl	2.6	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-1	0.0859	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-10	0.0039	µg/kg	J	IonRatio	L2675125
WC-SGPD20	E1668	PCB-105	0.927	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-111	0.0094	µg/kg	J	IonRatio	L2675125
WC-SGPD20	E1668	PCB-112	0.0045	µg/kg	J	IonRatio	L2675125
WC-SGPD20	E1668	PCB-114	0.0479	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-118	3.22	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-123	0.0287	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-126	0.0012	µg/kg	UJ	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-14	0.0015	µg/kg	J	IonRatio	L2675125
WC-SGPD20	E1668	PCB-15	0.12	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-152	0.0032	µg/kg	J	IonRatio	L2675125
WC-SGPD20	E1668	PCB-189	0.0865	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-19	0.0411	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-3	0.102	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-4	0.0753	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-44/47/65	2.12	µg/kg	J+	Inter	L2675125
WC-SGPD20	E1668	PCB-5	0.0043	µg/kg	J	IonRatio	L2675125
WC-SGPD20	E1668	PCB-54	0.00287	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-68	0.0529	µg/kg	J+	Inter	L2675125
WC-SGPD20	E1668	PCB-77	0.12	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	PCB-81	0.0028	µg/kg	J-	Sur<LCL	L2675125
WC-SGPD20	E1668	Tetrachlorobiphenyl	18.5	µg/kg	J+	Inter	L2675125
WC-SGPD20A	E1613B	1,2,3,4,6,7,8-HpCDF	0.356	µg/kg	J	FD>RPD	L2692261
WC-SGPD20A	E1613B	1,2,3,4,7,8,9-HpCDF	0.0062	µg/kg	J	IonRatio	L2692261
WC-SGPD20A	E1613B	1,2,3,6,7,8-HxCDF	0.0246	µg/kg	J	FD>RPD	L2692261
WC-SGPD20A	E1613B	2,3,4,6,7,8-HxCDF	0.0195	µg/kg	J	FD>RPD	L2692261
WC-SGPD20A	E1613B	2,3,4,7,8-PeCDF	0.0239	µg/kg	J	FD>RPD	L2692261
WC-SGPD20A	E1613B	2,3,7,8-TCDF	0.001	µg/kg	J	IonRatio	L2692261
WC-SGPD20A	E1613B	Total HpCDF	0.727	µg/kg	J	FD>RPD	L2692261
WC-SGPD20A	E1613B	Total HxCDF	0.405	µg/kg	J	FD>RPD	L2692261
WC-SGPD20A	E1613B	Total PeCDD	0.0335	µg/kg	J	FD>RPD	L2692261
WC-SGPD20A	E1613B	Total PeCDF	0.4	µg/kg	J	FD>RPD	L2692261
WC-SGPD20A	E1613B	Total TCDD	0.0146	µg/kg	J	FD>RPD	L2692261
WC-SGPD20A	E1613B	Total TCDF	0.155	µg/kg	J	FD>RPD	L2692261
WC-SGPD20A	E1699M	4,4'-DDE	2.1	µg/kg	J+	LCS>UCL	K2202475
WC-SGPD20A	SW8082A	Aroclor 1254	7.4	µg/kg	UJ	FD>RPD	K2202475
WC-SGPD20A	SW8082A	Aroclor 1260	15	µg/kg	J	FD>RPD	K2202475
WC-SGPD20A	SW8270DSIM	2-Methylnaphthalene	66	µg/kg	J	FD>RPD	K2202475
WC-SGPD20AFD	E1613B	1,2,3,4,6,7,8-HpCDF	0.253	µg/kg	J	FD>RPD	L2692261
WC-SGPD20AFD	E1613B	1,2,3,4,7,8,9-HpCDF	0.0058	µg/kg	J	IonRatio	L2692261
WC-SGPD20AFD	E1613B	1,2,3,6,7,8-HxCDF	0.0182	µg/kg	J	FD>RPD	L2692261
WC-SGPD20AFD	E1613B	1,2,3,7,8-PeCDD	0.0017	µg/kg	J	IonRatio	L2692261
WC-SGPD20AFD	E1613B	2,3,4,6,7,8-HxCDF	0.0142	µg/kg	J	FD>RPD	L2692261
WC-SGPD20AFD	E1613B	2,3,4,7,8-PeCDF	0.0165	µg/kg	J	FD>RPD	L2692261
WC-SGPD20AFD	E1613B	Total HpCDF	0.54	µg/kg	J	FD>RPD	L2692261
WC-SGPD20AFD	E1613B	Total HxCDF	0.309	µg/kg	J	FD>RPD	L2692261
WC-SGPD20AFD	E1613B	Total PeCDD	0.0266	µg/kg	J	FD>RPD	L2692261
WC-SGPD20AFD	E1613B	Total PeCDF	0.247	µg/kg	J	FD>RPD	L2692261
WC-SGPD20AFD	E1613B	Total TCDD	0.00962	µg/kg	J	FD>RPD	L2692261
WC-SGPD20AFD	E1613B	Total TCDF	0.0916	µg/kg	J	FD>RPD	L2692261
WC-SGPD20AFD	E1699M	2,4'-DDD	0.48	µg/kg	UJ	IS>UCL	K2202475
WC-SGPD20AFD	E1699M	2,4'-DDE	0.6	µg/kg	UJ	IS>UCL	K2202475
WC-SGPD20AFD	E1699M	2,4'-DDT	0.71	µg/kg	UJ	IS>UCL	K2202475
WC-SGPD20AFD	E1699M	4,4'-DDD	3.3	µg/kg	J-	IS>UCL	K2202475
WC-SGPD20AFD	E1699M	4,4'-DDE	1.8	µg/kg	J-	IS>UCL|LCS>UCL	K2202475
WC-SGPD20AFD	E1699M	4,4'-DDT	0.36	µg/kg	UJ	IS>UCL	K2202475
WC-SGPD20AFD	SW8082A	Aroclor 1254	15	µg/kg	J	FD>RPD	K2202475
WC-SGPD20AFD	SW8082A	Aroclor 1260	24	µg/kg	J	FD>RPD	K2202475
WC-SGPD20AFD	SW8270DSIM	2-Methylnaphthalene	110	µg/kg	J	FD>RPD	K2202475
WC-SGPD21	E1613B	1,2,3,4,7,8,9-HpCDF	0.0018	µg/kg	J	IonRatio	L2611619
WC-SGPD21	E1613B	2,3,4,7,8-PeCDF	0.0017	µg/kg	J	IonRatio	L2611619
WC-SGPD21	SW8270DSIM	Pyrene	210	µg/kg	J+	CCV>UCL	K2107637
WC-SGPD22	E1613B	1,2,3,7,8,9-HxCDD	0.00462	µg/kg	J+	LCS>UCL	L2659646
WC-SGPD22	E1613B	1,2,3,7,8,9-HxCDF	0.0017	µg/kg	J	IonRatio	L2659646
WC-SGPD23	E1699M	2,4'-DDD	0.6	µg/kg	J-	IS>UCL	K2107902
WC-SGPD23	E1699M	2,4'-DDE	0.69	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD23	E1699M	2,4'-DDT	0.82	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD23	E1699M	4,4'-DDD	1.9	µg/kg	J-	IS>UCL	K2107902
WC-SGPD23	E1699M	4,4'-DDE	2.7	µg/kg	J-	IS>UCL	K2107902
WC-SGPD23	E1699M	4,4'-DDT	0.41	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD24	E1613B	1,2,3,7,8,9-HxCDD	0.00246	µg/kg	J+	LCS>UCL	L2659646
WC-SGPD24	SW8082A	Aroclor 1242	2.2	µg/kg	J	CF>RPD	K2111932

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD25	E1613B	1,2,3,4,6,7,8-HpCDF	0.00615	µg/kg	J-	Sur<LCL	K2205401
WC-SGPD25	E1613B	1,2,3,4,7,8,9-HpCDF	0.00036	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SGPD25	E1613B	1,2,3,4,7,8-HxCDD	0.00034	µg/kg	U	LB<RL	K2205401
WC-SGPD25	E1613B	1,2,3,6,7,8-HxCDF	0.000246	µg/kg	UJ	LB<RL|Sur<LCL	K2205401
WC-SGPD25	E1613B	1,2,3,7,8,9-HxCDD	0.000356	µg/kg	U	LB<RL	K2205401
WC-SGPD25	E1613B	1,2,3,7,8,9-HxCDF	0.000289	µg/kg	U	LB<RL	K2205401
WC-SGPD25	E1613B	1,2,3,7,8-PeCDD	0.000358	µg/kg	J	IonRatio	K2205401
WC-SGPD25	E1613B	1,2,3,7,8-PeCDF	0.00108	µg/kg	J-	Sur<LCL|IonRatio	K2205401
WC-SGPD25	E1613B	2,3,4,6,7,8-HxCDF	0.000227	µg/kg	U	LB<RL	K2205401
WC-SGPD25	E1613B	2,3,4,7,8-PeCDF	0.000705	µg/kg	J-	Sur<LCL	K2205401
WC-SGPD25	E1613B	2,3,7,8-TCDD	0.000468	µg/kg	UJ	Sur<LCL	K2205401
WC-SGPD25	E1613B	2,3,7,8-TCDF	0.000527	µg/kg	J-	Sur<LCL	K2205401
WC-SGPD25	E1613B	OCDD	0.474	µg/kg	J-	Sur<LCL	K2205401
WC-SGPD25	SW8082A	Aroclor 1254	4.3	µg/kg	J	CF>RPD	K2205401
WC-SGPD25	SW8270DSIM	Benzo(a)pyrene	14	µg/kg	J+	CCV>UCL	K2205401
WC-SGPD25	SW8270DSIM	Dibenzo(a,h)anthracene	1.5	µg/kg	J+	CCV>UCL	K2205401
WC-SGPD25	SW8270DSIM	Indeno(1,2,3-cd)pyrene	10	µg/kg	J+	CCV>UCL	K2205401
WC-SGPD26	E1613B	1,2,3,4,7,8,9-HpCDF	0.0071	µg/kg	J	IonRatio	L2611545
WC-SGPD26	E1613B	1,2,3,6,7,8-HxCDF	0.022	µg/kg	J	IonRatio	L2611545
WC-SGPD26	E1613B	1,2,3,7,8-PeCDD	0.0019	µg/kg	J	IonRatio	L2611545
WC-SGPD26	SW8270DSIM	Pyrene	2400	µg/kg	J+	CCV>UCL	K2107598
WC-SGPD26A	E1613B	1,2,3,4,6,7,8-HpCDD	0.0687	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD26A	E1613B	1,2,3,4,6,7,8-HpCDF	0.0454	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD26A	E1613B	1,2,3,4,7,8,9-HpCDF	0.00646	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD26A	E1613B	1,2,3,4,7,8-HxCDD	0.000331	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD26A	E1613B	1,2,3,4,7,8-HxCDF	0.0316	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	1,2,3,6,7,8-HxCDD	0.00256	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	1,2,3,6,7,8-HxCDF	0.00869	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD26A	E1613B	1,2,3,7,8,9-HxCDD	0.000867	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	1,2,3,7,8,9-HxCDF	0.00483	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD26A	E1613B	1,2,3,7,8-PeCDD	0.000588	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD26A	E1613B	1,2,3,7,8-PeCDF	0.0231	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	2,3,4,6,7,8-HxCDF	0.00368	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD26A	E1613B	2,3,4,7,8-PeCDF	0.032	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	2,3,7,8-TCDD	0.000383	µg/kg	UJ	TEMP	K2202673
WC-SGPD26A	E1613B	2,3,7,8-TCDF	0.062	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD26A	E1613B	OCDD	0.988	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD26A	E1613B	OCDF	0.0871	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	Total HpCDD	0.217	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	Total HpCDF	0.114	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	Total HxCDD	0.0212	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	Total HxCDF	0.0869	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	Total PeCDD	0.00182	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	Total PeCDF	0.137	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	E1613B	Total TCDD	0.000383	µg/kg	UJ	TEMP	K2202673
WC-SGPD26A	E1613B	Total TCDF	0.202	µg/kg	J-	TEMP	K2202673
WC-SGPD26A	SW8082A	Aroclor 1254	23	µg/kg	J	CF>RPD	K2202673
WC-SGPD26A	SW8270DSIM	2-Methylnaphthalene	460	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Acenaphthene	220	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Acenaphthylene	66	µg/kg	J-	Sur<LCL|Inter	K2202673
WC-SGPD26A	SW8270DSIM	Anthracene	330	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Benzo(a)anthracene	220	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Benzo(a)pyrene	190	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Benzo(b)fluoranthene	150	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Benzo(g,h,i)perylene	140	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Benzo(k)fluoranthene	44	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Chrysene	400	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Dibenzo(a,h)anthracene	27	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Dibenzofuran	69	µg/kg	J-	Sur<LCL|Inter	K2202673
WC-SGPD26A	SW8270DSIM	Fluoranthene	510	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Fluorene	430	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Indeno(1,2,3-cd)pyrene	110	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Naphthalene	210	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Phenanthrene	1700	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD26A	SW8270DSIM	Pyrene	680	µg/kg	J-	Sur<LCL	K2202673
WC-SGPD27	E1613B	1,2,3,4,7,8,9-HpCDF	0.0018	µg/kg	J	IonRatio	L2659632
WC-SGPD27	E1613B	1,2,3,6,7,8-HxCDF	0.0021	µg/kg	J	IonRatio	L2659632
WC-SGPD27	E1613B	1,2,3,7,8,9-HxCDF	0.0012	µg/kg	J	IonRatio	L2659632
WC-SGPD27	E1613B	1,2,3,7,8-PeCDD	0.00055	µg/kg	J	IonRatio	L2659632
WC-SGPD27	E1699M	2,4'-DDD	0.81	µg/kg	J-	Sur<LCL	K2111941
WC-SGPD27	E1699M	2,4'-DDE	0.87	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD27	E1699M	2,4'-DDT	1.1	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD27	E1699M	4,4'-DDD	1.9	µg/kg	J-	Sur<LCL	K2111941
WC-SGPD27	E1699M	4,4'-DDE	1.1	µg/kg	J-	Sur<LCL	K2111941
WC-SGPD27	E1699M	4,4'-DDT	0.52	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD28	E1613B	1,2,3,7,8,9-HxCDF	0.0011	µg/kg	J	IonRatio	L2615160
WC-SGPD28	E1613B	1,2,3,7,8-PeCDF	0.0051	µg/kg	J	IonRatio	L2615160
WC-SGPD29	E1613B	2,3,7,8-TCDD	0.00021	µg/kg	J	IonRatio	L2659632
WC-SGPD29	E1699M	2,4'-DDD	0.78	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD29	E1699M	2,4'-DDE	0.98	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD29	E1699M	2,4'-DDT	1.2	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD29	E1699M	4,4'-DDD	0.7	µg/kg	J-	Sur<LCL	K2111941

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD29	E1699M	4,4'-DDE	0.87	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD29	E1699M	4,4'-DDT	0.58	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD29	SW8270DSIM	Acenaphthylene	0.69	µg/kg	U	LB<RL	K2111941
WC-SGPD30	E1613B	1,2,3,4,7,8-HxCDF	0.0042	µg/kg	J	IonRatio	L2659632
WC-SGPD30	E1613B	1,2,3,7,8-PeCDD	0.0011	µg/kg	J	IonRatio	L2659632
WC-SGPD30	E1699M	2,4'-DDD	0.61	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD30	E1699M	2,4'-DDE	0.77	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD30	E1699M	2,4'-DDT	0.91	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD30	E1699M	4,4'-DDD	2	µg/kg	J-	Sur<LCL	K2111941
WC-SGPD30	E1699M	4,4'-DDE	5.5	µg/kg	J-	Sur<LCL	K2111941
WC-SGPD30	E1699M	4,4'-DDT	0.46	µg/kg	UJ	Sur<LCL	K2111941
WC-SGPD31	E1613B	1,2,3,4,7,8,9-HpCDF	0.0021	µg/kg	J	IonRatio	L2611619
WC-SGPD31	E1613B	1,2,3,4,7,8-HxCDD	0.0012	µg/kg	J	IonRatio	L2611619
WC-SGPD31	E1613B	1,2,3,7,8,9-HxCDF	0.00089	µg/kg	J	IonRatio	L2611619
WC-SGPD31	SW8270DSIM	Pyrene	180	µg/kg	J+	CCV>UCL	K2107637
WC-SGPD32	E1613B	1,2,3,4,6,7,8-HpCDD	0.148	µg/kg	J+	MSD>UCL|MSRPD	L2612314
WC-SGPD32	E1613B	1,2,3,4,6,7,8-HpCDF	0.0398	µg/kg	J+	MSD>UCL|MSRPD	L2612314
WC-SGPD32	E1613B	2,3,7,8-TCDF	0.00471	µg/kg	J-	MS<LCL	L2612314
WC-SGPD32	E1613B	OCDD	2.09	µg/kg	J-	MS<LCL|MSD>UCL|MSRPD	L2612314
WC-SGPD32	E1613B	OCDF	0.118	µg/kg	J-	MS<LCL|MSD>UCL|MSRPD	L2612314
WC-SGPD32	E1699M	2,4'-DDD	1.6	µg/kg	J-	IS>UCL	K2107846
WC-SGPD32	E1699M	2,4'-DDE	0.72	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD32	E1699M	2,4'-DDT	0.85	µg/kg	UJ	IS>UCL	K2107846
WC-SGPD32	E1699M	4,4'-DDD	4.8	µg/kg	J-	IS>UCL	K2107846
WC-SGPD32	E1699M	4,4'-DDE	3.3	µg/kg	J-	IS>UCL	K2107846
WC-SGPD32	E1699M	4,4'-DDT	0.66	µg/kg	J-	IS>UCL	K2107846
WC-SGPD32	SW8082A	Aroclor 1242	14	µg/kg	J+	Sur>UCL	K2107846
WC-SGPD32	SW8082A	Aroclor 1254	24	µg/kg	J+	Sur>UCL	K2107846
WC-SGPD32	SW8082A	Aroclor 1260	15	µg/kg	J+	Sur>UCL	K2107846
WC-SGPD33	E1613B	1,2,3,4,7,8,9-HpCDF	0.00036	µg/kg	J	IonRatio	L2659655
WC-SGPD33	E1613B	1,2,3,7,8-PeCDD	0.00016	µg/kg	J	IonRatio	L2659655
WC-SGPD33	E1613B	2,3,7,8-TCDF	0.00054	µg/kg	J	IonRatio	L2659655
WC-SGPD33	SW8270DSIM	Naphthalene	0.76	µg/kg	U	LB<RL	K2111942
WC-SGPD34	SW8082A	Aroclor 1254	35	µg/kg	J	CF>RPD	K2107598
WC-SGPD34	SW8270DSIM	Pyrene	1300	µg/kg	J+	CCV>UCL	K2107598
WC-SGPD34A	E1613B	1,2,3,4,6,7,8-HpCDD	0.373	µg/kg	J-	MS>UCL|TEMP	K2202673
WC-SGPD34A	E1613B	1,2,3,4,6,7,8-HpCDF	0.0486	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	1,2,3,4,7,8,9-HpCDF	0.0027	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD34A	E1613B	1,2,3,4,7,8-HxCDD	0.00143	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD34A	E1613B	1,2,3,4,7,8-HxCDF	0.00625	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	1,2,3,6,7,8-HxCDD	0.00753	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	1,2,3,6,7,8-HxCDF	0.00321	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	1,2,3,7,8,9-HxCDD	0.00298	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD34A	E1613B	1,2,3,7,8,9-HxCDF	0.00148	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD34A	E1613B	1,2,3,7,8-PeCDD	0.000776	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD34A	E1613B	1,2,3,7,8-PeCDF	0.0023	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	2,3,4,6,7,8-HxCDF	0.00257	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD34A	E1613B	2,3,4,7,8-PeCDF	0.00235	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD34A	E1613B	2,3,7,8-TCDD	0.000835	µg/kg	UJ	TEMP	K2202673
WC-SGPD34A	E1613B	2,3,7,8-TCDF	0.00249	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	OCDD	3.22	µg/kg	J-	Sur<LCL|TEMP|MSD<LCL	K2202673
WC-SGPD34A	E1613B	OCDF	0.116	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	Total HpCDD	0.99	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	Total HpCDF	0.164	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	Total HxCDD	0.0751	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	Total HxCDF	0.0719	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	Total PeCDD	0.00514	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	Total PeCDF	0.0248	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	E1613B	Total TCDD	0.000835	µg/kg	UJ	TEMP	K2202673
WC-SGPD34A	E1613B	Total TCDF	0.00441	µg/kg	J-	TEMP	K2202673
WC-SGPD34A	SW8082A	Aroclor 1242	22	µg/kg	J+	Sur>UCL|CF>RPD	K2202673
WC-SGPD34A	SW8082A	Aroclor 1254	22	µg/kg	J+	Sur>UCL	K2202673
WC-SGPD34A	SW8082A	Aroclor 1260	12	µg/kg	J+	Sur>UCL	K2202673
WC-SGPD34A	SW8270DSIM	Fluoranthene	1700	µg/kg	J-	MS<LCL|MSD<LCL	K2202673
WC-SGPD34A	SW8270DSIM	Phenanthrene	1700	µg/kg	J-	MS<LCL|MSD<LCL	K2202673
WC-SGPD34A	SW8270DSIM	Pyrene	1100	µg/kg	J-	MS<LCL|MSD<LCL	K2202673
WC-SGPD35	E1613B	1,2,3,4,6,7,8-HpCDD	0.241	µg/kg	J-	Sur<LCL	L2611619
WC-SGPD35	E1613B	1,2,3,6,7,8-HxCDD	0.0067	µg/kg	J	IonRatio	L2611619
WC-SGPD35	E1613B	1,2,3,6,7,8-HxCDF	0.0034	µg/kg	J	IonRatio	L2611619
WC-SGPD35	E1613B	1,2,3,7,8,9-HxCDD	0.0037	µg/kg	J	IonRatio	L2611619
WC-SGPD35	E1613B	2,3,4,7,8-PeCDF	0.0022	µg/kg	J	IonRatio	L2611619
WC-SGPD35	E1613B	OCDD	1.8	µg/kg	J-	Sur<LCL	L2611619
WC-SGPD35	E1613B	OCDF	0.091	µg/kg	J	IonRatio	L2611619
WC-SGPD36	E1613B	1,2,3,4,6,7,8-HpCDD	0.0624	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	1,2,3,4,6,7,8-HpCDF	0.0195	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	1,2,3,4,7,8,9-HpCDF	0.00209	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	1,2,3,4,7,8-HxCDD	0.000549	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	1,2,3,4,7,8-HxCDF	0.00723	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	1,2,3,6,7,8-HxCDD	0.00238	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	1,2,3,6,7,8-HxCDF	0.00261	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	1,2,3,7,8,9-HxCDD	0.00144	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	1,2,3,7,8,9-HxCDF	0.000869	µg/kg	J	FD>RPD	L2612316

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD36	E1613B	1,2,3,7,8-PeCDD	0.000544	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	1,2,3,7,8-PeCDF	0.0029	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	2,3,4,6,7,8-HxCDF	0.00148	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	2,3,4,7,8-PeCDF	0.00198	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	2,3,7,8-TCDD	0.000216	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	2,3,7,8-TCDF	0.00184	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	OCDD	0.739	µg/kg	J-	FD>RPD|Sur<LCL	L2612316
WC-SGPD36	E1613B	OCDF	0.0449	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	Total HpCDD	0.165	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	Total HpCDF	0.0471	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	Total HxCDD	0.0189	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	Total HxCDF	0.0341	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	Total PeCDD	0.00254	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	Total PeCDF	0.0194	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	Total TCDD	0.00137	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1613B	Total TCDF	0.00879	µg/kg	J	FD>RPD	L2612316
WC-SGPD36	E1699M	2,4'-DDD	0.65	µg/kg	J-	IS>UCL	K2107752
WC-SGPD36	E1699M	2,4'-DDE	0.57	µg/kg	UJ	IS>UCL	K2107752
WC-SGPD36	E1699M	2,4'-DDT	0.68	µg/kg	UJ	IS>UCL	K2107752
WC-SGPD36	E1699M	4,4'-DDD	1.6	µg/kg	J-	IS>UCL	K2107752
WC-SGPD36	E1699M	4,4'-DDE	1.6	µg/kg	J-	IS>UCL	K2107752
WC-SGPD36	E1699M	4,4'-DDT	0.34	µg/kg	UJ	IS>UCL	K2107752
WC-SGPD36	SW8082A	Aroclor 1242	140	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8082A	Aroclor 1254	110	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8082A	Aroclor 1260	38	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	2-Methylnaphthalene	15	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Acenaphthene	11	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Acenaphthylene	7.9	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Anthracene	20	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Benzo(a)anthracene	38	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Benzo(b)fluoranthene	44	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Benzo(g,h,i)perylene	31	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Chrysene	57	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Dibenzofuran	6.3	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Fluoranthene	120	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Fluorene	14	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Indeno(1,2,3-cd)pyrene	24	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Naphthalene	49	µg/kg	J	FD>RPD	K2107752
WC-SGPD36	SW8270DSIM	Pyrene	140	µg/kg	J+	FD>RPD|CCV>UCL	K2107752
WC-SGPD36	SW9060	Total Organic Carbon	0.73	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	E1613B	1,2,3,4,6,7,8-HpCDD	0.114	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	1,2,3,4,6,7,8-HpCDF	0.0284	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	1,2,3,4,7,8,9-HpCDF	0.00329	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	1,2,3,4,7,8-HxCDD	0.00119	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	1,2,3,4,7,8-HxCDF	0.0143	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	1,2,3,6,7,8-HxCDD	0.00474	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	1,2,3,6,7,8-HxCDF	0.00501	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	1,2,3,7,8,9-HxCDD	0.00229	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	1,2,3,7,8,9-HxCDF	0.00186	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	1,2,3,7,8-PeCDD	0.000811	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	1,2,3,7,8-PeCDF	0.00703	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	2,3,4,6,7,8-HxCDF	0.00228	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	2,3,4,7,8-PeCDF	0.00439	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	2,3,7,8-TCDD	0.000346	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	2,3,7,8-TCDF	0.00406	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	OCDD	1.14	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	OCDF	0.0678	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	Total HpCDD	0.282	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	Total HpCDF	0.0705	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	Total HxCDD	0.0371	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	Total HxCDF	0.0622	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	Total PeCDD	0.00602	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	Total PeCDF	0.0378	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	Total TCDD	0.00226	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1613B	Total TCDF	0.021	µg/kg	J	FD>RPD	L2612316
WC-SGPD36FD	E1699M	2,4'-DDD	0.89	µg/kg	J-	IS>UCL	K2107752
WC-SGPD36FD	E1699M	2,4'-DDE	0.52	µg/kg	UJ	IS>UCL	K2107752
WC-SGPD36FD	E1699M	2,4'-DDT	0.62	µg/kg	UJ	IS>UCL	K2107752
WC-SGPD36FD	E1699M	4,4'-DDD	2.2	µg/kg	J-	IS>UCL	K2107752
WC-SGPD36FD	E1699M	4,4'-DDE	1.1	µg/kg	J-	IS>UCL	K2107752
WC-SGPD36FD	E1699M	4,4'-DDT	1.3	µg/kg	J-	IS>UCL	K2107752
WC-SGPD36FD	SW8082A	Aroclor 1242	17	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8082A	Aroclor 1254	10	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8082A	Aroclor 1260	5.9	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	2-Methylnaphthalene	4.4	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Acenaphthene	3.6	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Acenaphthylene	2.7	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Anthracene	11	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Benzo(a)anthracene	51	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Benzo(b)fluoranthene	56	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Benzo(g,h,i)perylene	22	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Chrysene	87	µg/kg	J	FD>RPD	K2107752

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD36FD	SW8270DSIM	Dibenzofuran	3.4	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Fluoranthene	260	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Fluorene	8.2	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Indeno(1,2,3-cd)pyrene	17	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Naphthalene	5.5	µg/kg	J	FD>RPD	K2107752
WC-SGPD36FD	SW8270DSIM	Pyrene	270	µg/kg	J+	FD>RPD|CCV>UCL	K2107752
WC-SGPD36FD	SW9060	Total Organic Carbon	1.01	µg/kg	J	FD>RPD	K2107752
WC-SGPD37	E1613B	1,2,3,4,7,8-HxCDD	0.00041	µg/kg	J	IonRatio	L2659655
WC-SGPD37	E1613B	1,2,3,7,8-PeCDD	0.00029	µg/kg	J	IonRatio	L2659655
WC-SGPD37	E1613B	2,3,7,8-TCDD	0.00012	µg/kg	J	IonRatio	L2659655
WC-SGPD37	E1613B	2,3,7,8-TCDF	0.0022	µg/kg	J	IonRatio	L2659655
WC-SGPD37	SW8082A	Aroclor 1254	6	µg/kg	J	CF>RPD	K2111942
WC-SGPD38	E1613B	1,2,3,4,7,8,9-HpCDF	0.0018	µg/kg	J	IonRatio	L2659655
WC-SGPD38	E1613B	1,2,3,7,8,9-HxCDD	0.0031	µg/kg	J	IonRatio	L2659655
WC-SGPD38	E1613B	2,3,4,6,7,8-HxCDF	0.0047	µg/kg	J	Coelute	L2659655
WC-SGPD38	SW8082A	Aroclor 1242	4.4	µg/kg	J	CF>RPD	K2111942
WC-SGPD39	E1613B	1,2,3,4,7,8-HxCDD	0.001	µg/kg	J	IonRatio|LabDupRPD	L2658841
WC-SGPD39	E1613B	1,2,3,4,7,8-HxCDF	0.00771	µg/kg	J	LabDupRPD	L2658841
WC-SGPD39	E1613B	1,2,3,6,7,8-HxCDD	0.00557	µg/kg	J	LabDupRPD	L2658841
WC-SGPD39	E1613B	1,2,3,7,8,9-HxCDD	0.00334	µg/kg	J	LabDupRPD	L2658841
WC-SGPD39	E1613B	1,2,3,7,8,9-HxCDF	0.00083	µg/kg	J	IonRatio	L2658841
WC-SGPD39	E1613B	2,3,4,6,7,8-HxCDF	0.0022	µg/kg	J	IonRatio	L2658841
WC-SGPD39	E1613B	2,3,7,8-TCDD	0.00021	µg/kg	J	IonRatio|LabDupRPD	L2658841
WC-SGPD39	E1613B	2,3,7,8-TCDF	0.00269	µg/kg	J	LabDupRPD	L2658841
WC-SGPD39	E1613B	Total HxCDD	0.0582	µg/kg	J	LabDupRPD	L2658841
WC-SGPD39	E1613B	Total PeCDD	0.00277	µg/kg	J	LabDupRPD	L2658841
WC-SGPD39	E1613B	Total PeCDF	0.108	µg/kg	J	LabDupRPD	L2658841
WC-SGPD39	E1613B	Total TCDF	0.161	µg/kg	J	LabDupRPD	L2658841
WC-SGPD39	SW8082A	Aroclor 1242	7.2	µg/kg	J	CF>RPD	K2111955
WC-SGPD39	SW8270DSIM	Anthracene	20	µg/kg	J-	CCV<LCL	K2111955
WC-SGPD39	SW8270DSIM	Dibenzofuran	1.1	µg/kg	U	LB<RL	K2111955
WC-SGPD40	E1613B	1,2,3,4,6,7,8-HpCDD	0.0913	µg/kg	J-	Sur<LCL	K2203194
WC-SGPD40	E1613B	1,2,3,4,6,7,8-HpCDF	0.0123	µg/kg	J-	Sur<LCL	K2203194
WC-SGPD40	E1613B	1,2,3,4,7,8,9-HpCDF	0.00153	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SGPD40	E1613B	1,2,3,4,7,8-HxCDD	0.000962	µg/kg	J	IonRatio	K2203194
WC-SGPD40	E1613B	1,2,3,4,7,8-HxCDF	0.00163	µg/kg	J-	Sur<LCL	K2203194
WC-SGPD40	E1613B	1,2,3,6,7,8-HxCDF	0.00105	µg/kg	J-	Sur<LCL	K2203194
WC-SGPD40	E1613B	1,2,3,7,8,9-HxCDD	0.00148	µg/kg	J	IonRatio	K2203194
WC-SGPD40	E1613B	1,2,3,7,8,9-HxCDF	0.000502	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SGPD40	E1613B	1,2,3,7,8-PeCDD	0.000678	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SGPD40	E1613B	1,2,3,7,8-PeCDF	0.000423	µg/kg	UJ	Sur<LCL	K2203194
WC-SGPD40	E1613B	2,3,4,6,7,8-HxCDF	0.000858	µg/kg	J-	Sur<LCL|IonRatio	K2203194
WC-SGPD40	E1613B	2,3,4,7,8-PeCDF	0.000416	µg/kg	UJ	Sur<LCL	K2203194
WC-SGPD40	E1613B	2,3,7,8-TCDD	0.00077	µg/kg	UJ	Sur<LCL	K2203194
WC-SGPD40	E1613B	2,3,7,8-TCDF	0.000847	µg/kg	UJ	Sur<LCL	K2203194
WC-SGPD40	E1613B	OCDD	0.756	µg/kg	J-	Sur<LCL	K2203194
WC-SGPD40	SW8082A	Aroclor 1254	12	µg/kg	J	CF>RPD	K2203194
WC-SGPD41	E1699M	2,4'-DDD	0.82	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD41	E1699M	2,4'-DDE	1.1	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD41	E1699M	2,4'-DDT	1.3	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD41	E1699M	4,4'-DDD	1.9	µg/kg	J-	IS>UCL	K2107902
WC-SGPD41	E1699M	4,4'-DDE	2.4	µg/kg	J-	IS>UCL	K2107902
WC-SGPD41	E1699M	4,4'-DDT	0.62	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD42	E1699M	2,4'-DDD	5.5	µg/kg	J-	IS>UCL	K2107902
WC-SGPD42	E1699M	2,4'-DDE	0.9	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD42	E1699M	2,4'-DDT	1.1	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD42	E1699M	4,4'-DDD	10	µg/kg	J-	IS>UCL	K2107902
WC-SGPD42	E1699M	4,4'-DDE	3.3	µg/kg	J-	IS>UCL	K2107902
WC-SGPD42	E1699M	4,4'-DDT	0.54	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD43	E1699M	2,4'-DDD	44	µg/kg	J-	IS>UCL	K2107598
WC-SGPD43	E1699M	2,4'-DDE	8.2	µg/kg	J-	IS>UCL	K2107598
WC-SGPD43	E1699M	2,4'-DDT	0.71	µg/kg	UJ	IS>UCL	K2107598
WC-SGPD43	E1699M	4,4'-DDD	180	µg/kg	J-	IS>UCL	K2107598
WC-SGPD43	E1699M	4,4'-DDE	60	µg/kg	J-	IS>UCL	K2107598
WC-SGPD43	E1699M	4,4'-DDT	44	µg/kg	J-	IS>UCL	K2107598
WC-SGPD43	SW8082A	Aroclor 1242	140	µg/kg	J	CF>RPD	K2107598
WC-SGPD43	SW8082A	Aroclor 1254	120	µg/kg	J	CF>RPD	K2107598
WC-SGPD43	SW8270DSIM	Pyrene	7400	µg/kg	J+	CCV>UCL	K2107598
WC-SGPD43A	E1613B	1,2,3,4,6,7,8-HpCDD	0.219	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD43A	E1613B	1,2,3,4,6,7,8-HpCDF	0.0361	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD43A	E1613B	1,2,3,4,7,8,9-HpCDF	0.00333	µg/kg	J-	IonRatio|Sur<LCL|TEMP	K2202673
WC-SGPD43A	E1613B	1,2,3,4,7,8-HxCDD	0.000867	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD43A	E1613B	1,2,3,4,7,8-HxCDF	0.00797	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	1,2,3,6,7,8-HxCDD	0.00361	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	1,2,3,6,7,8-HxCDF	0.00306	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD43A	E1613B	1,2,3,7,8,9-HxCDD	0.0019	µg/kg	J-	IonRatio|TEMP	K2202673
WC-SGPD43A	E1613B	1,2,3,7,8,9-HxCDF	0.00137	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	1,2,3,7,8-PeCDD	0.000572	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	1,2,3,7,8-PeCDF	0.00443	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	2,3,4,6,7,8-HxCDF	0.00238	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	2,3,4,7,8-PeCDF	0.00312	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	2,3,7,8-TCDD	0.000446	µg/kg	UJ	TEMP	K2202673

Table H-4. Overall Validation Findings
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Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD43A	E1613B	2,3,7,8-TCDF	0.00329	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	OCDD	5.02	µg/kg	J-	Sur<LCL|TEMP	K2202673
WC-SGPD43A	E1613B	OCDF	0.153	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	Total HpCDD	0.569	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	Total HpCDF	0.165	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	Total HxCDD	0.0371	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	Total HxCDF	0.0544	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	Total PeCDD	0.00389	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	Total PeCDF	0.0236	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	E1613B	Total TCDD	0.000446	µg/kg	UJ	TEMP	K2202673
WC-SGPD43A	E1613B	Total TCDF	0.00781	µg/kg	J-	TEMP	K2202673
WC-SGPD43A	SW8082A	Aroclor 1254	210	µg/kg	J	CF>RPD	K2202673
WC-SGPD43A	SW8270DSIM	Acenaphthylene	100	µg/kg	J+	Inter	K2202673
WC-SGPD43A	SW8270DSIM	Dibenzofuran	170	µg/kg	J+	Inter	K2202673
WC-SGPD44	E1613B	1,2,3,4,7,8,9-HpCDF	0.0015	µg/kg	J	IonRatio	L2615160
WC-SGPD44	E1613B	OCDD	1.1	µg/kg	J-	Sur<LCL	L2615160
WC-SGPD44	E1699M	4,4'-DDT	1	µg/kg	J	MSRPD	K2108034
WC-SGPD44	SW8082A	Aroclor 1254	6	µg/kg	J	CF>RPD	K2108034
WC-SGPD45	E1613B	1,2,3,4,7,8-HxCDD	0.0012	µg/kg	J	IonRatio	L2658841
WC-SGPD45	E1613B	1,2,3,7,8,9-HxCDF	0.0012	µg/kg	J	IonRatio	L2658841
WC-SGPD45	SW8082A	Aroclor 1242	5.9	µg/kg	J	CF>RPD	K2111955
WC-SGPD45	SW8270DSIM	Anthracene	21	µg/kg	J-	CCV<LCL	K2111955
WC-SGPD45	SW8270DSIM	Naphthalene	1.2	µg/kg	U	LB<RL	K2111955
WC-SGPD46	E1699M	2,4'-DDD	0.73	µg/kg	J-	IS>UCL	K2108034
WC-SGPD46	E1699M	2,4'-DDE	0.91	µg/kg	UJ	IS>UCL	K2108034
WC-SGPD46	E1699M	2,4'-DDT	1.1	µg/kg	UJ	IS>UCL	K2108034
WC-SGPD46	E1699M	4,4'-DDD	2.4	µg/kg	J-	IS>UCL	K2108034
WC-SGPD46	E1699M	4,4'-DDE	2.3	µg/kg	J-	IS>UCL	K2108034
WC-SGPD46	E1699M	4,4'-DDT	0.54	µg/kg	UJ	IS>UCL	K2108034
WC-SGPD46	SW8082A	Aroclor 1242	8.4	µg/kg	J	CF>RPD	K2108034
WC-SGPD46	SW8082A	Aroclor 1254	7.8	µg/kg	J	CF>RPD	K2108034
WC-SGPD47	SW8082A	Aroclor 1260	4.8	µg/kg	J	CF>RPD	K2107902
WC-SGPD48	E1613B	1,2,3,4,7,8,9-HpCDF	0.00059	µg/kg	J	IonRatio	L2614662
WC-SGPD48	E1613B	OCDD	0.606	µg/kg	J-	Sur<LCL	L2614662
WC-SGPD48	E1699M	2,4'-DDD	0.74	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD48	E1699M	2,4'-DDE	0.92	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD48	E1699M	2,4'-DDT	1.1	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD48	E1699M	4,4'-DDD	2	µg/kg	J-	IS>UCL	K2107902
WC-SGPD48	E1699M	4,4'-DDE	2	µg/kg	J-	IS>UCL	K2107902
WC-SGPD48	E1699M	4,4'-DDT	0.55	µg/kg	UJ	IS>UCL	K2107902
WC-SGPD49	E1613B	1,2,3,7,8,9-HxCDF	0.005	µg/kg	J	IonRatio	L2658841
WC-SGPD49	E1613B	2,3,7,8-TCDD	0.0004	µg/kg	J	IonRatio	L2658841
WC-SGPD49	SW8270DSIM	Anthracene	49	µg/kg	J-	CCV<LCL	K2111955
WC-SGPD50	E1613B	1,2,3,4,7,8,9-HpCDF	0.0026	µg/kg	J	IonRatio	L2615160
WC-SGPD50	E1613B	1,2,3,4,7,8-HxCDD	0.0011	µg/kg	J	IonRatio	L2615160
WC-SGPD50	E1613B	1,2,3,6,7,8-HxCDF	0.0028	µg/kg	J	IonRatio	L2615160
WC-SGPD50	E1613B	2,3,4,6,7,8-HxCDF	0.0022	µg/kg	J	IonRatio	L2615160
WC-SGPD50	E1613B	2,3,7,8-TCDD	0.00028	µg/kg	J	IonRatio	L2615160
WC-SGPD50	E1699M	2,4'-DDD	24	µg/kg	J-	IS>UCL	K2108034
WC-SGPD50	E1699M	2,4'-DDE	9.9	µg/kg	J-	IS>UCL	K2108034
WC-SGPD50	E1699M	2,4'-DDT	0.71	µg/kg	UJ	IS>UCL	K2108034
WC-SGPD50	E1699M	4,4'-DDD	89	µg/kg	J-	IS>UCL	K2108034
WC-SGPD50	E1699M	4,4'-DDE	14	µg/kg	J-	IS>UCL	K2108034
WC-SGPD50	E1699M	4,4'-DDT	0.36	µg/kg	UJ	IS>UCL	K2108034
WC-SGPD50	SW8082A	Aroclor 1254	12	µg/kg	J	CF>RPD	K2108034
WC-SGPD52	E1613B	1,2,3,4,7,8,9-HpCDF	0.0033	µg/kg	J	IonRatio	L2615160
WC-SGPD52	E1613B	2,3,4,7,8-PeCDF	0.0021	µg/kg	J	IonRatio	L2615160
WC-SGPD52	E1613B	2,3,7,8-TCDD	0.00014	µg/kg	J	IonRatio	L2615160
WC-SGPD52	E1699M	2,4'-DDD	0.62	µg/kg	UJ	IS>UCL	K2108034
WC-SGPD52	E1699M	2,4'-DDE	0.77	µg/kg	UJ	IS>UCL	K2108034
WC-SGPD52	E1699M	2,4'-DDT	0.92	µg/kg	UJ	IS>UCL	K2108034

Table H-4. Overall Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Method	Analyte	Result	Units	Final Flag	Reason Codes	SDG
WC-SGPD52	E1699M	4,4'-DDD	1.4	µg/kg	J-	IS>UCL	K2108034
WC-SGPD52	E1699M	4,4'-DDE	1.2	µg/kg	J-	IS>UCL	K2108034
WC-SGPD52	E1699M	4,4'-DDT	0.46	µg/kg	UJ	IS>UCL	K2108034
WC-SGPD52	SW8082A	Aroclor 1254	4.6	µg/kg	J	CF>RPD	K2108034
WC-SGPD53	E1613B	1,2,3,7,8-PeCDD	0.00094	µg/kg	J	IonRatio	L2615160
WC-SGPD53	E1613B	2,3,7,8-TCDD	0.00018	µg/kg	J	IonRatio	L2615160

Notes:
CCV<LCL = Continuing calibration verification recovery less than lower control limit
CCV>UCL = Continuing calibration verification recovery greater than upper control limit
CF>RPD = Confirmation relative percent difference criterion exceeded
Coelute = Analyte exhibited coelution with other compounds
FD>RPD = Field duplicate relative percent difference greater than acceptance criterion
ID = Identifier
ICRange = Analyte reported above initial calibration range
IonRatio = Ion abundance ratio criteria not met
Inter - Interference present
IS<LCL = Internal standard recovery less than the lower control limit
IS>UCL = Internal standard recovery greater than the upper control limit
LabDupRPD = Laboratory duplicate relative percent difference greater than acceptance criterion
LB<RL = Analyte detected less than five times associated laboratory blank concentration
LCS<LCL = Laboratory control sample recovery less than the lower control limit
LCS>UCL = Laboratory control sample recovery greater than the upper control limit
MS<LCL = Matrix spike recovery less than the lower control limit
MS>UCL = Matrix spike recovery greater than the upper control limit
MSRPD = Matrix spike/matrix spike duplicate relative percent difference greater than acceptance criterion
MSD<LCL = Matrix spike duplicate recovery less than the lower control limit
MSD>UCL = Matrix spike duplicate recovery greater than the upper control limit
Sur<LCL = Surrogate recovery less than the lower control limit
Sur>UCL = Surrogate recovery greater than the upper control limit
Temp = Sample received at a temperater greater than the acceptance criterion of 6 degrees

Qualifier Definitions
J = Analyte was present but reported value may not be accurate or precise.
J+ = Analyte was present but reported value may not be accurate or precise, high bias.
J- = Analyte was present but reported value may not be accurate or precise, low bias.
U = This analyte was analyzed for but not detected at the specified detection limit.
UJ = The analyte was not detected above the detection limit objective; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table H-5. Initial and Continuing Calibration Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD35-11.0-12.0	OCDD	10.7	µg/kg	J	ICRange	K2200743
E1613B	WC-SCPD38-13.0-14.0	OCDD	4.92	µg/kg	J	ICRange	K2200746
E1613B	WC-SCPD39-12.0-13.0	OCDD	13.7	µg/kg	J	ICRange	K2200746
E1613B	WC-SCPD39-13.0-13.9	OCDD	7.82	µg/kg	J	ICRange	K2200746
E1613B	WC-SCPD05-4.0-5.0	OCDD	7.02	µg/kg	J	ICRange	K2203181
E1613B	WC-SCPD09-1.0-2.0	OCDD	8.27	µg/kg	J	ICRange	K2203181
E1613B	WC-SCPD43A-1.0-2.0	OCDD	9.02	µg/kg	J	ICRange	K2203345
NWTPH-Dx	WC-SB02-0.0-1.0	Diesel Range Organics	17	mg/kg	J+	CCV>UCL	K2111070
NWTPH-Dx	WC-SB09-0.0-1.0	Diesel Range Organics	12	mg/kg	J+	CCV>UCL	K2111196
NWTPH-Dx	WC-SB10-0.0-1.0	Diesel Range Organics	120	mg/kg	J+	CCV>UCL	K2111070
NWTPH-Dx	WC-SB10-0.0-1.0	Diesel Range Organics	120	mg/kg	J+	CCV>UCL	K2111070
SW8270DSIM	WC-SB11-0.0-1.0FD	Anthracene	1.5	µg/kg	J+	CCV>UCL	K2110977
SW8270DSIM	WC-SB12-0.0-1.0	Anthracene	0.96	µg/kg	J+	CCV>UCL	K2110977
SW8270DSIM	WC-SCPD11-5.0-6.0	Benzo(a)pyrene	18	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD11-6.0-7.0	Benzo(a)pyrene	14	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD11-7.0-8.0	Benzo(a)pyrene	22	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD14-1.0-2.0	Pyrene	530	µg/kg	J+	CCV>UCL	K2107340
SW8270DSIM	WC-SCPD14-2.0-3.0	Pyrene	1.2	µg/kg	J+	CCV>UCL	K2107340
SW8270DSIM	WC-SCPD14-3.0-4.0	Pyrene	4.4	µg/kg	J+	CCV>UCL	K2107340
SW8270DSIM	WC-SCPD18-2.0-3.0	Pyrene	1.4	µg/kg	J+	CCV>UCL	K2107637
SW8270DSIM	WC-SCPD18-3.0-4.0	Pyrene	1.1	µg/kg	J+	CCV>UCL	K2107637
SW8270DSIM	WC-SCPD18-4.0-5.0	Pyrene	1.3	µg/kg	J+	CCV>UCL	K2107637
SW8270DSIM	WC-SCPD21-7.0-8.0	Benzo(a)pyrene	49	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD21-8.0-8.8	Benzo(a)pyrene	120	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD22-7.0-8.0	Benzo(a)pyrene	290	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD22-8.0-8.7	Benzo(a)pyrene	100	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD23-1.0-2.0	Pyrene	230	µg/kg	J+	CCV>UCL	K2107340
SW8270DSIM	WC-SCPD23-2.0-3.0	Pyrene	1.6	µg/kg	J+	CCV>UCL	K2107340
SW8270DSIM	WC-SCPD23-3.0-4.0	Pyrene	0.82	µg/kg	J+	CCV>UCL	K2107340
SW8270DSIM	WC-SCPD23-4.0-5.0	Pyrene	1.7	µg/kg	J+	CCV>UCL	K2107340
SW8270DSIM	WC-SCPD28-2.0-3.0	Pyrene	410	µg/kg	J+	CCV>UCL	K2107278
SW8270DSIM	WC-SCPD28-3.0-4.0	Pyrene	88	µg/kg	J+	CCV>UCL	K2107278
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Pyrene	5.6	µg/kg	J+	CCV>UCL	K2107278
SW8270DSIM	WC-SCPD29-5.0-6.0	Benzo(a)pyrene	86	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD29-6.0-7.0	Benzo(a)pyrene	180	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD29-7.0-8.0	Benzo(a)pyrene	470	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD30-8.0-9.0	Benzo(a)pyrene	93	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD30-9.0-9.8	Benzo(a)pyrene	380	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD31-1.0-2.0	Pyrene	330	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD31-10.0-11.0	Benzo(a)pyrene	70	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD31-11.0-12.0	Benzo(a)pyrene	2.5	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD31-2.0-3.0	Pyrene	440	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD31-3.0-4.0	Pyrene	530	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD31-4.0-5.0	Pyrene	360	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD31-8.0-9.0	Benzo(a)pyrene	160	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD35-1.0-2.0	Pyrene	290	µg/kg	J+	CCV>UCL	K2107489
SW8270DSIM	WC-SCPD35-10.0-11.0	Benzo(a)pyrene	110	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD35-11.0-12.0	Benzo(a)pyrene	660	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD35-2.0-3.0	Pyrene	350	µg/kg	J+	CCV>UCL	K2107489
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Pyrene	580	µg/kg	J+	CCV>UCL	K2107489
SW8270DSIM	WC-SCPD35-3.0-4.0	Pyrene	600	µg/kg	J+	CCV>UCL	K2107489
SW8270DSIM	WC-SCPD35-4.0-5.0	Pyrene	590	µg/kg	J+	CCV>UCL	K2107489
SW8270DSIM	WC-SCPD36-1.0-2.0	Pyrene	370	µg/kg	J+	CCV>UCL	K2107222
SW8270DSIM	WC-SCPD36-11.0-12.0	Benzo(a)pyrene	130	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD36-2.0-3.0	Pyrene	370	µg/kg	J+	CCV>UCL	K2107222
SW8270DSIM	WC-SCPD36-3.0-4.0	Pyrene	360	µg/kg	J+	CCV>UCL	K2107222
SW8270DSIM	WC-SCPD36-4.0-5.0	Pyrene	350	µg/kg	J+	CCV>UCL	K2107222
SW8270DSIM	WC-SCPD36-7.0-8.0	Benzo(a)pyrene	220	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(a)pyrene	920	µg/kg	J+	CCV>UCL	K2200743
SW8270DSIM	WC-SCPD38-2.0-3.0	Anthracene	23	µg/kg	J-	CCV<LCL	K2111942
SW8270DSIM	WC-SCPD39-1.0-2.0	Anthracene	22	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD39-2.0-3.0	Anthracene	18	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD39-3.0-4.0	Anthracene	32	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD39-4.0-5.0	Anthracene	18	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD41-1.0-2.0	Pyrene	130	µg/kg	J+	CCV>UCL	K2107340

Table H-5. Initial and Continuing Calibration Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8270DSIM	WC-SCPD41-2.0-3.0	Pyrene	380	µg/kg	J+	CCV>UCL	K2107340
SW8270DSIM	WC-SCPD41-3.0-4.0	Pyrene	420	µg/kg	J+	CCV>UCL	K2107340
SW8270DSIM	WC-SCPD41-4.0-5.0	Pyrene	410	µg/kg	J+	CCV>UCL	K2107340
SW8270DSIM	WC-SCPD42-3.0-4.0	Pyrene	5900	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD42-4.0-5.0	Pyrene	23	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD42-5.0-6.0	Pyrene	19	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD44-1.0-2.0	Pyrene	380	µg/kg	J+	CCV>UCL	K2107222
SW8270DSIM	WC-SCPD44-2.0-3.0	Pyrene	7100	µg/kg	J+	CCV>UCL	K2107222
SW8270DSIM	WC-SCPD44-3.0-4.0	Pyrene	390	µg/kg	J+	CCV>UCL	K2107222
SW8270DSIM	WC-SCPD44-4.0-5.0	Pyrene	93	µg/kg	J+	CCV>UCL	K2107222
SW8270DSIM	WC-SCPD45-1.0-2.0	Anthracene	13	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD45-2.0-3.0	Anthracene	31	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Anthracene	31	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD45-4.0-5.0	Anthracene	0.51	µg/kg	UJ	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD46-1.0-2.0	Pyrene	170	µg/kg	J+	CCV>UCL	K2107395
SW8270DSIM	WC-SCPD46-2.0-3.0	Pyrene	220	µg/kg	J+	CCV>UCL	K2107395
SW8270DSIM	WC-SCPD46-3.0-4.0	Pyrene	390	µg/kg	J+	CCV>UCL	K2107395
SW8270DSIM	WC-SCPD46-4.0-5.0	Pyrene	240	µg/kg	J+	CCV>UCL	K2107395
SW8270DSIM	WC-SCPD46-5.0-6.0	Anthracene	29	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD46-6.0-7.0	Anthracene	18	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD47-1.0-2.0	Pyrene	200	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SCPD47-2.0-3.0	Pyrene	93	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SCPD47-3.0-4.0	Pyrene	7.7	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SCPD47-4.0-5.0	Pyrene	4.9	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SCPD48-1.0-2.0	Pyrene	300	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD48-2.0-3.0	Pyrene	440	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD48-3.0-4.0	Pyrene	740	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD48-3.0-4.0FD	Pyrene	790	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD48-4.0-5.0	Pyrene	890	µg/kg	J+	CCV>UCL	K2107158
SW8270DSIM	WC-SCPD48-5.0-6.0	Anthracene	92	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD48-6.0-7.0	Anthracene	73	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD50-1.0-2.0	Pyrene	280	µg/kg	J+	CCV>UCL	K2107395
SW8270DSIM	WC-SCPD50-2.0-3.0	Pyrene	290	µg/kg	J+	CCV>UCL	K2107395
SW8270DSIM	WC-SCPD50-3.0-4.0	Pyrene	21	µg/kg	J+	CCV>UCL	K2107395
SW8270DSIM	WC-SCPD50-4.0-5.0	Pyrene	7.9	µg/kg	J+	CCV>UCL	K2107395
SW8270DSIM	WC-SCPD52-1.0-2.0	Pyrene	200	µg/kg	J+	CCV>UCL	K2107489
SW8270DSIM	WC-SCPD52-2.0-3.0	Pyrene	280	µg/kg	J+	CCV>UCL	K2107489
SW8270DSIM	WC-SCPD52-3.0-4.0	Pyrene	410	µg/kg	J+	CCV>UCL	K2107489
SW8270DSIM	WC-SCPD52-4.0-5.0	Pyrene	13	µg/kg	J+	CCV>UCL	K2107489
SW8270DSIM	WC-SCPD52-5.0-6.0	Anthracene	39	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD52-6.0-7.0	Anthracene	42	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD53A-1.0-2.0	Pyrene	380	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SCPD53A-2.0-3.0	Pyrene	280	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SCPD53A-3.0-4.0	Pyrene	260	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SCPD53A-4.0-5.0	Pyrene	520	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SGPD02	Pyrene	280	µg/kg	J+	CCV>UCL	K2107700
SW8270DSIM	WC-SGPD03	Pyrene	140	µg/kg	J+	CCV>UCL	K2107700
SW8270DSIM	WC-SGPD04	Pyrene	200	µg/kg	J+	CCV>UCL	K2107700
SW8270DSIM	WC-SGPD12	Pyrene	2200	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SGPD16	Pyrene	890	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SGPD21	Pyrene	210	µg/kg	J+	CCV>UCL	K2107637
SW8270DSIM	WC-SGPD26	Pyrene	2400	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SGPD31	Pyrene	180	µg/kg	J+	CCV>UCL	K2107637
SW8270DSIM	WC-SGPD34	Pyrene	1300	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SGPD36	Pyrene	140	µg/kg	J+	CCV>UCL	K2107752
SW8270DSIM	WC-SGPD36FD	Pyrene	270	µg/kg	J+	CCV>UCL	K2107752
SW8270DSIM	WC-SGPD39	Anthracene	20	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SGPD43	Pyrene	7400	µg/kg	J+	CCV>UCL	K2107598
SW8270DSIM	WC-SGPD45	Anthracene	21	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SGPD49	Anthracene	49	µg/kg	J-	CCV<LCL	K2111955
SW8270DSIM	WC-SCPD25-1.0-2.0	Benzo(a)pyrene	47	µg/kg	J+	CCV>UCL	K2205401
SW8270DSIM	WC-SCPD25-1.0-2.0	Dibenzo(a,h)anthracene	5.2	µg/kg	J+	CCV>UCL	K2205401
SW8270DSIM	WC-SCPD25-1.0-2.0	Indeno(1,2,3-cd)pyrene	33	µg/kg	J+	CCV>UCL	K2205401
SW8270DSIM	WC-SCPD25-2.0-3.0	Benzo(a)pyrene	1.3	µg/kg	J+	CCV>UCL	K2205401
SW8270DSIM	WC-SCPD25-2.0-3.0	Indeno(1,2,3-cd)pyrene	1.4	µg/kg	J+	CCV>UCL	K2205401

Table H-5. Initial and Continuing Calibration Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8270DSIM	WC-SCPD25-3.0-4.0	Benzo(a)pyrene	0.62	µg/kg	J+	CCV>UCL	K2205401
SW8270DSIM	WC-SCPD25-3.0-4.0	Indeno(1,2,3-cd)pyrene	0.67	µg/kg	J+	CCV>UCL	K2205401
SW8270DSIM	WC-SCPD40-9.0-9.5	Benzo(a)pyrene	1	µg/kg	J+	CCV>UCL	K2205401
SW8270DSIM	WC-SCPD40-9.0-9.5	Indeno(1,2,3-cd)pyrene	1.2	µg/kg	J+	CCV>UCL	K2205401
SW8270DSIM	WC-SGPD25	Benzo(a)pyrene	14	µg/kg	J+	CCV>UCL	K2205401
SW8270DSIM	WC-SGPD25	Dibenzo(a,h)anthracene	1.5	µg/kg	J+	CCV>UCL	K2205401
SW8270DSIM	WC-SGPD25	Indeno(1,2,3-cd)pyrene	10	µg/kg	J+	CCV>UCL	K2205401

Notes:
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
CCV<LCL = Continuing calibration verification recovery less than lower control limit
CCV>UCL = Continuing calibration verification recovery greater than upper control limit
ICRange = Analyte reported above initial calibration range
ID = Identifier

Qualifier Definitions
J = Analyte was present but reported value may not be accurate or precise.
J+ = Analyte was present but reported value may not be accurate or precise, high bias.
J- = Analyte was present but reported value may not be accurate or precise, low bias.
UJ = The analyte was not detected above the detection limit objective; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table H-6- Holding Time Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD05-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.161	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0679	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.00475	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,4,7,8-HxCDD	0.0013	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,4,7,8-HxCDF	0.0119	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,6,7,8-HxCDD	0.00504	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,6,7,8-HxCDF	0.0073	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,7,8,9-HxCDD	0.00249	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,7,8,9-HxCDF	0.00202	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,7,8-PeCDD	0.000684	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,7,8-PeCDF	0.00661	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	2,3,4,6,7,8-HxCDF	0.00365	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	2,3,4,7,8-PeCDF	0.00594	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	2,3,7,8-TCDD	0.000422	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	2,3,7,8-TCDF	0.00331	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	OCDD	3.38	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	OCDF	0.177	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	Total HpCDD	0.498	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	Total HpCDF	0.226	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	Total HxCDD	0.0622	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	Total HxCDF	0.103	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	Total PeCDD	0.00772	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	Total PeCDF	0.066	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	Total TCDD	0.00671	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	Total TCDF	0.0267	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,4,6,7,8-HpCDD	0.0396	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,4,6,7,8-HpCDF	0.0444	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,4,7,8,9-HpCDF	0.00595	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,4,7,8-HxCDD	0.00619	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,4,7,8-HxCDF	0.00724	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,6,7,8-HxCDD	0.00607	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,6,7,8-HxCDF	0.00918	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,7,8,9-HxCDD	0.00579	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,7,8,9-HxCDF	0.00596	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,7,8-PeCDD	0.00621	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,7,8-PeCDF	0.00656	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	2,3,4,6,7,8-HxCDF	0.00748	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	2,3,4,7,8-PeCDF	0.00993	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	2,3,7,8-TCDD	0.00105	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	2,3,7,8-TCDF	0.00187	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	OCDD	0.778	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	OCDF	0.0561	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	Total HpCDD	0.12	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	Total HpCDF	0.0878	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	Total HxCDD	0.0289	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	Total HxCDF	0.0834	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	Total PeCDD	0.00872	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	Total PeCDF	0.0778	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	Total TCDD	0.000383	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	Total TCDF	0.0176	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.0596	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0694	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.00264	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,7,8-HxCDD	0.000653	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,7,8-HxCDF	0.00346	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,6,7,8-HxCDD	0.00273	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,6,7,8-HxCDF	0.0102	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,7,8,9-HxCDD	0.00158	ug/kg	J-	HT>UCL	K2208213

Table H-6- Holding Time Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD06-5.0-6.0	1,2,3,7,8,9-HxCDF	0.00178	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,7,8-PeCDD	0.00113	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,7,8-PeCDF	0.00154	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	2,3,4,6,7,8-HxCDF	0.0032	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	2,3,4,7,8-PeCDF	0.00362	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	2,3,7,8-TCDD	0.000379	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	2,3,7,8-TCDF	0.00109	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	OCDD	1.59	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	OCDF	0.0761	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	Total HpCDD	0.142	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	Total HpCDF	0.157	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	Total HxCDD	0.0286	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	Total HxCDF	0.0792	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	Total PeCDD	0.0039	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	Total PeCDF	0.0521	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	Total TCDD	0.00234	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	Total TCDF	0.0111	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,4,6,7,8-HpCDD	0.0445	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,4,6,7,8-HpCDF	0.0425	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,4,7,8,9-HpCDF	0.00137	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,4,7,8-HxCDD	0.000602	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,4,7,8-HxCDF	0.00109	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,6,7,8-HxCDD	0.00214	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,6,7,8-HxCDF	0.00599	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,7,8,9-HxCDD	0.000625	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,7,8,9-HxCDF	0.000752	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,7,8-PeCDD	0.000405	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,7,8-PeCDF	0.000736	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	2,3,4,6,7,8-HxCDF	0.00158	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	2,3,4,7,8-PeCDF	0.00185	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	2,3,7,8-TCDD	0.000381	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	2,3,7,8-TCDF	0.000265	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	OCDD	0.992	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	OCDF	0.0834	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	Total HpCDD	0.136	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	Total HpCDF	0.109	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	Total HxCDD	0.0205	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	Total HxCDF	0.0491	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	Total PeCDD	0.00178	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	Total PeCDF	0.0259	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	Total TCDD	0.000381	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	Total TCDF	0.00276	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.116	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0238	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.00175	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,7,8-HxCDD	0.00166	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,7,8-HxCDF	0.00356	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,6,7,8-HxCDD	0.00466	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,6,7,8-HxCDF	0.00288	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8,9-HxCDD	0.002	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8,9-HxCDF	0.00113	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8-PeCDD	0.000889	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8-PeCDF	0.00116	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	2,3,4,6,7,8-HxCDF	0.0015	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	2,3,4,7,8-PeCDF	0.00167	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	2,3,7,8-TCDD	0.000566	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	2,3,7,8-TCDF	0.000426	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	OCDD	1.91	ug/kg	J-	HT>UCL	K2208213

Table H-6- Holding Time Validation Findings
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Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD07-5.0-6.0	OCDF	0.0747	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	Total HpCDD	0.295	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	Total HpCDF	0.0609	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	Total HxCDD	0.0401	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	Total HxCDF	0.0404	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	Total PeCDD	0.000423	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	Total PeCDF	0.0188	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	Total TCDD	0.000566	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	Total TCDF	0.00188	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.283	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0875	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.00591	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,4,7,8-HxCDD	0.00125	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,4,7,8-HxCDF	0.00254	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,6,7,8-HxCDD	0.0086	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,6,7,8-HxCDF	0.0104	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,7,8,9-HxCDD	0.00346	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,7,8,9-HxCDF	0.00143	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,7,8-PeCDD	0.00113	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,7,8-PeCDF	0.00141	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	2,3,4,6,7,8-HxCDF	0.00449	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	2,3,4,7,8-PeCDF	0.00449	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	2,3,7,8-TCDD	0.000954	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	2,3,7,8-TCDF	0.000657	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	OCDD	4.71	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	OCDF	0.329	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	Total HpCDD	0.733	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	Total HpCDF	0.335	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	Total HxCDD	0.0756	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	Total HxCDF	0.122	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	Total PeCDD	0.0104	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	Total PeCDF	0.076	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	Total TCDD	0.00679	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	Total TCDF	0.0212	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,4,6,7,8-HpCDD	0.266	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,4,6,7,8-HpCDF	0.0676	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,4,7,8,9-HpCDF	0.00483	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,4,7,8-HxCDD	0.00198	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,4,7,8-HxCDF	0.00743	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,6,7,8-HxCDD	0.00909	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,6,7,8-HxCDF	0.00923	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,7,8,9-HxCDD	0.00431	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,7,8,9-HxCDF	0.00178	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,7,8-PeCDD	0.00126	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,7,8-PeCDF	0.00229	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	2,3,4,6,7,8-HxCDF	0.00427	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	2,3,4,7,8-PeCDF	0.00399	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	2,3,7,8-TCDD	0.0013	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	2,3,7,8-TCDF	0.000656	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	OCDD	4.47	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	OCDF	0.203	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	Total HpCDD	0.672	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	Total HpCDF	0.245	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	Total HxCDD	0.0752	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	Total HxCDF	0.118	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	Total PeCDD	0.00433	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	Total PeCDF	0.0629	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	Total TCDD	0.00206	ug/kg	J-	HT>UCL	K2208213

Table H-6- Holding Time Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD08-6.0-7.0	Total TCDF	0.0129	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,4,6,7,8-HpCDD	0.187	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,4,6,7,8-HpCDF	0.0328	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,4,7,8,9-HpCDF	0.00259	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,4,7,8-HxCDD	0.00127	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,4,7,8-HxCDF	0.00198	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,6,7,8-HxCDD	0.00549	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,6,7,8-HxCDF	0.0037	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,7,8,9-HxCDD	0.00271	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,7,8,9-HxCDF	0.000499	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,7,8-PeCDD	0.000646	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,7,8-PeCDF	0.000534	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	2,3,4,6,7,8-HxCDF	0.00214	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	2,3,4,7,8-PeCDF	0.00119	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	2,3,7,8-TCDD	0.0005	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	2,3,7,8-TCDF	0.000164	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	OCDD	3.75	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	OCDF	0.122	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	Total HpCDD	0.546	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	Total HpCDF	0.137	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	Total HxCDD	0.0766	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	Total HxCDF	0.0577	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	Total PeCDD	0.00638	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	Total PeCDF	0.0191	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	Total TCDD	0.00144	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	Total TCDF	0.00447	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.00367	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0000422	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.0000627	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,7,8-HxCDD	0.000197	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,7,8-HxCDF	0.0000638	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,6,7,8-HxCDD	0.0000658	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,6,7,8-HxCDF	0.0000689	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,7,8,9-HxCDD	0.0000669	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,7,8,9-HxCDF	0.000106	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,7,8-PeCDD	0.000133	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,7,8-PeCDF	0.000191	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	2,3,4,6,7,8-HxCDF	0.0000628	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	2,3,4,7,8-PeCDF	0.0000976	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	2,3,7,8-TCDD	0.000495	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	2,3,7,8-TCDF	0.000176	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	OCDD	0.0582	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	OCDF	0.00404	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	Total HpCDD	0.00367	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	Total HpCDF	0.00172	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	Total HxCDD	0.0000686	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	Total HxCDF	0.0000726	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	Total PeCDD	0.00023	ug/kg	J-	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	Total PeCDF	0.000103	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	Total TCDD	0.000495	ug/kg	UJ	HT>UCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	Total TCDF	0.000176	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD05-5.0-6.0	2,4'-DDD	6.5	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD05-5.0-6.0	2,4'-DDE	2	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD05-5.0-6.0	2,4'-DDT	0.71	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD05-5.0-6.0	4,4'-DDD	24	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD05-5.0-6.0	4,4'-DDE	12	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD05-5.0-6.0	4,4'-DDT	0.36	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD05-6.0-7.0	2,4'-DDD	5.7	ug/kg	J-	HT>UCL	K2208213

Table H-6- Holding Time Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1699M	WC-SCPD05-6.0-7.0	2,4'-DDE	1.2	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD05-6.0-7.0	2,4'-DDT	0.67	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD05-6.0-7.0	4,4'-DDD	17	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD05-6.0-7.0	4,4'-DDE	8.4	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD05-6.0-7.0	4,4'-DDT	0.34	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD06-5.0-6.0	2,4'-DDD	1.8	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD06-5.0-6.0	2,4'-DDE	0.7	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD06-5.0-6.0	2,4'-DDT	0.84	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD06-5.0-6.0	4,4'-DDD	7.1	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD06-5.0-6.0	4,4'-DDE	2.8	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD06-5.0-6.0	4,4'-DDT	0.42	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD06-6.0-7.0	2,4'-DDD	1.1	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD06-6.0-7.0	2,4'-DDE	0.64	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD06-6.0-7.0	2,4'-DDT	0.76	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD06-6.0-7.0	4,4'-DDD	5	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD06-6.0-7.0	4,4'-DDE	1.5	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD06-6.0-7.0	4,4'-DDT	0.38	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD07-5.0-6.0	2,4'-DDD	0.64	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD07-5.0-6.0	2,4'-DDE	0.6	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD07-5.0-6.0	2,4'-DDT	0.71	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD07-5.0-6.0	4,4'-DDD	3.6	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD07-5.0-6.0	4,4'-DDE	5.4	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD07-5.0-6.0	4,4'-DDT	0.36	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD08-5.0-6.0	2,4'-DDD	4.9	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-5.0-6.0	2,4'-DDE	1.9	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-5.0-6.0	2,4'-DDT	0.71	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD08-5.0-6.0	4,4'-DDD	27	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-5.0-6.0	4,4'-DDE	24	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-5.0-6.0	4,4'-DDT	0.36	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD08-6.0-7.0	2,4'-DDD	4.2	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-6.0-7.0	2,4'-DDE	1.3	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-6.0-7.0	2,4'-DDT	0.76	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD08-6.0-7.0	4,4'-DDD	21	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-6.0-7.0	4,4'-DDE	19	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-6.0-7.0	4,4'-DDT	0.38	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD08-7.0-8.0	2,4'-DDD	1.4	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-7.0-8.0	2,4'-DDE	0.62	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD08-7.0-8.0	2,4'-DDT	0.73	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD08-7.0-8.0	4,4'-DDD	6.1	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-7.0-8.0	4,4'-DDE	6.8	ug/kg	J-	HT>UCL	K2208213
E1699M	WC-SCPD08-7.0-8.0	4,4'-DDT	0.37	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD45-5.0-6.0	2,4'-DDD	0.58	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD45-5.0-6.0	2,4'-DDE	0.72	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD45-5.0-6.0	2,4'-DDT	0.86	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD45-5.0-6.0	4,4'-DDD	0.32	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD45-5.0-6.0	4,4'-DDE	0.64	ug/kg	UJ	HT>UCL	K2208213
E1699M	WC-SCPD45-5.0-6.0	4,4'-DDT	0.43	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD05-5.0-6.0	Aroclor 1016	0.82	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD05-5.0-6.0	Aroclor 1221	0.82	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD05-5.0-6.0	Aroclor 1232	0.82	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD05-5.0-6.0	Aroclor 1242	11	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD05-5.0-6.0	Aroclor 1248	0.82	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD05-5.0-6.0	Aroclor 1254	25	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD05-5.0-6.0	Aroclor 1260	60	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD05-6.0-7.0	Aroclor 1016	0.83	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD05-6.0-7.0	Aroclor 1221	0.83	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD05-6.0-7.0	Aroclor 1232	0.83	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD05-6.0-7.0	Aroclor 1242	4.5	ug/kg	J-	HT>UCL	K2208213

Table H-6- Holding Time Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8082A	WC-SCPD05-6.0-7.0	Aroclor 1248	0.83	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD05-6.0-7.0	Aroclor 1254	27	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD05-6.0-7.0	Aroclor 1260	41	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD06-5.0-6.0	Aroclor 1016	0.81	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD06-5.0-6.0	Aroclor 1221	0.81	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD06-5.0-6.0	Aroclor 1232	0.81	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD06-5.0-6.0	Aroclor 1242	5.2	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD06-5.0-6.0	Aroclor 1248	0.81	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD06-5.0-6.0	Aroclor 1254	20	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD06-5.0-6.0	Aroclor 1260	29	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD06-6.0-7.0	Aroclor 1016	0.83	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD06-6.0-7.0	Aroclor 1221	0.83	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD06-6.0-7.0	Aroclor 1232	0.83	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD06-6.0-7.0	Aroclor 1242	3.9	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD06-6.0-7.0	Aroclor 1248	0.83	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD06-6.0-7.0	Aroclor 1254	15	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD06-6.0-7.0	Aroclor 1260	18	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD07-5.0-6.0	Aroclor 1016	0.88	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD07-5.0-6.0	Aroclor 1221	0.88	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD07-5.0-6.0	Aroclor 1232	0.88	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD07-5.0-6.0	Aroclor 1242	18	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD07-5.0-6.0	Aroclor 1248	0.88	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD07-5.0-6.0	Aroclor 1254	31	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD07-5.0-6.0	Aroclor 1260	22	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD08-5.0-6.0	Aroclor 1016	0.97	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-5.0-6.0	Aroclor 1221	0.97	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-5.0-6.0	Aroclor 1232	0.97	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-5.0-6.0	Aroclor 1242	43	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD08-5.0-6.0	Aroclor 1248	0.97	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-5.0-6.0	Aroclor 1254	68	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD08-5.0-6.0	Aroclor 1260	84	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD08-6.0-7.0	Aroclor 1016	0.88	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-6.0-7.0	Aroclor 1221	0.88	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-6.0-7.0	Aroclor 1232	0.88	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-6.0-7.0	Aroclor 1242	37	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD08-6.0-7.0	Aroclor 1248	0.88	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-6.0-7.0	Aroclor 1254	75	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD08-6.0-7.0	Aroclor 1260	71	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD08-7.0-8.0	Aroclor 1016	0.87	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-7.0-8.0	Aroclor 1221	0.87	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-7.0-8.0	Aroclor 1232	0.87	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-7.0-8.0	Aroclor 1242	21	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD08-7.0-8.0	Aroclor 1248	0.87	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD08-7.0-8.0	Aroclor 1254	33	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD08-7.0-8.0	Aroclor 1260	22	ug/kg	J-	HT>UCL	K2208213
SW8082A	WC-SCPD45-5.0-6.0	Aroclor 1016	0.93	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD45-5.0-6.0	Aroclor 1221	0.93	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD45-5.0-6.0	Aroclor 1232	0.93	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD45-5.0-6.0	Aroclor 1242	0.93	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD45-5.0-6.0	Aroclor 1248	0.93	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD45-5.0-6.0	Aroclor 1254	0.93	ug/kg	UJ	HT>UCL	K2208213
SW8082A	WC-SCPD45-5.0-6.0	Aroclor 1260	0.93	ug/kg	UJ	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	2-Methylnaphthalene	25	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Acenaphthene	16	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Acenaphthylene	16	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Anthracene	24	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Benzo(a)anthracene	49	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Benzo(a)pyrene	71	ug/kg	J-	HT>UCL	K2208213

Table H-6- Holding Time Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8270DSIM	WC-SCPD05-5.0-6.0	Benzo(b)fluoranthene	73	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Benzo(g,h,i)perylene	60	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Benzo(k)fluoranthene	25	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Chrysene	83	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Dibenzo(a,h)anthracene	7.7	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Dibenzofuran	13	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Fluoranthene	180	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Fluorene	27	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Indeno(1,2,3-cd)pyrene	51	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Naphthalene	53	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Phenanthrene	190	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-5.0-6.0	Pyrene	220	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	2-Methylnaphthalene	50	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Acenaphthene	40	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Acenaphthylene	33	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Anthracene	57	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Benzo(a)anthracene	94	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Benzo(a)pyrene	130	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Benzo(b)fluoranthene	130	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Benzo(g,h,i)perylene	120	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Benzo(k)fluoranthene	42	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Chrysene	150	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Dibenzo(a,h)anthracene	13	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Dibenzofuran	21	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Fluoranthene	340	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Fluorene	48	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Indeno(1,2,3-cd)pyrene	96	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Naphthalene	84	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Phenanthrene	340	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD05-6.0-7.0	Pyrene	430	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	2-Methylnaphthalene	51	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Acenaphthene	29	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Acenaphthylene	40	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Anthracene	41	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Benzo(a)anthracene	58	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Benzo(a)pyrene	96	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Benzo(b)fluoranthene	98	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Benzo(g,h,i)perylene	94	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Benzo(k)fluoranthene	31	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Chrysene	88	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Dibenzo(a,h)anthracene	7.7	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Dibenzofuran	19	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Fluoranthene	250	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Fluorene	36	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Indeno(1,2,3-cd)pyrene	71	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Naphthalene	180	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Phenanthrene	240	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-5.0-6.0	Pyrene	310	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	2-Methylnaphthalene	41	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Acenaphthene	20	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Acenaphthylene	32	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Anthracene	33	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Benzo(a)anthracene	45	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Benzo(a)pyrene	77	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Benzo(b)fluoranthene	74	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Benzo(g,h,i)perylene	73	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Benzo(k)fluoranthene	24	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Chrysene	65	ug/kg	J-	HT>UCL	K2208213

Table H-6- Holding Time Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8270DSIM	WC-SCPD06-6.0-7.0	Dibenzo(a,h)anthracene	5.9	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Dibenzofuran	13	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Fluoranthene	180	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Fluorene	24	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Indeno(1,2,3-cd)pyrene	57	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Naphthalene	95	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Phenanthrene	170	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD06-6.0-7.0	Pyrene	230	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	2-Methylnaphthalene	17	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Acenaphthene	20	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Acenaphthylene	9.6	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Anthracene	25	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Benzo(a)anthracene	34	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Benzo(a)pyrene	44	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Benzo(b)fluoranthene	43	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Benzo(g,h,i)perylene	30	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Benzo(k)fluoranthene	14	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Chrysene	46	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Dibenzo(a,h)anthracene	4.7	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Dibenzofuran	8.9	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Fluoranthene	110	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Fluorene	23	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Indeno(1,2,3-cd)pyrene	27	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Naphthalene	30	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Phenanthrene	140	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD07-5.0-6.0	Pyrene	120	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	2-Methylnaphthalene	180	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Acenaphthene	110	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Acenaphthylene	94	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Anthracene	90	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Benzo(a)anthracene	88	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Benzo(a)pyrene	110	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Benzo(b)fluoranthene	120	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Benzo(g,h,i)perylene	98	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Benzo(k)fluoranthene	42	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Chrysene	140	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Dibenzo(a,h)anthracene	10	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Dibenzofuran	58	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Fluoranthene	440	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Fluorene	110	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Indeno(1,2,3-cd)pyrene	75	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Naphthalene	490	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Phenanthrene	530	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-5.0-6.0	Pyrene	520	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	2-Methylnaphthalene	150	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Acenaphthene	83	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Acenaphthylene	74	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Anthracene	79	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Benzo(a)anthracene	81	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Benzo(a)pyrene	110	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Benzo(b)fluoranthene	110	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Benzo(g,h,i)perylene	89	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Benzo(k)fluoranthene	36	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Chrysene	120	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Dibenzo(a,h)anthracene	9.8	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Dibenzofuran	47	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Fluoranthene	370	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Fluorene	91	ug/kg	J-	HT>UCL	K2208213

Table H-6- Holding Time Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8270DSIM	WC-SCPD08-6.0-7.0	Indeno(1,2,3-cd)pyrene	70	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Naphthalene	410	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Phenanthrene	450	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-6.0-7.0	Pyrene	430	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	2-Methylnaphthalene	25	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Acenaphthene	56	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Acenaphthylene	18	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Anthracene	44	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Benzo(a)anthracene	100	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Benzo(a)pyrene	140	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Benzo(b)fluoranthene	130	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Benzo(g,h,i)perylene	86	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Benzo(k)fluoranthene	48	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Chrysene	120	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Dibenzo(a,h)anthracene	12	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Dibenzofuran	11	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Fluoranthene	270	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Fluorene	34	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Indeno(1,2,3-cd)pyrene	84	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Naphthalene	63	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Phenanthrene	230	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD08-7.0-8.0	Pyrene	320	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	2-Methylnaphthalene	0.63	ug/kg	UJ	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Acenaphthene	3.5	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Acenaphthylene	0.48	ug/kg	UJ	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Anthracene	5.8	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Benzo(a)anthracene	3.1	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Benzo(a)pyrene	0.65	ug/kg	UJ	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Benzo(b)fluoranthene	2.2	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Benzo(g,h,i)perylene	0.68	ug/kg	UJ	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Benzo(k)fluoranthene	0.65	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Chrysene	3.2	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Dibenzo(a,h)anthracene	0.4	ug/kg	UJ	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Dibenzofuran	1.4	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Fluoranthene	10	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Fluorene	4.9	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Indeno(1,2,3-cd)pyrene	0.62	ug/kg	UJ	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Naphthalene	0.93	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Phenanthrene	28	ug/kg	J-	HT>UCL	K2208213
SW8270DSIM	WC-SCPD45-5.0-6.0	Pyrene	11	ug/kg	J-	HT>UCL	K2208213

Notes:
HT>UCL = Sample was extracted and analyzed outside of holding time
µg/kg = microgram per kilogram
ID = Identifier

Qualifier Definitions
J- = Analyte was present but reported value may not be accurate or precise, low bias.
UJ = The analyte was not detected above the detection limit objective; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table H-7. Laboratory Blank Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	MDL	Units	Validation Flag	Reason Codes	SDG	Associated Blank Concentration
E1613B	WC-SB11-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00102	0.000142	µg/kg	U	LB<RL	K2204428	0.000224
E1613B	WC-SB11-1.0-2.0	1,2,3,7,8,9-HxCDF	0.00041	0.000284	µg/kg	U	LB<RL	K2204428	0.00022
E1613B	WC-SB11-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.00166	0.000344	µg/kg	U	LB<RL	K2204428	0.000448
E1613B	WC-SB11-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.000603	0.0000831	µg/kg	U	LB<RL	K2204428	0.000184
E1613B	WC-SB11-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.00018	0.0000973	µg/kg	U	LB<RL	K2204428	0.000224
E1613B	WC-SB11-2.0-3.0	OCDF	0.00189	0.000419	µg/kg	U	LB<RL	K2204428	0.000423
E1613B	WC-SB11-2.0-3.0	Total HpCDD	0.00166	0.000344	µg/kg	U	LB<RL	K2204428	0.000708
E1613B	WC-SB11-2.0-3.0	Total HpCDF	0.000603	0.0000899	µg/kg	U	LB<RL	K2204428	0.000224
E1613B	WC-SB11-3.0-4.0	1,2,3,4,6,7,8-HpCDD	0.00201	0.000236	µg/kg	U	LB<RL	K2204428	0.000448
E1613B	WC-SB11-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.00035	0.0000535	µg/kg	U	LB<RL	K2204428	0.000184
E1613B	WC-SB11-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.000129	0.0000607	µg/kg	U	LB<RL	K2204428	0.000224
E1613B	WC-SB11-3.0-4.0	Total HpCDD	0.00201	0.000236	µg/kg	U	LB<RL	K2204428	0.000708
E1613B	WC-SB11-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.000465	0.0000502	µg/kg	U	LB<RL	K2204428	0.000184
E1613B	WC-SB11-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.00013	0.0000546	µg/kg	U	LB<RL	K2204428	0.000224
E1613B	WC-SB11-4.0-5.0	Total HpCDF	0.00013	0.0000524	µg/kg	U	LB<RL	K2204428	0.000224
E1613B	WC-SB11-4.0-5.0	Total HxCDF	0.000184	0.0000934	µg/kg	U	LB<RL	K2204428	0.000363
E1613B	WC-SCPD06-1.0-2.0	1,2,3,7,8,9-HxCDD	0.000561	0.000165	µg/kg	U	LB<RL	K2203181	0.000117
E1613B	WC-SCPD07-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.000678	0.000137	µg/kg	U	LB<RL	K2204707	0.000224
E1613B	WC-SCPD07-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000666	0.000233	µg/kg	U	LB<RL	K2204707	0.00022
E1613B	WC-SCPD07-1.0-2.0	2,3,4,6,7,8-HxCDF	0.00059	0.000184	µg/kg	U	LB<RL	K2204707	0.000143
E1613B	WC-SCPD07-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.000975	0.000534	µg/kg	U	LB<RL	K2204707	0.000224
E1613B	WC-SCPD07-3.0-4.0	1,2,3,7,8,9-HxCDF	0.000518	0.000245	µg/kg	U	LB<RL	K2204707	0.00022
E1613B	WC-SCPD07-4.0-5.0	1,2,3,7,8,9-HxCDF	0.000526	0.000281	µg/kg	U	LB<RL	K2204707	0.00022
E1613B	WC-SCPD08-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.000884	0.000165	µg/kg	U	LB<RL	K2204707	0.000224
E1613B	WC-SCPD08-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000495	0.000149	µg/kg	U	LB<RL	K2204707	0.00022
E1613B	WC-SCPD08-1.0-2.0	2,3,4,6,7,8-HxCDF	0.00059	0.000136	µg/kg	U	LB<RL	K2204707	0.000143
E1613B	WC-SCPD08-2.0-3.0	1,2,3,7,8,9-HxCDF	0.000504	0.000308	µg/kg	U	LB<RL	K2204707	0.00022
E1613B	WC-SCPD08-3.0-4.0	1,2,3,7,8,9-HxCDF	0.000335	0.00028	µg/kg	U	LB<RL	K2204707	0.00022
E1613B	WC-SCPD08-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.00097	0.000307	µg/kg	U	LB<RL	K2204707	0.000224
E1613B	WC-SCPD08-4.0-5.0	1,2,3,7,8,9-HxCDF	0.000288	0.000264	µg/kg	U	LB<RL	K2204707	0.00022
E1613B	WC-SCPD08-7.0-8.0	1,2,3,7,8,9-HxCDF	0.000676	0.000499	ug/kg	U	LB<RL	K2208213	0.000143
E1613B	WC-SCPD09-3.0-4.0	1,2,3,7,8,9-HxCDF	0.000171	0.0000981	µg/kg	U	LB<RL	K2203194	0.000058
E1613B	WC-SCPD09-4.0-5.0	1,2,3,7,8,9-HxCDF	0.000196	0.000097	µg/kg	U	LB<RL	K2203194	0.000058
E1613B	WC-SCPD10-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.00024	0.000038	µg/kg	U	LB<RL	L2659646	0.00032
E1613B	WC-SCPD10-1.0-2.0	OCDF	0.00147	0.00014	µg/kg	U	LB<RL	L2659646	0.00083
E1613B	WC-SCPD10-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.000265	0.000016	µg/kg	U	LB<RL	L2659646	0.00014
E1613B	WC-SCPD10-2.0-3.0	1,2,3,7,8-PeCDF	0.000046	0.000016	µg/kg	U	LB<RL	L2659646	0.000034
E1613B	WC-SCPD10-2.0-3.0	OCDF	0.000824	0.000048	µg/kg	U	LB<RL	L2659646	0.00052
E1613B	WC-SCPD10-2.0-3.0	Total TCDF	0.000126	0.000022	µg/kg	U	LB<RL	L2659646	0.0000522
E1613B	WC-SCPD10-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.00025	0.000024	µg/kg	U	LB<RL	L2659646	0.00014
E1613B	WC-SCPD10-3.0-4.0	1,2,3,7,8-PeCDF	0.000054	0.000024	µg/kg	U	LB<RL	L2659646	0.000034
E1613B	WC-SCPD10-3.0-4.0	OCDF	0.00105	0.000042	µg/kg	U	LB<RL	L2659646	0.00052
E1613B	WC-SCPD10-3.0-4.0	Total TCDF	0.000234	0.000028	µg/kg	U	LB<RL	L2659646	0.0000522
E1613B	WC-SCPD10-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.00019	0.00002	µg/kg	U	LB<RL	L2659646	0.00014
E1613B	WC-SCPD10-4.0-5.0	1,2,3,7,8-PeCDF	0.0000663	0.000015	µg/kg	U	LB<RL	L2659646	0.000034
E1613B	WC-SCPD10-4.0-5.0	OCDF	0.00111	0.000031	µg/kg	U	LB<RL	L2659646	0.00052
E1613B	WC-SCPD10-4.0-5.0	Total TCDF	0.000143	0.000021	µg/kg	U	LB<RL	L2659646	0.0000522
E1613B	WC-SCPD14-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.000494	0.00014	µg/kg	U	LB<RL	L2608826	0.000106
E1613B	WC-SCPD14-2.0-3.0	1,2,3,7,8,9-HxCDF	0.000064	0.000046	µg/kg	U	LB<RL	L2608826	0.0000402
E1613B	WC-SCPD14-2.0-3.0	OCDF	0.0014	0.00016	µg/kg	U	LB<RL	L2608826	0.00032
E1613B	WC-SCPD14-3.0-4.0	OCDF	0.000989	0.0003	µg/kg	U	LB<RL	L2608826	0.00032
E1613B	WC-SCPD14-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.000076	0.000038	µg/kg	U	LB<RL	L2608826	0.000106
E1613B	WC-SCPD19-1.0-2.0	1,2,3,6,7,8-HxCDD	0.000091	0.000063	µg/kg	U	LB<RL	L2606435	0.000031
E1613B	WC-SCPD19-1.0-2.0	OCDF	0.00111	0.00017	µg/kg	U	LB<RL	L2606435	0.000396
E1613B	WC-SCPD19-2.0-3.0	OCDF	0.000425	0.0004	µg/kg	U	LB<RL	L2606435	0.000396
E1613B	WC-SCPD19-3.0-4.0	1,2,3,6,7,8-HxCDD	0.000104	0.000047	µg/kg	U	LB<RL	L2606435	0.000031
E1613B	WC-SCPD19-3.0-4.0	OCDF	0.00017	0.000054	µg/kg	U	LB<RL	L2606435	0.000396
E1613B	WC-SCPD19-4.0-5.0	1,2,3,6,7,8-HxCDD	0.0000866	0.000037	µg/kg	U	LB<RL	L2606435	0.000031
E1613B	WC-SCPD19-4.0-5.0	OCDF	0.000082	0.000048	µg/kg	U	LB<RL	L2606435	0.000396
E1613B	WC-SCPD23-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.00026	0.000034	µg/kg	U	LB<RL	L2608826	0.000106
E1613B	WC-SCPD23-2.0-3.0	OCDF	0.00075	0.000088	µg/kg	U	LB<RL	L2608826	0.00032
E1613B	WC-SCPD23-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.00012	0.00002	µg/kg	U	LB<RL	L2608826	0.000106
E1613B	WC-SCPD23-3.0-4.0	1,2,3,7,8,9-HxCDF	0.0000304	0.000022	µg/kg	U	LB<RL	L2608826	0.0000402
E1613B	WC-SCPD23-3.0-4.0	OCDF	0.0002	0.000065	µg/kg	U	LB<RL	L2608826	0.00032
E1613B	WC-SCPD23-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.000288	0.000035	µg/kg	U	LB<RL	L2608826	0.000106
E1613B	WC-SCPD23-4.0-5.0	OCDF	0.0005	0.000054	µg/kg	U	LB<RL	L2608826	0.00032
E1613B	WC-SCPD24-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.00025	0.000048	µg/kg	U	LB<RL	L2659646	0.00014
E1613B	WC-SCPD24-2.0-3.0	1,2,3,7,8-PeCDF	0.000043	0.000016	µg/kg	U	LB<RL	L2659646	0.000034
E1613B	WC-SCPD24-2.0-3.0	OCDF	0.00129	0.000045	µg/kg	U	LB<RL	L2659646	0.00052
E1613B	WC-SCPD24-2.0-3.0	Total TCDF	0.0000943	0.000023	µg/kg	U	LB<RL	L2659646	0.0000522
E1613B	WC-SCPD24-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.000563	0.000048	µg/kg	U	LB<RL	L2659632	0.000135
E1613B	WC-SCPD24-3.0-4.0	OCDF	0.00213	0.00006	µg/kg	U	LB<RL	L2659632	0.00171
E1613B	WC-SCPD24-3.0-4.0	Total HpCDF	0.000563	0.000072	µg/kg	U	LB<RL	L2659632	0.000135
E1613B	WC-SCPD24-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.000184	0.000023	µg/kg	U	LB<RL	L2659632	0.000135
E1613B	WC-SCPD24-4.0-5.0	OCDD	0.0167	0.000078	µg/kg	U	LB<RL	L2659632	0.00396
E1613B	WC-SCPD24-4.0-5.0	OCDF	0.00071	0.000057	µg/kg	U	LB<RL	L2659632	0.00171
E1613B	WC-SCPD24-4.0-5.0	Total HpCDF	0.000184	0.000036	µg/kg	U	LB<RL	L2659632	0.000135
E1613B	WC-SCPD25-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00118	0.000342	µg/kg	U	LB<RL	K2205401	0.000289
E1613B	WC-SCPD25-1.0-2.0	1,2,3,4,7,8-HxCDD	0.000339	0.000241	µg/kg	U	LB<RL	K2205401	0.000138
E1613B	WC-SCPD25-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000547	0.000267	µg/kg	U	LB<RL	K2205401	0.000271
E1613B	WC-SCPD25-1.0-2.0	2,3,4,6,7,8-HxCDF	0.000699	0.000219	µg/kg	U	LB<RL	K2205401	0.000199
E1613B	WC-SCPD25-2.0-3.0	2,3,4,6,7,8-HxCDF	0.000158	0.000146	µg/kg	U	LB<RL	K2205401	0.000199
E1613B	WC-SCPD25-2.0-3.0	2,3,4,7,8-PeCDF	0.000204	0.000109	µg/kg	U	LB<RL	K2205401	0.0000979
E1613B	WC-SCPD25-2.0-3.0	Total HxCDF	0.00226	0.000165	µg/kg	U	LB<RL	K2205401	0.000595
E1613B	WC-SCPD25-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.000728	0.000153	µg/kg	U	LB<RL	K2205401	0.000275
E1613B	WC-SCPD25-3.0-4.0	Total HxCDD	0.000763	0.000254	µg/kg	U	LB<RL	K2205401	0.00028

Table H-7. Laboratory Blank Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Method	Sample ID	Analyte	Result	MDL	Units	Validation Flag	Reason Codes	SDG	Associated Blank Concentration
E1613B	WC-SCPD25-3.0-4.0	Total HxCDF	0.000504	0.000131	µg/kg	U	LB<RL	K2205401	0.000595
E1613B	WC-SCPD25-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.000589	0.000549	µg/kg	U	LB<RL	K2205401	0.000289
E1613B	WC-SCPD25-4.0-5.0	1,2,3,4,7,8-HxCDF	0.000315	0.00019	µg/kg	U	LB<RL	K2205401	0.000125
E1613B	WC-SCPD25-4.0-5.0	2,3,4,6,7,8-HxCDF	0.00025	0.000185	µg/kg	U	LB<RL	K2205401	0.000199
E1613B	WC-SCPD26A-1.0-2.0	Total PeCDD	0.000441	0.000139	µg/kg	U	LB<RL	K2204432	0.000299
E1613B	WC-SCPD26A-3.0-4.0	1,2,3,7,8,9-HxCDF	0.000605	0.000229	µg/kg	U	LB<RL	K2204432	0.00022
E1613B	WC-SCPD27-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.00043	0.000039	µg/kg	U	LB<RL	L2659632	0.000135
E1613B	WC-SCPD27-3.0-4.0	OCDF	0.00179	0.000053	µg/kg	U	LB<RL	L2659632	0.00171
E1613B	WC-SCPD27-3.0-4.0	Total HpCDF	0.000635	0.00006	µg/kg	U	LB<RL	L2659632	0.000135
E1613B	WC-SCPD27-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.00014	0.000048	µg/kg	U	LB<RL	L2659632	0.000135
E1613B	WC-SCPD27-4.0-5.0	OCDF	0.0011	0.000095	µg/kg	U	LB<RL	L2659632	0.00171
E1613B	WC-SCPD28-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.000459	0.000046	µg/kg	U	LB<RL	L2608823	0.000106
E1613B	WC-SCPD28-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.000063	0.000059	µg/kg	U	LB<RL	L2608823	0.00007
E1613B	WC-SCPD28-4.0-5.0	OCDF	0.00134	0.000064	µg/kg	U	LB<RL	L2608823	0.000332
E1613B	WC-SCPD28-4.0-5.0	Total HpCDF	0.000522	0.000059	µg/kg	U	LB<RL	L2608823	0.000106
E1613B	WC-SCPD28-4.0-5.0FD	1,2,3,4,6,7,8-HpCDF	0.000149	0.000039	µg/kg	U	LB<RL	L2608823	0.000106
E1613B	WC-SCPD28-4.0-5.0FD	1,2,3,7,8,9-HxCDD	0.00015	0.000058	µg/kg	U	LB<RL	L2608823	0.0000418
E1613B	WC-SCPD28-4.0-5.0FD	OCDF	0.000338	0.000036	µg/kg	U	LB<RL	L2608823	0.000332
E1613B	WC-SCPD28-4.0-5.0FD	Total HpCDF	0.000276	0.000055	µg/kg	U	LB<RL	L2608823	0.000106
E1613B	WC-SCPD29-7.0-8.0	1,2,3,4,7,8,9-HpCDF	0.000129	0.0000328	µg/kg	U	LB<RL	K2200743	0.0000574
E1613B	WC-SCPD29-7.0-8.0	1,2,3,7,8,9-HxCDD	0.000213	0.0000364	µg/kg	U	LB<RL	K2200743	0.0000581
E1613B	WC-SCPD31-10.0-11.0	1,2,3,7,8,9-HxCDD	0.00024	0.0000563	µg/kg	U	LB<RL	K2200743	0.0000581
E1613B	WC-SCPD31-11.0-12.0	1,2,3,4,6,7,8-HpCDF	0.000169	0.000102	µg/kg	U	LB<RL	K2200743	0.0000467
E1613B	WC-SCPD32-14.0-14.8	1,2,3,4,6,7,8-HpCDF	0.000227	0.000119	µg/kg	U	LB<RL	K2203194	0.0000729
E1613B	WC-SCPD33-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.000396	0.00005	µg/kg	U	LB<RL	L2659655	0.000087
E1613B	WC-SCPD33-2.0-3.0	1,2,3,4,7,8-HxCDF	0.0000323	0.000023	µg/kg	U	LB<RL	L2659655	0.0000463
E1613B	WC-SCPD33-2.0-3.0	1,2,3,6,7,8-HxCDF	0.000033	0.000022	µg/kg	U	LB<RL	L2659655	0.0000382
E1613B	WC-SCPD33-2.0-3.0	OCDF	0.00054	0.000086	µg/kg	U	LB<RL	L2659655	0.00063
E1613B	WC-SCPD33-2.0-3.0	Total HxCDF	0.0000521	0.000034	µg/kg	U	LB<RL	L2659655	0.0000845
E1613B	WC-SCPD33-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.000187	0.000013	µg/kg	U	LB<RL	L2659655	0.000087
E1613B	WC-SCPD33-3.0-4.0	OCDF	0.00128	0.000043	µg/kg	U	LB<RL	L2659655	0.00063
E1613B	WC-SCPD33-3.0-4.0	Total HxCDF	0.0000409	0.000021	µg/kg	U	LB<RL	L2659655	0.0000845
E1613B	WC-SCPD33-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.000061	0.000019	µg/kg	U	LB<RL	L2659655	0.000087
E1613B	WC-SCPD33-4.0-5.0	1,2,3,6,7,8-HxCDF	0.00002	0.0000096	µg/kg	U	LB<RL	L2659655	0.0000382
E1613B	WC-SCPD33-4.0-5.0	1,2,3,7,8-PeCDF	0.000017	0.000013	µg/kg	U	LB<RL	L2659655	0.000063
E1613B	WC-SCPD33-4.0-5.0	OCDF	0.00031	0.000057	µg/kg	U	LB<RL	L2659655	0.00063
E1613B	WC-SCPD40-8.0-9.0	1,2,3,4,6,7,8-HpCDF	0.00123	0.000261	µg/kg	U	LB<RL	K2205401	0.000275
E1613B	WC-SCPD40-8.0-9.0	1,2,3,4,7,8-HxCDF	0.000165	0.000139	µg/kg	U	LB<RL	K2205401	0.000125
E1613B	WC-SCPD40-8.0-9.0	1,2,3,6,7,8-HxCDF	0.000271	0.000144	µg/kg	U	LB<RL	K2205401	0.000154
E1613B	WC-SCPD40-8.0-9.0	1,2,3,7,8,9-HxCDF	0.000304	0.000202	µg/kg	U	LB<RL	K2205401	0.000271
E1613B	WC-SCPD40-8.0-9.0	2,3,4,6,7,8-HxCDF	0.000333	0.000139	µg/kg	U	LB<RL	K2205401	0.000199
E1613B	WC-SCPD40-8.0-9.0	Total HxCDF	0.0012	0.000153	µg/kg	U	LB<RL	K2205401	0.000595
E1613B	WC-SCPD40-9.0-9.5	1,2,3,4,6,7,8-HpCDF	0.00136	0.000246	µg/kg	U	LB<RL	K2205401	0.000275
E1613B	WC-SCPD40-9.0-9.5	1,2,3,4,7,8,9-HpCDF	0.000392	0.000296	µg/kg	U	LB<RL	K2205401	0.000289
E1613B	WC-SCPD40-9.0-9.5	1,2,3,4,7,8-HxCDF	0.000235	0.000173	µg/kg	U	LB<RL	K2205401	0.000125
E1613B	WC-SCPD40-9.0-9.5	1,2,3,6,7,8-HxCDF	0.000255	0.000185	µg/kg	U	LB<RL	K2205401	0.000154
E1613B	WC-SCPD40-9.0-9.5	2,3,4,6,7,8-HxCDF	0.000318	0.000174	µg/kg	U	LB<RL	K2205401	0.000199
E1613B	WC-SCPD40-9.0-9.5	2,3,4,7,8-PeCDF	0.000155	0.000103	µg/kg	U	LB<RL	K2205401	0.0000979
E1613B	WC-SCPD40-9.0-9.5	Total HxCDF	0.00125	0.000193	µg/kg	U	LB<RL	K2205401	0.000595
E1613B	WC-SCPD41-7.0-8.0	1,2,3,7,8,9-HxCDF	0.000212	0.000154	µg/kg	U	LB<RL	K2203194	0.000058
E1613B	WC-SCPD42-4.0-5.0	1,2,3,7,8-PeCDF	0.0000779	0.000022	µg/kg	U	LB<RL	L2606306	0.0000777
E1613B	WC-SCPD42-4.0-5.0	1,2,3,7,8-PeCDD	0.000048	0.000038	µg/kg	U	LB<RL	L2606306	0.0000392
E1613B	WC-SCPD42-4.0-5.0	1,2,3,6,7,8-HxCDF	0.000067	0.000035	µg/kg	U	LB<RL	L2606306	0.000065
E1613B	WC-SCPD42-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.00091	0.000046	µg/kg	U	LB<RL	L2606306	0.000264
E1613B	WC-SCPD42-4.0-5.0	1,2,3,4,7,8-HxCDF	0.00012	0.000034	µg/kg	U	LB<RL	L2606306	0.0000638
E1613B	WC-SCPD42-4.0-5.0	2,3,4,7,8-PeCDF	0.0000716	0.00002	µg/kg	U	LB<RL	L2606306	0.0000354
E1613B	WC-SCPD42-4.0-5.0	2,3,7,8-TCDF	0.000066	0.000021	µg/kg	U	LB<RL	L2606306	0.000042
E1613B	WC-SCPD42-4.0-5.0	OCDF	0.00181	0.00012	µg/kg	U	LB<RL	L2606306	0.000838
E1613B	WC-SCPD42-4.0-5.0	Total HpCDF	0.00109	0.000071	µg/kg	U	LB<RL	L2606306	0.000599
E1613B	WC-SCPD42-4.0-5.0	Total HxCDF	0.000334	0.00005	µg/kg	U	LB<RL	L2606306	0.000135
E1613B	WC-SCPD42-4.0-5.0	Total PeCDF	0.000351	0.000022	µg/kg	U	LB<RL	L2606306	0.000113
E1613B	WC-SCPD42-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.000436	0.000047	µg/kg	U	LB<RL	L2606306	0.000264
E1613B	WC-SCPD42-5.0-6.0	1,2,3,6,7,8-HxCDD	0.000172	0.000082	µg/kg	U	LB<RL	L2606306	0.0000515
E1613B	WC-SCPD42-5.0-6.0	1,2,3,7,8,9-HxCDD	0.000231	0.000086	µg/kg	U	LB<RL	L2606306	0.000047
E1613B	WC-SCPD42-5.0-6.0	1,2,3,7,8-PeCDD	0.0000566	0.000044	µg/kg	U	LB<RL	L2606306	0.0000392
E1613B	WC-SCPD42-5.0-6.0	2,3,4,7,8-PeCDF	0.000021	0.000021	µg/kg	U	LB<RL	L2606306	0.0000354
E1613B	WC-SCPD42-5.0-6.0	OCDD	0.032	0.00027	µg/kg	U	LB<RL	L2606306	0.00836
E1613B	WC-SCPD42-5.0-6.0	OCDF	0.000584	0.00012	µg/kg	U	LB<RL	L2606306	0.000838
E1613B	WC-SCPD42-5.0-6.0	Total HpCDF	0.000782	0.000069	µg/kg	U	LB<RL	L2606306	0.000599
E1613B	WC-SCPD42-5.0-6.0	Total PeCDF	0.0000266	0.000023	µg/kg	U	LB<RL	L2606306	0.000113
E1613B	WC-SCPD42-6.0-7.0	1,2,3,4,6,7,8-HpCDD	0.00311	0.00014	µg/kg	U	LB<RL	L2606306	0.00064
E1613B	WC-SCPD42-6.0-7.0	1,2,3,4,6,7,8-HpCDF	0.0000992	0.000045	µg/kg	U	LB<RL	L2606306	0.000264
E1613B	WC-SCPD42-6.0-7.0	OCDD	0.029	0.00036	µg/kg	U	LB<RL	L2606306	0.00836
E1613B	WC-SCPD42-6.0-7.0	OCDF	0.000301	0.00016	µg/kg	U	LB<RL	L2606306	0.000838
E1613B	WC-SCPD42-6.0-7.0	Total HpCDF	0.0000992	0.000066	µg/kg	U	LB<RL	L2606306	0.000599
E1613B	WC-SCPD44-7.0-8.0	1,2,3,4,6,7,8-HpCDF	0.000299	0.0000299	µg/kg	U	LB<RL	K2203194	0.0000729
E1613B	WC-SCPD44-7.0-8.0	1,2,3,6,7,8-HxCDD	0.000198	0.0000471	µg/kg	U	LB<RL	K2203194	0.0000707
E1613B	WC-SCPD44-8.0-8.9	1,2,3,7,8,9-HxCDF	0.000187	0.000123	µg/kg	U	LB<RL	K2203194	0.000058
E1613B	WC-SCPD45-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.000161	0.00002	µg/kg	U	LB<RL	L2658841	0.000087
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.000665	0.0000422	ug/kg	U	LB<RL	K2208213	0.000143
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.000107	0.0000627	ug/kg	U	LB<RL	K2208213	0.000114
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,7,8-HxCDF	0.000113	0.0000638	ug/kg	U	LB<RL	K2208213	0.0000618
E1613B	WC-SCPD45-5.0-6.0	1,2,3,6,7,8-HxCDD	0.000203	0.0000658	ug/kg	U	LB<RL	K2208213	0.000059
E1613B	WC-SCPD45-5.0-6.0	1,2,3,6,7,8-HxCDF	0.000132	0.0000689	ug/kg	U	LB<RL	K2208213	0.0000616
E1613B	WC-SCPD45-5.0-6.0	Total HxCDF	0.000491	0.0000726	ug/kg	U	LB<RL	K2208213	0.000132
E1613B	WC-SCPD47-2.0-3.0	1,2,3,7,8,9-HxCDF	0.00015	0.000087	µg/kg	U	LB<RL	L2611545	0.000051

Table H-7. Laboratory Blank Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Method	Sample ID	Analyte	Result	MDL	Units	Validation Flag	Reason Codes	SDG	Associated Blank Concentration
E1613B	WC-SCPD47-3.0-4.0	1,2,3,7,8,9-HxCDF	0.000061	0.000026	µg/kg	U	LB<RL	L2611545	0.000051
E1613B	WC-SCPD47-3.0-4.0	1,2,3,7,8-PeCDF	0.000087	0.000032	µg/kg	U	LB<RL	L2611545	0.0000384
E1613B	WC-SCPD47-3.0-4.0	Total PeCDF	0.0000599	0.000032	µg/kg	U	LB<RL	L2611545	0.0000384
E1613B	WC-SCPD47-4.0-5.0	1,2,3,7,8,9-HxCDF	0.000035	0.000021	µg/kg	U	LB<RL	L2611545	0.000051
E1613B	WC-SCPD47-4.0-5.0	1,2,3,7,8-PeCDF	0.000045	0.000017	µg/kg	U	LB<RL	L2611545	0.0000384
E1613B	WC-SCPD47-4.0-5.0	OCDF	0.00034	0.000039	µg/kg	U	LB<RL	L2611545	0.00017
E1613B	WC-SCPD47-4.0-5.0	Total PeCDF	0.0000692	0.000017	µg/kg	U	LB<RL	L2611545	0.0000384
E1613B	WC-SGPD02	1,2,3,7,8,9-HxCDF	0.000478	0.000091	µg/kg	U	LB<RL	L2611632	0.00012
E1613B	WC-SGPD07A	1,2,3,4,7,8,9-HpCDF	0.000863	0.000181	µg/kg	U	LB<RL	K2204707	0.000224
E1613B	WC-SGPD07A	2,3,4,6,7,8-HxCDF	0.000561	0.00018	µg/kg	U	LB<RL	K2204707	0.000143
E1613B	WC-SGPD07A	Total PeCDD	0.000862	0.000149	µg/kg	U	LB<RL	K2204707	0.000299
E1613B	WC-SGPD08	1,2,3,4,7,8,9-HpCDF	0.000397	0.000075	µg/kg	U	LB<RL	K2204707	0.000224
E1613B	WC-SGPD08	1,2,3,7,8,9-HxCDF	0.000298	0.0000908	µg/kg	U	LB<RL	K2204707	0.00022
E1613B	WC-SGPD08	2,3,4,6,7,8-HxCDF	0.000231	0.0000756	µg/kg	U	LB<RL	K2204707	0.000143
E1613B	WC-SGPD09	1,2,3,7,8,9-HxCDF	0.000222	0.000149	µg/kg	U	LB<RL	K2203181	0.0000452
E1613B	WC-SGPD13	1,2,3,7,8,9-HxCDF	0.000668	0.000069	µg/kg	U	LB<RL	L2612314	0.000154
E1613B	WC-SGPD17FD	1,2,3,7,8,9-HxCDF	0.000221	0.00016	µg/kg	U	LB<RL	L2615164	0.000154
E1613B	WC-SGPD25	1,2,3,4,7,8,9-HpCDF	0.000596	0.00036	µg/kg	U	LB<RL	K2205401	0.000289
E1613B	WC-SGPD25	1,2,3,4,7,8-HxCDD	0.000384	0.00034	µg/kg	U	LB<RL	K2205401	0.000138
E1613B	WC-SGPD25	1,2,3,6,7,8-HxCDF	0.000573	0.000246	µg/kg	U	LB<RL	K2205401	0.000154
E1613B	WC-SGPD25	1,2,3,7,8,9-HxCDD	0.000603	0.000356	µg/kg	U	LB<RL	K2205401	0.000138
E1613B	WC-SGPD25	1,2,3,7,8,9-HxCDF	0.000491	0.000289	µg/kg	U	LB<RL	K2205401	0.000271
E1613B	WC-SGPD25	2,3,4,6,7,8-HxCDF	0.00046	0.000227	µg/kg	U	LB<RL	K2205401	0.000199
NWTPH-Dx	WC-SB01-0.0-1.0	Diesel Range Organics	7.6	2.8	µg/kg	U	LB<RL	K2111196	2.2
NWTPH-Dx	WC-SB01-0.0-1.0	Residual Range Organics (C25-C36)	47	6	µg/kg	U	LB<RL	K2111196	11
NWTPH-Dx	WC-SB03-0.0-1.0	Diesel Range Organics	6.7	5.7	µg/kg	U	LB<RL	K2111196	2.2
NWTPH-Dx	WC-SB03-0.0-1.0	Residual Range Organics (C25-C36)	39	13	µg/kg	U	LB<RL	K2111196	11
NWTPH-Dx	WC-SB04-0.0-1.0	Diesel Range Organics	5	2.6	µg/kg	U	LB<RL	K2111196	2.2
NWTPH-Dx	WC-SB04-0.0-1.0	Residual Range Organics (C25-C36)	35	5.6	µg/kg	U	LB<RL	K2111196	11
NWTPH-Dx	WC-SB09-0.0-1.0	Residual Range Organics (C25-C36)	17	4.3	µg/kg	U	LB<RL	K2111196	11
NWTPH-Dx	WC-SB11-0.0-1.0	Diesel Range Organics	5.8	2.6	µg/kg	U	LB<RL	K2110977	2.2
NWTPH-Dx	WC-SB11-0.0-1.0	Residual Range Organics (C25-C36)	23	5.6	µg/kg	U	LB<RL	K2110977	11
NWTPH-Dx	WC-SB11-0.0-1.0FD	Diesel Range Organics	3.4	2.6	µg/kg	U	LB<RL	K2110977	2.2
NWTPH-Dx	WC-SB11-0.0-1.0FD	Residual Range Organics (C25-C36)	19	5.7	µg/kg	U	LB<RL	K2110977	11
NWTPH-Dx	WC-SB12-0.0-1.0	Diesel Range Organics	5.6	2.8	µg/kg	U	LB<RL	K2110977	2.2
NWTPH-Dx	WC-SB12-0.0-1.0	Residual Range Organics (C25-C36)	25	6	µg/kg	U	LB<RL	K2110977	11
SW8270D-LL	WC-SB11-0.0-1.0	Bis (2-ethylhexyl) phthalate	19	13	µg/kg	U	LB<RL	K2110977	11
SW8270D-LL	WC-SB11-0.0-1.0FD	Bis (2-ethylhexyl) phthalate	19	13	µg/kg	U	LB<RL	K2110977	11
SW8270D-LL	WC-SB12-0.0-1.0	Bis (2-ethylhexyl) phthalate	20	14	µg/kg	U	LB<RL	K2110977	11
SW8270DSIM	WC-SB01-0.0-1.0	2-Methylnaphthalene	1.4	0.56	µg/kg	U	LB<RL	K2111196	0.43
SW8270DSIM	WC-SB01-0.0-1.0	Benzo(a)anthracene	2.9	0.35	µg/kg	U	LB<RL	K2111196	1.4
SW8270DSIM	WC-SB01-0.0-1.0	Benzo(b)fluoranthene	3.3	0.58	µg/kg	U	LB<RL	K2111196	1.4
SW8270DSIM	WC-SB01-0.0-1.0	Benzo(k)fluoranthene	1.2	0.37	µg/kg	U	LB<RL	K2111196	0.62
SW8270DSIM	WC-SB01-0.0-1.0	Chrysene	2.4	0.47	µg/kg	U	LB<RL	K2111196	1.1
SW8270DSIM	WC-SB01-0.0-1.0	Naphthalene	2.4	0.71	µg/kg	U	LB<RL	K2111196	0.99
SW8270DSIM	WC-SB03-0.0-1.0	2-Methylnaphthalene	0.68	0.59	µg/kg	U	LB<RL	K2111196	0.43
SW8270DSIM	WC-SB03-0.0-1.0	Benzo(a)anthracene	1.1	0.37	µg/kg	U	LB<RL	K2111196	1.4
SW8270DSIM	WC-SB03-0.0-1.0	Benzo(b)fluoranthene	0.71	0.6	µg/kg	U	LB<RL	K2111196	1.4
SW8270DSIM	WC-SB03-0.0-1.0	Naphthalene	2.2	0.74	µg/kg	U	LB<RL	K2111196	0.99
SW8270DSIM	WC-SB03-0.0-1.0	Pyrene	0.96	0.51	µg/kg	U	LB<RL	K2111196	1.2
SW8270DSIM	WC-SB04-0.0-1.0	Benzo(g,h,i)perylene	1.7	0.58	µg/kg	U	LB<RL	K2111196	0.97
SW8270DSIM	WC-SB04-0.0-1.0	Indeno(1,2,3-cd)pyrene	2.4	0.52	µg/kg	U	LB<RL	K2111196	0.95
SW8270DSIM	WC-SB09-0.0-1.0	2-Methylnaphthalene	0.46	0.41	µg/kg	U	LB<RL	K2111196	0.43
SW8270DSIM	WC-SB09-0.0-1.0	Benzo(a)anthracene	0.93	0.26	µg/kg	U	LB<RL	K2111196	1.4
SW8270DSIM	WC-SB09-0.0-1.0	Benzo(a)pyrene	1.1	0.42	µg/kg	U	LB<RL	K2111196	1.2
SW8270DSIM	WC-SB09-0.0-1.0	Benzo(b)fluoranthene	1	0.42	µg/kg	U	LB<RL	K2111196	1.4
SW8270DSIM	WC-SB09-0.0-1.0	Benzo(g,h,i)perylene	1.9	0.44	µg/kg	U	LB<RL	K2111196	0.97
SW8270DSIM	WC-SB09-0.0-1.0	Benzo(k)fluoranthene	0.57	0.27	µg/kg	U	LB<RL	K2111196	0.62
SW8270DSIM	WC-SB09-0.0-1.0	Chrysene	0.67	0.34	µg/kg	U	LB<RL	K2111196	1.1
SW8270DSIM	WC-SB09-0.0-1.0	Fluoranthene	0.74	0.69	µg/kg	U	LB<RL	K2111196	1.2
SW8270DSIM	WC-SB09-0.0-1.0	Indeno(1,2,3-cd)pyrene	1.9	0.4	µg/kg	U	LB<RL	K2111196	0.95
SW8270DSIM	WC-SB09-0.0-1.0	Naphthalene	1.3	0.52	µg/kg	U	LB<RL	K2111196	0.99
SW8270DSIM	WC-SB09-0.0-1.0	Pyrene	0.95	0.35	µg/kg	U	LB<RL	K2111196	1.2
SW8270DSIM	WC-SB10-0.0-1.0	Benzo(a)anthracene	1.1	0.3	µg/kg	U	LB<RL	K2111070	0.42
SW8270DSIM	WC-SB10-0.0-1.0	Naphthalene	1.7	0.61	µg/kg	U	LB<RL	K2111070	0.57
SW8270DSIM	WC-SB11-0.0-1.0	Benzo(a)anthracene	0.86	0.33	µg/kg	U	LB<RL	K2110977	0.51
SW8270DSIM	WC-SB11-0.0-1.0	Benzo(a)pyrene	1.7	0.55	µg/kg	U	LB<RL	K2110977	1
SW8270DSIM	WC-SB11-0.0-1.0FD	Benzo(a)anthracene	1.8	0.33	µg/kg	U	LB<RL	K2110977	0.51
SW8270DSIM	WC-SB11-0.0-1.0FD	Benzo(a)pyrene	0.63	0.55	µg/kg	U	LB<RL	K2110977	1
SW8270DSIM	WC-SB11-1.0-2.0	Benzo(a)anthracene	0.99	0.34	µg/kg	U	LB<RL	K2204428	0.48
SW8270DSIM	WC-SB11-1.0-2.0	Benzo(a)pyrene	0.88	0.56	µg/kg	U	LB<RL	K2204428	0.41
SW8270DSIM	WC-SB11-1.0-2.0	Naphthalene	1.2	0.7	µg/kg	U	LB<RL	K2204428	0.68
SW8270DSIM	WC-SB11-2.0-3.0	Benzo(a)anthracene	0.75	0.35	µg/kg	U	LB<RL	K2204428	0.48
SW8270DSIM	WC-SB11-2.0-3.0	Naphthalene	1	0.71	µg/kg	U	LB<RL	K2204428	0.68
SW8270DSIM	WC-SB11-3.0-4.0	Benzo(a)anthracene	0.76	0.35	µg/kg	U	LB<RL	K2204428	0.48
SW8270DSIM	WC-SB11-3.0-4.0	Naphthalene	1.1	0.7	µg/kg	U	LB<RL	K2204428	0.68
SW8270DSIM	WC-SB11-4.0-5.0	Benzo(a)anthracene	1.2	0.34	µg/kg	U	LB<RL	K2204428	0.48
SW8270DSIM	WC-SB11-4.0-5.0	Benzo(a)pyrene	1.2	0.55	µg/kg	U	LB<RL	K2204428	0.41
SW8270DSIM	WC-SB12-0.0-1.0	Benzo(a)anthracene	1.4	0.36	µg/kg	U	LB<RL	K2110977	0.51
SW8270DSIM	WC-SCPD09-3.0-4.0	2-Methylnaphthalene	0.66	0.49	µg/kg	U	LB<RL	K2203194	0.4
SW8270DSIM	WC-SCPD09-3.0-4.0	Benzo(a)anthracene	0.64	0.3	µg/kg	U	LB<RL	K2203194	0.63
SW8270DSIM	WC-SCPD09-3.0-4.0	Naphthalene	1.2	0.62	µg/kg	U	LB<RL	K2203194	0.84
SW8270DSIM	WC-SCPD09-3.0-4.0	Phenanthrene	0.91	0.77	µg/kg	U	LB<RL	K2203194	0.63
SW8270DSIM	WC-SCPD09-3.0-4.0	Pyrene	0.57	0.42	µg/kg	U	LB<RL	K2203194	0.48
SW8270DSIM	WC-SCPD09-4.0-5.0	2-Methylnaphthalene	0.77	0.5	µg/kg	U	LB<RL	K2203194	0.4
SW8270DSIM	WC-SCPD09-4.0-5.0	Benzo(a)anthracene	0.85	0.32	µg/kg	U	LB<RL	K2203194	0.63

Table H-7. Laboratory Blank Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	MDL	Units	Validation Flag	Reason Codes	SDG	Associated Blank Concentration
SW8270DSIM	WC-SCPD09-4.0-5.0	Naphthalene	1.6	0.64	µg/kg	U	LB<RL	K2203194	0.84
SW8270DSIM	WC-SCPD09-4.0-5.0	Phenanthrene	0.97	0.8	µg/kg	U	LB<RL	K2203194	0.63
SW8270DSIM	WC-SCPD09-4.0-5.0	Pyrene	0.65	0.44	µg/kg	U	LB<RL	K2203194	0.48
SW8270DSIM	WC-SCPD10-1.0-2.0	2-Methylnaphthalene	1.6	0.53	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD10-1.0-2.0	Benzo(a)anthracene	1.6	0.33	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD10-1.0-2.0	Dibenzofuran	2	0.85	µg/kg	U	LB<RL	K2111932	1
SW8270DSIM	WC-SCPD10-1.0-2.0	Naphthalene	4.1	0.67	µg/kg	U	LB<RL	K2111932	0.94
SW8270DSIM	WC-SCPD10-1.0-2.0	Phenanthrene	3.1	0.84	µg/kg	U	LB<RL	K2111932	0.7
SW8270DSIM	WC-SCPD10-2.0-3.0	2-Methylnaphthalene	1.2	0.53	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD10-2.0-3.0	Benzo(a)anthracene	1.3	0.33	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD10-2.0-3.0	Dibenzofuran	1.3	0.86	µg/kg	U	LB<RL	K2111932	1
SW8270DSIM	WC-SCPD10-2.0-3.0	Naphthalene	4.2	0.67	µg/kg	U	LB<RL	K2111932	0.94
SW8270DSIM	WC-SCPD10-2.0-3.0	Phenanthrene	2.6	0.84	µg/kg	U	LB<RL	K2111932	0.7
SW8270DSIM	WC-SCPD10-2.0-3.0	Pyrene	1.6	0.46	µg/kg	U	LB<RL	K2111932	0.46
SW8270DSIM	WC-SCPD10-3.0-4.0	2-Methylnaphthalene	1.7	0.6	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD10-3.0-4.0	Benzo(a)anthracene	2.1	0.38	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD10-3.0-4.0	Dibenzofuran	2.5	0.97	µg/kg	U	LB<RL	K2111932	1
SW8270DSIM	WC-SCPD10-4.0-5.0	2-Methylnaphthalene	1.1	0.59	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD10-4.0-5.0	Benzo(a)anthracene	1.2	0.37	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD10-4.0-5.0	Dibenzofuran	1.4	0.95	µg/kg	U	LB<RL	K2111932	1
SW8270DSIM	WC-SCPD10-4.0-5.0	Naphthalene	3.9	0.75	µg/kg	U	LB<RL	K2111932	0.94
SW8270DSIM	WC-SCPD10-4.0-5.0	Phenanthrene	2.4	0.94	µg/kg	U	LB<RL	K2111932	0.7
SW8270DSIM	WC-SCPD10-4.0-5.0	Pyrene	1.5	0.51	µg/kg	U	LB<RL	K2111932	0.46
SW8270DSIM	WC-SCPD14-3.0-4.0	Benzo(a)anthracene	1.6	0.32	µg/kg	U	LB<RL	K2107340	0.6
SW8270DSIM	WC-SCPD14-3.0-4.0	Benzo(g,h,i)perylene	0.7	0.55	µg/kg	U	LB<RL	K2107340	0.45
SW8270DSIM	WC-SCPD14-3.0-4.0	Chrysene	1	0.43	µg/kg	U	LB<RL	K2107340	0.39
SW8270DSIM	WC-SCPD18-1.0-2.0	Naphthalene	1.5	0.7	µg/kg	U	LB<RL	K2107637	0.73
SW8270DSIM	WC-SCPD18-1.0-2.0FD	Naphthalene	1.5	0.68	µg/kg	U	LB<RL	K2107637	0.73
SW8270DSIM	WC-SCPD18-2.0-3.0	Naphthalene	1.3	0.69	µg/kg	U	LB<RL	K2107637	0.73
SW8270DSIM	WC-SCPD18-3.0-4.0	Naphthalene	1.6	0.69	µg/kg	U	LB<RL	K2107637	0.73
SW8270DSIM	WC-SCPD18-4.0-5.0	Naphthalene	1.6	0.68	µg/kg	U	LB<RL	K2107637	0.73
SW8270DSIM	WC-SCPD19-1.0-2.0	Anthracene	0.58	0.44	µg/kg	U	LB<RL	K2107052	0.3
SW8270DSIM	WC-SCPD19-1.0-2.0	Benzo(a)anthracene	1.2	0.35	µg/kg	U	LB<RL	K2107052	0.4
SW8270DSIM	WC-SCPD19-1.0-2.0	Naphthalene	1.8	0.71	µg/kg	U	LB<RL	K2107052	0.81
SW8270DSIM	WC-SCPD19-1.0-2.0	Phenanthrene	4.7	0.88	µg/kg	U	LB<RL	K2107052	2
SW8270DSIM	WC-SCPD19-2.0-3.0	Benzo(a)anthracene	0.63	0.36	µg/kg	U	LB<RL	K2107052	0.4
SW8270DSIM	WC-SCPD19-2.0-3.0	Naphthalene	1.6	0.73	µg/kg	U	LB<RL	K2107052	0.81
SW8270DSIM	WC-SCPD19-2.0-3.0	Phenanthrene	2.9	0.91	µg/kg	U	LB<RL	K2107052	2
SW8270DSIM	WC-SCPD19-3.0-4.0	Anthracene	0.69	0.43	µg/kg	U	LB<RL	K2107052	0.3
SW8270DSIM	WC-SCPD19-3.0-4.0	Naphthalene	1.4	0.69	µg/kg	U	LB<RL	K2107052	0.81
SW8270DSIM	WC-SCPD19-3.0-4.0	Phenanthrene	4.7	0.87	µg/kg	U	LB<RL	K2107052	2
SW8270DSIM	WC-SCPD19-4.0-5.0	Naphthalene	1.3	0.68	µg/kg	U	LB<RL	K2107052	0.81
SW8270DSIM	WC-SCPD19-4.0-5.0	Phenanthrene	2.4	0.86	µg/kg	U	LB<RL	K2107052	2
SW8270DSIM	WC-SCPD19-4.0-5.0	Pyrene	1.4	0.47	µg/kg	U	LB<RL	K2107052	0.38
SW8270DSIM	WC-SCPD23-4.0-5.0	Benzo(a)anthracene	1.1	0.3	µg/kg	U	LB<RL	K2107340	0.6
SW8270DSIM	WC-SCPD23-4.0-5.0	Benzo(g,h,i)perylene	0.87	0.52	µg/kg	U	LB<RL	K2107340	0.45
SW8270DSIM	WC-SCPD23-4.0-5.0	Chrysene	0.49	0.41	µg/kg	U	LB<RL	K2107340	0.39
SW8270DSIM	WC-SCPD23-4.0-5.0	Indeno(1,2,3-cd)pyrene	0.61	0.47	µg/kg	U	LB<RL	K2107340	0.49
SW8270DSIM	WC-SCPD24-1.0-2.0	2-Methylnaphthalene	1.3	0.56	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD24-1.0-2.0	Benzo(a)anthracene	1.6	0.35	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD24-1.0-2.0	Dibenzofuran	0.91	0.9	µg/kg	U	LB<RL	K2111932	1
SW8270DSIM	WC-SCPD24-1.0-2.0	Naphthalene	3.3	0.71	µg/kg	U	LB<RL	K2111932	0.94
SW8270DSIM	WC-SCPD24-2.0-3.0	2-Methylnaphthalene	0.8	0.54	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD24-2.0-3.0	Benzo(a)anthracene	1.1	0.34	µg/kg	U	LB<RL	K2111932	0.47
SW8270DSIM	WC-SCPD24-2.0-3.0	Naphthalene	1.6	0.69	µg/kg	U	LB<RL	K2111932	0.94
SW8270DSIM	WC-SCPD24-2.0-3.0	Phenanthrene	2	0.86	µg/kg	U	LB<RL	K2111932	0.7
SW8270DSIM	WC-SCPD24-2.0-3.0	Pyrene	1	0.47	µg/kg	U	LB<RL	K2111932	0.46
SW8270DSIM	WC-SCPD24-4.0-5.0	2-Methylnaphthalene	2.5	0.51	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD24-4.0-5.0	Acenaphthene	3.2	0.41	µg/kg	U	LB<RL	K2111941	2.3
SW8270DSIM	WC-SCPD24-4.0-5.0	Acenaphthylene	2.3	0.39	µg/kg	U	LB<RL	K2111941	1.7
SW8270DSIM	WC-SCPD24-4.0-5.0	Anthracene	2.8	0.4	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD24-4.0-5.0	Benzo(a)anthracene	1.6	0.32	µg/kg	U	LB<RL	K2111941	1
SW8270DSIM	WC-SCPD24-4.0-5.0	Benzo(b)fluoranthene	2.8	0.52	µg/kg	U	LB<RL	K2111941	1.5
SW8270DSIM	WC-SCPD24-4.0-5.0	Benzo(g,h,i)perylene	1.2	0.55	µg/kg	U	LB<RL	K2111941	0.79
SW8270DSIM	WC-SCPD24-4.0-5.0	Benzo(k)fluoranthene	1.5	0.33	µg/kg	U	LB<RL	K2111941	1.1
SW8270DSIM	WC-SCPD24-4.0-5.0	Chrysene	2.1	0.43	µg/kg	U	LB<RL	K2111941	1.1
SW8270DSIM	WC-SCPD24-4.0-5.0	Dibenzo(a,h)anthracene	0.9	0.32	µg/kg	U	LB<RL	K2111941	0.57
SW8270DSIM	WC-SCPD24-4.0-5.0	Dibenzofuran	5.5	0.82	µg/kg	U	LB<RL	K2111941	4
SW8270DSIM	WC-SCPD24-4.0-5.0	Fluoranthene	3	0.86	µg/kg	U	LB<RL	K2111941	2
SW8270DSIM	WC-SCPD24-4.0-5.0	Fluorene	5.3	0.78	µg/kg	U	LB<RL	K2111941	3.6
SW8270DSIM	WC-SCPD24-4.0-5.0	Indeno(1,2,3-cd)pyrene	1.4	0.5	µg/kg	U	LB<RL	K2111941	0.88
SW8270DSIM	WC-SCPD24-4.0-5.0	Naphthalene	2.5	0.65	µg/kg	U	LB<RL	K2111941	2.1
SW8270DSIM	WC-SCPD24-4.0-5.0	Phenanthrene	4.9	0.81	µg/kg	U	LB<RL	K2111941	3.3
SW8270DSIM	WC-SCPD24-4.0-5.0	Pyrene	3.2	0.44	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD25-2.0-3.0	Benzo(a)anthracene	1.9	0.3	µg/kg	U	LB<RL	K2205401	0.39
SW8270DSIM	WC-SCPD25-3.0-4.0	Benzo(a)anthracene	1.3	0.3	µg/kg	U	LB<RL	K2205401	0.39
SW8270DSIM	WC-SCPD25-3.0-4.0	Pyrene	2.1	0.42	µg/kg	U	LB<RL	K2205401	0.52
SW8270DSIM	WC-SCPD25-4.0-5.0	Benzo(a)anthracene	0.87	0.29	µg/kg	U	LB<RL	K2205401	0.39
SW8270DSIM	WC-SCPD25-4.0-5.0	Pyrene	0.82	0.4	µg/kg	U	LB<RL	K2205401	0.52
SW8270DSIM	WC-SCPD27-1.0-2.0	2-Methylnaphthalene	9.3	0.72	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD27-1.0-2.0	Acenaphthylene	6.7	0.55	µg/kg	U	LB<RL	K2111941	1.7
SW8270DSIM	WC-SCPD27-1.0-2.0	Naphthalene	10	0.91	µg/kg	U	LB<RL	K2111941	2.1
SW8270DSIM	WC-SCPD27-3.0-4.0	2-Methylnaphthalene	7.6	0.48	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD27-3.0-4.0	Acenaphthene	4.9	0.39	µg/kg	U	LB<RL	K2111941	2.3
SW8270DSIM	WC-SCPD27-3.0-4.0	Acenaphthylene	2.4	0.36	µg/kg	U	LB<RL	K2111941	1.7
SW8270DSIM	WC-SCPD27-3.0-4.0	Anthracene	2	0.37	µg/kg	U	LB<RL	K2111941	1.9

Table H-7. Laboratory Blank Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	MDL	Units	Validation Flag	Reason Codes	SDG	Associated Blank Concentration
SW8270DSIM	WC-SCPD27-3.0-4.0	Benzo(a)anthracene	3.5	0.3	µg/kg	U	LB<RL	K2111941	1
SW8270DSIM	WC-SCPD27-3.0-4.0	Benzo(a)pyrene	2.9	0.49	µg/kg	U	LB<RL	K2111941	1
SW8270DSIM	WC-SCPD27-3.0-4.0	Benzo(b)fluoranthene	4.2	0.49	µg/kg	U	LB<RL	K2111941	1.5
SW8270DSIM	WC-SCPD27-3.0-4.0	Benzo(g,h,i)perylene	2.3	0.51	µg/kg	U	LB<RL	K2111941	0.79
SW8270DSIM	WC-SCPD27-3.0-4.0	Benzo(k)fluoranthene	2.9	0.31	µg/kg	U	LB<RL	K2111941	1.1
SW8270DSIM	WC-SCPD27-3.0-4.0	Chrysene	4	0.4	µg/kg	U	LB<RL	K2111941	1.1
SW8270DSIM	WC-SCPD27-3.0-4.0	Dibenzo(a,h)anthracene	1.6	0.3	µg/kg	U	LB<RL	K2111941	0.57
SW8270DSIM	WC-SCPD27-3.0-4.0	Dibenzofuran	4.1	0.77	µg/kg	U	LB<RL	K2111941	4
SW8270DSIM	WC-SCPD27-3.0-4.0	Fluorene	3.3	0.73	µg/kg	U	LB<RL	K2111941	3.6
SW8270DSIM	WC-SCPD27-3.0-4.0	Indeno(1,2,3-cd)pyrene	2.3	0.46	µg/kg	U	LB<RL	K2111941	0.88
SW8270DSIM	WC-SCPD27-3.0-4.0	Naphthalene	9.9	0.6	µg/kg	U	LB<RL	K2111941	2.1
SW8270DSIM	WC-SCPD27-3.0-4.0	Phenanthrene	9.7	0.76	µg/kg	U	LB<RL	K2111941	3.3
SW8270DSIM	WC-SCPD27-3.0-4.0	Pyrene	9.3	0.41	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD27-4.0-5.0	2-Methylnaphthalene	3.3	0.52	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD27-4.0-5.0	Acenaphthene	4.3	0.42	µg/kg	U	LB<RL	K2111941	2.3
SW8270DSIM	WC-SCPD27-4.0-5.0	Acenaphthylene	2.6	0.39	µg/kg	U	LB<RL	K2111941	1.7
SW8270DSIM	WC-SCPD27-4.0-5.0	Anthracene	3.4	0.41	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD27-4.0-5.0	Benzo(a)anthracene	1.9	0.32	µg/kg	U	LB<RL	K2111941	1
SW8270DSIM	WC-SCPD27-4.0-5.0	Benzo(a)pyrene	1.9	0.53	µg/kg	U	LB<RL	K2111941	1
SW8270DSIM	WC-SCPD27-4.0-5.0	Benzo(b)fluoranthene	3	0.53	µg/kg	U	LB<RL	K2111941	1.5
SW8270DSIM	WC-SCPD27-4.0-5.0	Benzo(g,h,i)perylene	1.7	0.56	µg/kg	U	LB<RL	K2111941	0.79
SW8270DSIM	WC-SCPD27-4.0-5.0	Benzo(k)fluoranthene	2	0.34	µg/kg	U	LB<RL	K2111941	1.1
SW8270DSIM	WC-SCPD27-4.0-5.0	Chrysene	2.3	0.44	µg/kg	U	LB<RL	K2111941	1.1
SW8270DSIM	WC-SCPD27-4.0-5.0	Dibenzo(a,h)anthracene	0.86	0.32	µg/kg	U	LB<RL	K2111941	0.57
SW8270DSIM	WC-SCPD27-4.0-5.0	Dibenzofuran	6.8	0.84	µg/kg	U	LB<RL	K2111941	4
SW8270DSIM	WC-SCPD27-4.0-5.0	Fluoranthene	4.6	0.88	µg/kg	U	LB<RL	K2111941	2
SW8270DSIM	WC-SCPD27-4.0-5.0	Fluorene	6.2	0.8	µg/kg	U	LB<RL	K2111941	3.6
SW8270DSIM	WC-SCPD27-4.0-5.0	Indeno(1,2,3-cd)pyrene	1.4	0.5	µg/kg	U	LB<RL	K2111941	0.88
SW8270DSIM	WC-SCPD27-4.0-5.0	Naphthalene	3.6	0.66	µg/kg	U	LB<RL	K2111941	2.1
SW8270DSIM	WC-SCPD27-4.0-5.0	Phenanthrene	7.1	0.82	µg/kg	U	LB<RL	K2111941	3.3
SW8270DSIM	WC-SCPD27-4.0-5.0	Pyrene	4.5	0.45	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Benzo(a)anthracene	0.72	0.37	µg/kg	U	LB<RL	K2107278	0.51
SW8270DSIM	WC-SCPD29-1.0-2.0	2-Methylnaphthalene	9.2	0.59	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD29-1.0-2.0	Dibenzofuran	16	0.96	µg/kg	U	LB<RL	K2111941	4
SW8270DSIM	WC-SCPD29-3.0-4.0	Anthracene	8.7	0.51	µg/kg	U	LB<RL	K2111941	1.9
SW8270DSIM	WC-SCPD29-3.0-4.0	Fluorene	14	0.99	µg/kg	U	LB<RL	K2111941	3.6
SW8270DSIM	WC-SCPD31-11.0-12.0	Fluoranthene	2.7	0.79	µg/kg	U	LB<RL	K2200743	0.97
SW8270DSIM	WC-SCPD31-11.0-12.0	Phenanthrene	5.6	0.74	µg/kg	U	LB<RL	K2200743	1.6
SW8270DSIM	WC-SCPD32-13.0-14.0	2-Methylnaphthalene	1.4	0.95	µg/kg	U	LB<RL	K2203194	0.4
SW8270DSIM	WC-SCPD32-13.0-14.0	Naphthalene	2.6	1.3	µg/kg	U	LB<RL	K2203194	0.84
SW8270DSIM	WC-SCPD32-14.0-14.8	2-Methylnaphthalene	0.64	0.5	µg/kg	U	LB<RL	K2203194	0.4
SW8270DSIM	WC-SCPD32-14.0-14.8	Benzo(a)anthracene	0.52	0.31	µg/kg	U	LB<RL	K2203194	0.63
SW8270DSIM	WC-SCPD32-14.0-14.8	Naphthalene	1.1	0.64	µg/kg	U	LB<RL	K2203194	0.84
SW8270DSIM	WC-SCPD33-3.0-4.0	2-Methylnaphthalene	0.91	0.47	µg/kg	U	LB<RL	K2111942	0.76
SW8270DSIM	WC-SCPD33-3.0-4.0	Naphthalene	2.4	0.59	µg/kg	U	LB<RL	K2111942	2.2
SW8270DSIM	WC-SCPD33-4.0-5.0	2-Methylnaphthalene	1.3	0.51	µg/kg	U	LB<RL	K2111942	0.76
SW8270DSIM	WC-SCPD33-4.0-5.0	Benzo(a)anthracene	1	0.32	µg/kg	U	LB<RL	K2111942	0.46
SW8270DSIM	WC-SCPD33-4.0-5.0	Naphthalene	3.3	0.64	µg/kg	U	LB<RL	K2111942	2.2
SW8270DSIM	WC-SCPD33-4.0-5.0	Phenanthrene	2.9	0.81	µg/kg	U	LB<RL	K2111942	1.1
SW8270DSIM	WC-SCPD33-4.0-5.0	Pyrene	1.5	0.44	µg/kg	U	LB<RL	K2111942	0.41
SW8270DSIM	WC-SCPD37-1.0-2.0	2-Methylnaphthalene	2	0.48	µg/kg	U	LB<RL	K2111942	0.76
SW8270DSIM	WC-SCPD37-1.0-2.0	Naphthalene	4.6	0.61	µg/kg	U	LB<RL	K2111942	2.2
SW8270DSIM	WC-SCPD37-6.0-7.0	2-Methylnaphthalene	1.8	0.46	µg/kg	U	LB<RL	K2203194	0.4
SW8270DSIM	WC-SCPD37-6.0-7.0	Naphthalene	3.2	0.58	µg/kg	U	LB<RL	K2203194	0.84
SW8270DSIM	WC-SCPD38-2.0-3.0	2-Methylnaphthalene	20	0.62	µg/kg	U	LB<RL	K2111942	5.3
SW8270DSIM	WC-SCPD38-2.0-3.0	Benzo(k)fluoranthene	25	0.4	µg/kg	U	LB<RL	K2111942	5.5
SW8270DSIM	WC-SCPD38-2.0-3.0	Dibenzo(a,h)anthracene	9.2	0.38	µg/kg	U	LB<RL	K2111942	3.8
SW8270DSIM	WC-SCPD39-2.0-3.0	2-Methylnaphthalene	8.1	0.62	µg/kg	U	LB<RL	K2111955	1.8
SW8270DSIM	WC-SCPD39-2.0-3.0	Dibenzofuran	7.9	1.1	µg/kg	U	LB<RL	K2111955	1.8
SW8270DSIM	WC-SCPD39-2.0-3.0	Naphthalene	11	0.79	µg/kg	U	LB<RL	K2111955	3
SW8270DSIM	WC-SCPD39-4.0-5.0	Naphthalene	14	0.8	µg/kg	U	LB<RL	K2111955	3
SW8270DSIM	WC-SCPD40-8.0-9.0	Benzo(a)anthracene	0.77	0.3	µg/kg	U	LB<RL	K2205401	0.39
SW8270DSIM	WC-SCPD40-8.0-9.0	Pyrene	0.74	0.41	µg/kg	U	LB<RL	K2205401	0.52
SW8270DSIM	WC-SCPD40-9.0-9.5	Benzo(a)anthracene	1.4	0.33	µg/kg	U	LB<RL	K2205401	0.39
SW8270DSIM	WC-SCPD40-9.0-9.5	Pyrene	1.4	0.45	µg/kg	U	LB<RL	K2205401	0.52
SW8270DSIM	WC-SCPD41-7.0-8.0	2-Methylnaphthalene	1	0.48	µg/kg	U	LB<RL	K2203194	0.4
SW8270DSIM	WC-SCPD41-7.0-8.0	Anthracene	1.1	0.38	µg/kg	U	LB<RL	K2203194	0.49
SW8270DSIM	WC-SCPD41-7.0-8.0	Benzo(a)anthracene	3.1	0.3	µg/kg	U	LB<RL	K2203194	0.63
SW8270DSIM	WC-SCPD41-7.0-8.0	Naphthalene	1.9	0.61	µg/kg	U	LB<RL	K2203194	0.84
SW8270DSIM	WC-SCPD41-8.0-8.8	2-Methylnaphthalene	1.7	0.99	µg/kg	U	LB<RL	K2203194	0.4
SW8270DSIM	WC-SCPD41-8.0-8.8	Benzo(a)anthracene	2	0.62	µg/kg	U	LB<RL	K2203194	0.63
SW8270DSIM	WC-SCPD41-8.0-8.8	Naphthalene	2.9	1.3	µg/kg	U	LB<RL	K2203194	0.84
SW8270DSIM	WC-SCPD44-7.0-8.0	2-Methylnaphthalene	1.1	0.52	µg/kg	U	LB<RL	K2203194	0.4
SW8270DSIM	WC-SCPD44-7.0-8.0	Benzo(a)anthracene	1.2	0.33	µg/kg	U	LB<RL	K2203194	0.63
SW8270DSIM	WC-SCPD44-7.0-8.0	Naphthalene	1.4	0.66	µg/kg	U	LB<RL	K2203194	0.84
SW8270DSIM	WC-SCPD44-7.0-8.0	Phenanthrene	1.9	0.83	µg/kg	U	LB<RL	K2203194	0.63
SW8270DSIM	WC-SCPD44-7.0-8.0	Pyrene	0.89	0.45	µg/kg	U	LB<RL	K2203194	0.48
SW8270DSIM	WC-SCPD44-8.0-8.9	2-Methylnaphthalene	0.92	0.49	µg/kg	U	LB<RL	K2203194	0.4
SW8270DSIM	WC-SCPD44-8.0-8.9	Benzo(a)anthracene	0.75	0.3	µg/kg	U	LB<RL	K2203194	0.63
SW8270DSIM	WC-SCPD44-8.0-8.9	Naphthalene	1.5	0.62	µg/kg	U	LB<RL	K2203194	0.84
SW8270DSIM	WC-SCPD44-8.0-8.9	Phenanthrene	1.9	0.77	µg/kg	U	LB<RL	K2203194	0.63
SW8270DSIM	WC-SCPD44-8.0-8.9	Pyrene	0.81	0.42	µg/kg	U	LB<RL	K2203194	0.48
SW8270DSIM	WC-SCPD45-1.0-2.0	2-Methylnaphthalene	5	0.73	µg/kg	U	LB<RL	K2111955	1.8
SW8270DSIM	WC-SCPD45-1.0-2.0	Acenaphthylene	3.7	0.55	µg/kg	U	LB<RL	K2111955	0.8
SW8270DSIM	WC-SCPD45-1.0-2.0	Dibenzo(a,h)anthracene	3.2	0.46	µg/kg	U	LB<RL	K2111955	0.82
SW8270DSIM	WC-SCPD45-1.0-2.0	Dibenzofuran	7.8	1.2	µg/kg	U	LB<RL	K2111955	1.8

Table H-7. Laboratory Blank Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	MDL	Units	Validation Flag	Reason Codes	SDG	Associated Blank Concentration
SW8270DSIM	WC-SCPD45-1.0-2.0	Naphthalene	8.8	0.93	µg/kg	U	LB<RL	K2111955	3
SW8270DSIM	WC-SCPD45-3.0-4.0	Dibenzofuran	8.6	0.92	µg/kg	U	LB<RL	K2111955	1.8
SW8270DSIM	WC-SCPD45-3.0-4.0	Naphthalene	13	0.72	µg/kg	U	LB<RL	K2111955	3
SW8270DSIM	WC-SCPD45-4.0-5.0	2-Methylnaphthalene	1.5	0.64	µg/kg	U	LB<RL	K2111955	1.8
SW8270DSIM	WC-SCPD45-4.0-5.0	Acenaphthene	1.4	0.52	µg/kg	U	LB<RL	K2111955	1
SW8270DSIM	WC-SCPD45-4.0-5.0	Benzo(a)anthracene	1.2	0.4	µg/kg	U	LB<RL	K2111955	1.4
SW8270DSIM	WC-SCPD45-4.0-5.0	Benzo(b)fluoranthene	1.1	0.66	µg/kg	U	LB<RL	K2111955	1.4
SW8270DSIM	WC-SCPD45-4.0-5.0	Chrysene	0.62	0.54	µg/kg	U	LB<RL	K2111955	1.6
SW8270DSIM	WC-SCPD45-4.0-5.0	Fluoranthene	1.2	1.1	µg/kg	U	LB<RL	K2111955	1.5
SW8270DSIM	WC-SCPD45-4.0-5.0	Fluorene	1.2	0.99	µg/kg	U	LB<RL	K2111955	1.3
SW8270DSIM	WC-SCPD45-4.0-5.0	Naphthalene	3.7	0.82	µg/kg	U	LB<RL	K2111955	3
SW8270DSIM	WC-SCPD45-4.0-5.0	Phenanthrene	2.4	1.1	µg/kg	U	LB<RL	K2111955	1.9
SW8270DSIM	WC-SCPD45-4.0-5.0	Pyrene	1.5	0.56	µg/kg	U	LB<RL	K2111955	1.5
SW8270DSIM	WC-SCPD45-5.0-6.0	2-Methylnaphthalene	1.3	0.63	ug/kg	U	LB<RL	K2208213	0.44
SW8270DSIM	WC-SCPD47-3.0-4.0	2-Methylnaphthalene	0.84	0.53	µg/kg	U	LB<RL	K2107598	0.38
SW8270DSIM	WC-SCPD47-3.0-4.0	Naphthalene	1.4	0.67	µg/kg	U	LB<RL	K2107598	0.62
SW8270DSIM	WC-SCPD47-3.0-4.0	Phenanthrene	3.4	0.84	µg/kg	U	LB<RL	K2107598	0.72
SW8270DSIM	WC-SCPD47-4.0-5.0	2-Methylnaphthalene	1.6	0.48	µg/kg	U	LB<RL	K2107598	0.38
SW8270DSIM	WC-SCPD47-4.0-5.0	Benzo(a)anthracene	1.6	0.3	µg/kg	U	LB<RL	K2107598	0.37
SW8270DSIM	WC-SCPD47-4.0-5.0	Naphthalene	1.8	0.61	µg/kg	U	LB<RL	K2107598	0.62
SW8270DSIM	WC-SCPD48-8.0-9.0	Naphthalene	6.2	0.7	µg/kg	U	LB<RL	K2200746	1.3
SW8270DSIM	WC-SCPD48-9.0-9.5	2-Methylnaphthalene	0.86	0.49	µg/kg	U	LB<RL	K2200746	0.62
SW8270DSIM	WC-SCPD48-9.0-9.5	Benzo(a)anthracene	1.9	0.31	µg/kg	U	LB<RL	K2200746	0.45
SW8270DSIM	WC-SCPD48-9.0-9.5	Naphthalene	1.3	0.62	µg/kg	U	LB<RL	K2200746	1.3
SW8270DSIM	WC-SCPD50-3.0-4.0	Naphthalene	1.6	0.68	µg/kg	U	LB<RL	K2107395	0.48
SW8270DSIM	WC-SCPD52-4.0-5.0	Naphthalene	1	0.62	µg/kg	U	LB<RL	K2107489	0.48
SW8270DSIM	WC-SCPD52-5.0-6.0	Naphthalene	11	0.66	µg/kg	U	LB<RL	K2111955	3
SW8270DSIM	WC-SCPD52-6.0-7.0	Naphthalene	12	0.66	µg/kg	U	LB<RL	K2111955	3
SW8270DSIM	WC-SCPD52-7.0-8.0	Naphthalene	3	0.64	µg/kg	U	LB<RL	K2200746	1.3
SW8270DSIM	WC-SCPD52-8.0-9.0	Naphthalene	2.1	0.62	µg/kg	U	LB<RL	K2200746	1.3
SW8270DSIM	WC-SCPD52-9.0-9.2	2-Methylnaphthalene	1.4	0.49	µg/kg	U	LB<RL	K2200746	0.62
SW8270DSIM	WC-SCPD52-9.0-9.2	Benzo(a)anthracene	1.6	0.31	µg/kg	U	LB<RL	K2200746	0.45
SW8270DSIM	WC-SCPD52-9.0-9.2	Naphthalene	1.8	0.62	µg/kg	U	LB<RL	K2200746	1.3
SW8270DSIM	WC-SGPD29	Acenaphthylene	8	0.69	µg/kg	U	LB<RL	K2111941	1.7
SW8270DSIM	WC-SGPD33	Naphthalene	10	0.76	µg/kg	U	LB<RL	K2111942	2.2
SW8270DSIM	WC-SGPD39	Dibenzofuran	8.7	1.1	µg/kg	U	LB<RL	K2111955	1.8
SW8270DSIM	WC-SGPD45	Naphthalene	12	1.2	µg/kg	U	LB<RL	K2111955	3

Notes:
µg/kg = microgram per kilogram
LB<RL = Analyte detected less than five times associated laboratory blank concentration
ID = Identifier

Qualifier Definitions
U = This analyte was analyzed for but not detected at the specified detection limit.

Table H-8. Field Duplicate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG	%RPD
D6913/D7928	WC-SB11-0.0-1.0	Fine Sand (0.125 to 0.25mm), Wentworth	15.1	%	J	FD>RPD	K2110977	55
D6913/D7928	WC-SB11-0.0-1.0	Fine Silt (2-5 um)	66.6	%	J	FD>RPD	K2110977	22
D6913/D7928	WC-SB11-0.0-1.0	Medium Sand (0.25 to 0.5mm), Wentworth	2	%	J	FD>RPD	K2110977	72
D6913/D7928	WC-SB11-0.0-1.0	Medium Silt (5-20 um)	57	%	J	FD>RPD	K2110977	24
D6913/D7928	WC-SB11-0.0-1.0FD	Fine Sand (0.125 to 0.25mm), Wentworth	32.2	%	J	FD>RPD	K2110977	55
D6913/D7928	WC-SB11-0.0-1.0FD	Fine Silt (2-5 um)	46.5	%	J	FD>RPD	K2110977	22
D6913/D7928	WC-SB11-0.0-1.0FD	Medium Sand (0.25 to 0.5mm), Wentworth	5.4	%	J	FD>RPD	K2110977	72
D6913/D7928	WC-SB11-0.0-1.0FD	Medium Silt (5-20 um)	38.9	%	J	FD>RPD	K2110977	24
E1613B	WC-SB11-0.0-1.0	1,2,3,4,6,7,8-HpCDD	0.0314	µg/kg	J	FD>RPD	L2645738	37
E1613B	WC-SB11-0.0-1.0	1,2,3,4,6,7,8-HpCDF	0.0157	µg/kg	J	FD>RPD	L2645738	45
E1613B	WC-SB11-0.0-1.0	1,2,3,6,7,8-HxCDD	0.00149	µg/kg	J	FD>RPD	L2645738	60
E1613B	WC-SB11-0.0-1.0	1,2,3,7,8-PeCDD	0.0003	µg/kg	J	FD>RPD	L2645738	74
E1613B	WC-SB11-0.0-1.0	2,3,4,6,7,8-HxCDF	0.0011	µg/kg	J	FD>RPD	L2645738	123
E1613B	WC-SB11-0.0-1.0	2,3,4,7,8-PeCDF	0.000363	µg/kg	J	FD>RPD	L2645738	65
E1613B	WC-SB11-0.0-1.0	OCDD	0.231	µg/kg	J	FD>RPD	L2645738	44
E1613B	WC-SB11-0.0-1.0	OCDF	0.028	µg/kg	J	FD>RPD	L2645738	32
E1613B	WC-SB11-0.0-1.0	Total HpCDD	0.064	µg/kg	J	FD>RPD	L2645738	38
E1613B	WC-SB11-0.0-1.0	Total HpCDF	0.0422	µg/kg	J	FD>RPD	L2645738	42
E1613B	WC-SB11-0.0-1.0	Total HxCDF	0.024	µg/kg	J	FD>RPD	L2645738	57
E1613B	WC-SB11-0.0-1.0	Total PeCDF	0.00204	µg/kg	J	FD>RPD	L2645738	121
E1613B	WC-SB11-0.0-1.0FD	1,2,3,4,6,7,8-HpCDD	0.0455	µg/kg	J	FD>RPD	L2645738	37
E1613B	WC-SB11-0.0-1.0FD	1,2,3,4,6,7,8-HpCDF	0.0248	µg/kg	J	FD>RPD	L2645738	45
E1613B	WC-SB11-0.0-1.0FD	1,2,3,6,7,8-HxCDD	0.00276	µg/kg	J	FD>RPD	L2645738	60
E1613B	WC-SB11-0.0-1.0FD	1,2,3,7,8-PeCDD	0.000655	µg/kg	J	FD>RPD	L2645738	74
E1613B	WC-SB11-0.0-1.0FD	2,3,4,6,7,8-HxCDF	0.0046	µg/kg	J	FD>RPD	L2645738	123
E1613B	WC-SB11-0.0-1.0FD	2,3,4,7,8-PeCDF	0.00071	µg/kg	J	FD>RPD	L2645738	65
E1613B	WC-SB11-0.0-1.0FD	OCDD	0.361	µg/kg	J	FD>RPD	L2645738	44
E1613B	WC-SB11-0.0-1.0FD	OCDF	0.0386	µg/kg	J	FD>RPD	L2645738	32
E1613B	WC-SB11-0.0-1.0FD	Total HpCDD	0.0944	µg/kg	J	FD>RPD	L2645738	38
E1613B	WC-SB11-0.0-1.0FD	Total HpCDF	0.0649	µg/kg	J	FD>RPD	L2645738	42
E1613B	WC-SB11-0.0-1.0FD	Total HxCDF	0.0433	µg/kg	J	FD>RPD	L2645738	57
E1613B	WC-SB11-0.0-1.0FD	Total PeCDF	0.00826	µg/kg	J	FD>RPD	L2645738	121
E1613B	WC-SCPD18-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.000485	µg/kg	J	FD>RPD	L2611619	128
E1613B	WC-SCPD18-1.0-2.0	OCDD	0.00759	µg/kg	J	FD>RPD	L2611619	104
E1613B	WC-SCPD18-1.0-2.0	Total HpCDD	0.000485	µg/kg	J	FD>RPD	L2611619	170
E1613B	WC-SCPD18-1.0-2.0FD	1,2,3,4,6,7,8-HpCDD	0.00221	µg/kg	J	FD>RPD	L2611619	128
E1613B	WC-SCPD18-1.0-2.0FD	OCDD	0.0241	µg/kg	J	FD>RPD	L2611619	104
E1613B	WC-SCPD18-1.0-2.0FD	Total HpCDD	0.00605	µg/kg	J	FD>RPD	L2611619	170
E1613B	WC-SCPD28-4.0-5.0	1,2,3,4,6,7,8-HpCDD	0.00405	µg/kg	J	FD>RPD	L2608823	37
E1613B	WC-SCPD28-4.0-5.0	1,2,3,4,7,8-HxCDF	0.000155	µg/kg	J	FD>RPD	L2608823	122
E1613B	WC-SCPD28-4.0-5.0	1,2,3,7,8,9-HxCDD	0.0002	µg/kg	J	FD>RPD	L2608823	110
E1613B	WC-SCPD28-4.0-5.0	2,3,4,7,8-PeCDF	0.0000972	µg/kg	J	FD>RPD	L2608823	108
E1613B	WC-SCPD28-4.0-5.0	OCDD	0.0393	µg/kg	J	FD>RPD	L2608823	48
E1613B	WC-SCPD28-4.0-5.0	Total HpCDD	0.00978	µg/kg	J	FD>RPD	L2608823	37
E1613B	WC-SCPD28-4.0-5.0	Total HxCDD	0.00109	µg/kg	J	FD>RPD	L2608823	28
E1613B	WC-SCPD28-4.0-5.0	Total PeCDF	0.000226	µg/kg	J	FD>RPD	L2608823	152
E1613B	WC-SCPD28-4.0-5.0	Total TCDD	0.000085	µg/kg	UJ	FD>RPD	L2608823	135
E1613B	WC-SCPD28-4.0-5.0	Total TCDF	0.000097	µg/kg	J	FD>RPD	L2608823	96
E1613B	WC-SCPD28-4.0-5.0FD	1,2,3,4,6,7,8-HpCDD	0.00278	µg/kg	J	FD>RPD	L2608823	37
E1613B	WC-SCPD28-4.0-5.0FD	1,2,3,4,7,8-HxCDF	0.0000376	µg/kg	J	FD>RPD	L2608823	122
E1613B	WC-SCPD28-4.0-5.0FD	1,2,3,7,8,9-HxCDD	0.000058	µg/kg	UJ	FD>RPD	L2608823	110
E1613B	WC-SCPD28-4.0-5.0FD	2,3,4,7,8-PeCDF	0.000029	µg/kg	UJ	FD>RPD	L2608823	108
E1613B	WC-SCPD28-4.0-5.0FD	OCDD	0.024	µg/kg	J	FD>RPD	L2608823	48
E1613B	WC-SCPD28-4.0-5.0FD	Total HpCDD	0.00675	µg/kg	J	FD>RPD	L2608823	37
E1613B	WC-SCPD28-4.0-5.0FD	Total HxCDD	0.00144	µg/kg	J	FD>RPD	L2608823	28
E1613B	WC-SCPD28-4.0-5.0FD	Total PeCDF	0.000031	µg/kg	UJ	FD>RPD	L2608823	152
E1613B	WC-SCPD28-4.0-5.0FD	Total TCDD	0.000441	µg/kg	J	FD>RPD	L2608823	135
E1613B	WC-SCPD28-4.0-5.0FD	Total TCDF	0.000034	µg/kg	UJ	FD>RPD	L2608823	96
E1613B	WC-SCPD35-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.0778	µg/kg	J	FD>RPD	L2611560	109
E1613B	WC-SCPD35-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.0137	µg/kg	J	FD>RPD	L2611560	116
E1613B	WC-SCPD35-2.0-3.0	1,2,3,4,7,8-HxCDD	0.00048	µg/kg	J	FD>RPD	L2611560	123
E1613B	WC-SCPD35-2.0-3.0	1,2,3,4,7,8-HxCDF	0.0063	µg/kg	J	FD>RPD	L2611560	39
E1613B	WC-SCPD35-2.0-3.0	1,2,3,6,7,8-HxCDD	0.00357	µg/kg	J	FD>RPD	L2611560	96
E1613B	WC-SCPD35-2.0-3.0	1,2,3,6,7,8-HxCDF	0.00248	µg/kg	J	FD>RPD	L2611560	82
E1613B	WC-SCPD35-2.0-3.0	1,2,3,7,8,9-HxCDD	0.00201	µg/kg	J	FD>RPD	L2611560	104
E1613B	WC-SCPD35-2.0-3.0	1,2,3,7,8,9-HxCDF	0.00122	µg/kg	J	FD>RPD	L2611560	44
E1613B	WC-SCPD35-2.0-3.0	1,2,3,7,8-PeCDD	0.00059	µg/kg	J	FD>RPD	L2611560	78
E1613B	WC-SCPD35-2.0-3.0	2,3,4,6,7,8-HxCDF	0.00132	µg/kg	J	FD>RPD	L2611560	108
E1613B	WC-SCPD35-2.0-3.0	2,3,4,7,8-PeCDF	0.0029	µg/kg	J	FD>RPD	L2611560	32
E1613B	WC-SCPD35-2.0-3.0	2,3,7,8-TCDF	0.00511	µg/kg	J	FD>RPD	L2611560	33
E1613B	WC-SCPD35-2.0-3.0	OCDD	0.693	µg/kg	J	FD>RPD	L2611560	116
E1613B	WC-SCPD35-2.0-3.0	OCDF	0.0351	µg/kg	J	FD>RPD	L2611560	111
E1613B	WC-SCPD35-2.0-3.0	Total HpCDD	0.185	µg/kg	J	FD>RPD	L2611560	111
E1613B	WC-SCPD35-2.0-3.0	Total HpCDF	0.0377	µg/kg	J	FD>RPD	L2611560	116
E1613B	WC-SCPD35-2.0-3.0	Total HxCDD	0.029	µg/kg	J	FD>RPD	L2611560	100
E1613B	WC-SCPD35-2.0-3.0	Total HxCDF	0.0229	µg/kg	J	FD>RPD	L2611560	118
E1613B	WC-SCPD35-2.0-3.0	Total PeCDD	0.00197	µg/kg	J	FD>RPD	L2611560	141
E1613B	WC-SCPD35-2.0-3.0	Total PeCDF	0.0176	µg/kg	J	FD>RPD	L2611560	63
E1613B	WC-SCPD35-2.0-3.0	Total TCDD	0.0012	µg/kg	J	FD>RPD	L2611560	85
E1613B	WC-SCPD35-2.0-3.0	Total TCDF	0.0108	µg/kg	J	FD>RPD	L2611560	59
E1613B	WC-SCPD35-2.0-3.0FD	1,2,3,4,6,7,8-HpCDD	0.264	µg/kg	J	FD>RPD	L2611560	109
E1613B	WC-SCPD35-2.0-3.0FD	1,2,3,4,6,7,8-HpCDF	0.0519	µg/kg	J	FD>RPD	L2611560	116
E1613B	WC-SCPD35-2.0-3.0FD	1,2,3,4,7,8-HxCDD	0.00202	µg/kg	J	FD>RPD	L2611560	123
E1613B	WC-SCPD35-2.0-3.0FD	1,2,3,4,7,8-HxCDF	0.00939	µg/kg	J	FD>RPD	L2611560	39
E1613B	WC-SCPD35-2.0-3.0FD	1,2,3,6,7,8-HxCDD	0.0101	µg/kg	J	FD>RPD	L2611560	96
E1613B	WC-SCPD35-2.0-3.0FD	1,2,3,6,7,8-HxCDF	0.00594	µg/kg	J	FD>RPD	L2611560	82
E1613B	WC-SCPD35-2.0-3.0FD	1,2,3,7,8,9-HxCDD	0.00636	µg/kg	J	FD>RPD	L2611560	104
E1613B	WC-SCPD35-2.0-3.0FD	1,2,3,7,8,9-HxCDF	0.00191	µg/kg	J	FD>RPD	L2611560	44
E1613B	WC-SCPD35-2.0-3.0FD	1,2,3,7,8-PeCDD	0.00134	µg/kg	J	FD>RPD	L2611560	78
E1613B	WC-SCPD35-2.0-3.0FD	2,3,4,6,7,8-HxCDF	0.0044	µg/kg	J	FD>RPD	L2611560	108
E1613B	WC-SCPD35-2.0-3.0FD	2,3,4,7,8-PeCDF	0.00399	µg/kg	J	FD>RPD	L2611560	32
E1613B	WC-SCPD35-2.0-3.0FD	2,3,7,8-TCDF	0.00365	µg/kg	J	FD>RPD	L2611560	33

Table H-8. Field Duplicate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG	%RPD
E1613B	WC-SCPD35-2.0-3.0FD	OCDD	2.62	µg/kg	J	FD>RPD	L2611560	116
E1613B	WC-SCPD35-2.0-3.0FD	OCDF	0.122	µg/kg	J	FD>RPD	L2611560	111
E1613B	WC-SCPD35-2.0-3.0FD	Total HpCDD	0.65	µg/kg	J	FD>RPD	L2611560	111
E1613B	WC-SCPD35-2.0-3.0FD	Total HpCDF	0.142	µg/kg	J	FD>RPD	L2611560	116
E1613B	WC-SCPD35-2.0-3.0FD	Total HxCDD	0.0868	µg/kg	J	FD>RPD	L2611560	100
E1613B	WC-SCPD35-2.0-3.0FD	Total HxCDF	0.0886	µg/kg	J	FD>RPD	L2611560	118
E1613B	WC-SCPD35-2.0-3.0FD	Total PeCDD	0.0113	µg/kg	J	FD>RPD	L2611560	141
E1613B	WC-SCPD35-2.0-3.0FD	Total PeCDF	0.0338	µg/kg	J	FD>RPD	L2611560	63
E1613B	WC-SCPD35-2.0-3.0FD	Total TCDD	0.00297	µg/kg	J	FD>RPD	L2611560	85
E1613B	WC-SCPD35-2.0-3.0FD	Total TCDF	0.0198	µg/kg	J	FD>RPD	L2611560	59
E1613B	WC-SCPD48-3.0-4.0	1,2,3,4,6,7,8-HpCDD	0.254	µg/kg	J	FD>RPD	L2606306	80
E1613B	WC-SCPD48-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.0947	µg/kg	J	FD>RPD	L2606306	80
E1613B	WC-SCPD48-3.0-4.0	1,2,3,6,7,8-HxCDD	0.012	µg/kg	J	FD>RPD	L2606306	52
E1613B	WC-SCPD48-3.0-4.0	1,2,3,6,7,8-HxCDF	0.016	µg/kg	J	FD>RPD	L2606306	38
E1613B	WC-SCPD48-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00918	µg/kg	J	FD>RPD	L2606306	49
E1613B	WC-SCPD48-3.0-4.0	1,2,3,7,8,9-HxCDF	0.00675	µg/kg	J	FD>RPD	L2606306	43
E1613B	WC-SCPD48-3.0-4.0	1,2,3,7,8-PeCDF	0.0246	µg/kg	J	FD>RPD	L2606306	41
E1613B	WC-SCPD48-3.0-4.0	2,3,4,6,7,8-HxCDF	0.0212	µg/kg	J	FD>RPD	L2606306	104
E1613B	WC-SCPD48-3.0-4.0	2,3,7,8-TCDF	0.0164	µg/kg	J	FD>RPD	L2606306	20
E1613B	WC-SCPD48-3.0-4.0	OCDD	2.41	µg/kg	J	FD>RPD	L2606306	78
E1613B	WC-SCPD48-3.0-4.0	OCDF	0.24	µg/kg	J	FD>RPD	L2606306	93
E1613B	WC-SCPD48-3.0-4.0	Total HpCDD	0.541	µg/kg	J	FD>RPD	L2606306	77
E1613B	WC-SCPD48-3.0-4.0	Total HpCDF	0.318	µg/kg	J	FD>RPD	L2606306	82
E1613B	WC-SCPD48-3.0-4.0	Total HxCDD	0.0989	µg/kg	J	FD>RPD	L2606306	62
E1613B	WC-SCPD48-3.0-4.0	Total HxCDF	0.324	µg/kg	J	FD>RPD	L2606306	24
E1613B	WC-SCPD48-3.0-4.0	Total PeCDD	0.018	µg/kg	J	FD>RPD	L2606306	41
E1613B	WC-SCPD48-3.0-4.0FD	1,2,3,4,6,7,8-HpCDD	0.591	µg/kg	J	FD>RPD	L2606306	80
E1613B	WC-SCPD48-3.0-4.0FD	1,2,3,4,6,7,8-HpCDF	0.221	µg/kg	J	FD>RPD	L2606306	80
E1613B	WC-SCPD48-3.0-4.0FD	1,2,3,6,7,8-HxCDD	0.0204	µg/kg	J	FD>RPD	L2606306	52
E1613B	WC-SCPD48-3.0-4.0FD	1,2,3,6,7,8-HxCDF	0.0236	µg/kg	J	FD>RPD	L2606306	38
E1613B	WC-SCPD48-3.0-4.0FD	1,2,3,7,8,9-HxCDD	0.0151	µg/kg	J	FD>RPD	L2606306	49
E1613B	WC-SCPD48-3.0-4.0FD	1,2,3,7,8,9-HxCDF	0.0104	µg/kg	J	FD>RPD	L2606306	43
E1613B	WC-SCPD48-3.0-4.0FD	1,2,3,7,8-PeCDF	0.0371	µg/kg	J	FD>RPD	L2606306	41
E1613B	WC-SCPD48-3.0-4.0FD	2,3,4,6,7,8-HxCDF	0.00672	µg/kg	J	FD>RPD	L2606306	104
E1613B	WC-SCPD48-3.0-4.0FD	2,3,7,8-TCDF	0.0201	µg/kg	J	FD>RPD	L2606306	20
E1613B	WC-SCPD48-3.0-4.0FD	OCDD	5.48	µg/kg	J	FD>RPD	L2606306	78
E1613B	WC-SCPD48-3.0-4.0FD	OCDF	0.657	µg/kg	J	FD>RPD	L2606306	93
E1613B	WC-SCPD48-3.0-4.0FD	Total HpCDD	1.22	µg/kg	J	FD>RPD	L2606306	77
E1613B	WC-SCPD48-3.0-4.0FD	Total HpCDF	0.757	µg/kg	J	FD>RPD	L2606306	82
E1613B	WC-SCPD48-3.0-4.0FD	Total HxCDD	0.187	µg/kg	J	FD>RPD	L2606306	62
E1613B	WC-SCPD48-3.0-4.0FD	Total HxCDF	0.411	µg/kg	J	FD>RPD	L2606306	24
E1613B	WC-SCPD48-3.0-4.0FD	Total PeCDD	0.0273	µg/kg	J	FD>RPD	L2606306	41
E1613B	WC-SGPD17	1,2,3,4,6,7,8-HpCDD	0.152	µg/kg	J	FD>RPD	L2615164	36
E1613B	WC-SGPD17	1,2,3,4,7,8-HxCDD	0.0011	µg/kg	J	FD>RPD	L2615164	25
E1613B	WC-SGPD17	1,2,3,6,7,8-HxCDD	0.00484	µg/kg	J	FD>RPD	L2615164	27
E1613B	WC-SGPD17	1,2,3,7,8,9-HxCDD	0.00276	µg/kg	J	FD>RPD	L2615164	34
E1613B	WC-SGPD17	1,2,3,7,8,9-HxCDF	0.000923	µg/kg	J	FD>RPD	L2615164	141
E1613B	WC-SGPD17	2,3,4,6,7,8-HxCDF	0.00238	µg/kg	J	FD>RPD	L2615164	23
E1613B	WC-SGPD17	2,3,7,8-TCDF	0.0019	µg/kg	J	FD>RPD	L2615164	27
E1613B	WC-SGPD17	OCDD	1.15	µg/kg	J	FD>RPD	L2615164	24
E1613B	WC-SGPD17	Total HpCDD	0.408	µg/kg	J	FD>RPD	L2615164	51
E1613B	WC-SGPD17	Total HxCDD	0.0477	µg/kg	J	FD>RPD	L2615164	45
E1613B	WC-SGPD17	Total PeCDD	0.00574	µg/kg	J	FD>RPD	L2615164	29
E1613B	WC-SGPD17	Total TCDD	0.00515	µg/kg	J	FD>RPD	L2615164	130
E1613B	WC-SGPD17FD	1,2,3,4,6,7,8-HpCDD	0.219	µg/kg	J	FD>RPD	L2615164	36
E1613B	WC-SGPD17FD	1,2,3,4,7,8-HxCDD	0.00141	µg/kg	J	FD>RPD	L2615164	25
E1613B	WC-SGPD17FD	1,2,3,6,7,8-HxCDD	0.00638	µg/kg	J	FD>RPD	L2615164	27
E1613B	WC-SGPD17FD	1,2,3,7,8,9-HxCDD	0.00391	µg/kg	J	FD>RPD	L2615164	34
E1613B	WC-SGPD17FD	1,2,3,7,8,9-HxCDF	0.00016	µg/kg	UJ	FD>RPD	L2615164	141
E1613B	WC-SGPD17FD	2,3,4,6,7,8-HxCDF	0.00189	µg/kg	J	FD>RPD	L2615164	23
E1613B	WC-SGPD17FD	2,3,7,8-TCDF	0.00249	µg/kg	J	FD>RPD	L2615164	27
E1613B	WC-SGPD17FD	OCDD	1.47	µg/kg	J	FD>RPD	L2615164	24
E1613B	WC-SGPD17FD	Total HpCDD	0.69	µg/kg	J	FD>RPD	L2615164	51
E1613B	WC-SGPD17FD	Total HxCDD	0.0751	µg/kg	J	FD>RPD	L2615164	45
E1613B	WC-SGPD17FD	Total PeCDD	0.0077	µg/kg	J	FD>RPD	L2615164	29
E1613B	WC-SGPD17FD	Total TCDD	0.0011	µg/kg	J	FD>RPD	L2615164	130
E1613B	WC-SGPD36	1,2,3,4,6,7,8-HpCDD	0.0624	µg/kg	J	FD>RPD	L2612316	59
E1613B	WC-SGPD36	1,2,3,4,6,7,8-HpCDF	0.0195	µg/kg	J	FD>RPD	L2612316	37
E1613B	WC-SGPD36	1,2,3,4,7,8,9-HpCDF	0.00209	µg/kg	J	FD>RPD	L2612316	45
E1613B	WC-SGPD36	1,2,3,4,7,8-HxCDD	0.000549	µg/kg	J	FD>RPD	L2612316	74
E1613B	WC-SGPD36	1,2,3,4,7,8-HxCDF	0.00723	µg/kg	J	FD>RPD	L2612316	66
E1613B	WC-SGPD36	1,2,3,6,7,8-HxCDD	0.00238	µg/kg	J	FD>RPD	L2612316	66
E1613B	WC-SGPD36	1,2,3,6,7,8-HxCDF	0.00261	µg/kg	J	FD>RPD	L2612316	63
E1613B	WC-SGPD36	1,2,3,7,8,9-HxCDD	0.00144	µg/kg	J	FD>RPD	L2612316	46
E1613B	WC-SGPD36	1,2,3,7,8,9-HxCDF	0.000869	µg/kg	J	FD>RPD	L2612316	73
E1613B	WC-SGPD36	1,2,3,7,8-PeCDD	0.000544	µg/kg	J	FD>RPD	L2612316	39
E1613B	WC-SGPD36	1,2,3,7,8-PeCDF	0.0029	µg/kg	J	FD>RPD	L2612316	83
E1613B	WC-SGPD36	2,3,4,6,7,8-HxCDF	0.00148	µg/kg	J	FD>RPD	L2612316	43
E1613B	WC-SGPD36	2,3,4,7,8-PeCDF	0.00198	µg/kg	J	FD>RPD	L2612316	76
E1613B	WC-SGPD36	2,3,7,8-TCDD	0.000216	µg/kg	J	FD>RPD	L2612316	46
E1613B	WC-SGPD36	2,3,7,8-TCDF	0.00184	µg/kg	J	FD>RPD	L2612316	75
E1613B	WC-SGPD36	OCDD	0.739	µg/kg	J	FD>RPD	L2612316	43
E1613B	WC-SGPD36	OCDF	0.0449	µg/kg	J	FD>RPD	L2612316	41
E1613B	WC-SGPD36	Total HpCDD	0.165	µg/kg	J	FD>RPD	L2612316	52
E1613B	WC-SGPD36	Total HpCDF	0.0471	µg/kg	J	FD>RPD	L2612316	40
E1613B	WC-SGPD36	Total HxCDD	0.0189	µg/kg	J	FD>RPD	L2612316	65
E1613B	WC-SGPD36	Total HxCDF	0.0341	µg/kg	J	FD>RPD	L2612316	58
E1613B	WC-SGPD36	Total PeCDD	0.00254	µg/kg	J	FD>RPD	L2612316	81
E1613B	WC-SGPD36	Total PeCDF	0.0194	µg/kg	J	FD>RPD	L2612316	64
E1613B	WC-SGPD36	Total TCDD	0.00137	µg/kg	J	FD>RPD	L2612316	49
E1613B	WC-SGPD36	Total TCDF	0.00879	µg/kg	J	FD>RPD	L2612316	82
E1613B	WC-SGPD36FD	1,2,3,4,6,7,8-HpCDD	0.114	µg/kg	J	FD>RPD	L2612316	59

Table H-8. Field Duplicate Validation Findings
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Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG	%RPD
E1613B	WC-SGPD36FD	1,2,3,4,6,7,8-HpCDF	0.0284	µg/kg	J	FD>RPD	L2612316	37
E1613B	WC-SGPD36FD	1,2,3,4,7,8,9-HpCDF	0.00329	µg/kg	J	FD>RPD	L2612316	45
E1613B	WC-SGPD36FD	1,2,3,4,7,8-HxCDD	0.00119	µg/kg	J	FD>RPD	L2612316	74
E1613B	WC-SGPD36FD	1,2,3,4,7,8-HxCDF	0.0143	µg/kg	J	FD>RPD	L2612316	66
E1613B	WC-SGPD36FD	1,2,3,6,7,8-HxCDD	0.00474	µg/kg	J	FD>RPD	L2612316	66
E1613B	WC-SGPD36FD	1,2,3,6,7,8-HxCDF	0.00501	µg/kg	J	FD>RPD	L2612316	63
E1613B	WC-SGPD36FD	1,2,3,7,8,9-HxCDD	0.00229	µg/kg	J	FD>RPD	L2612316	46
E1613B	WC-SGPD36FD	1,2,3,7,8,9-HxCDF	0.00186	µg/kg	J	FD>RPD	L2612316	73
E1613B	WC-SGPD36FD	1,2,3,7,8-PeCDD	0.000811	µg/kg	J	FD>RPD	L2612316	39
E1613B	WC-SGPD36FD	1,2,3,7,8-PeCDF	0.00703	µg/kg	J	FD>RPD	L2612316	83
E1613B	WC-SGPD36FD	2,3,4,6,7,8-HxCDF	0.00228	µg/kg	J	FD>RPD	L2612316	43
E1613B	WC-SGPD36FD	2,3,4,7,8-PeCDF	0.00439	µg/kg	J	FD>RPD	L2612316	76
E1613B	WC-SGPD36FD	2,3,7,8-TCDD	0.000346	µg/kg	J	FD>RPD	L2612316	46
E1613B	WC-SGPD36FD	2,3,7,8-TCDF	0.00406	µg/kg	J	FD>RPD	L2612316	75
E1613B	WC-SGPD36FD	OCDD	1.14	µg/kg	J	FD>RPD	L2612316	43
E1613B	WC-SGPD36FD	OCDF	0.0678	µg/kg	J	FD>RPD	L2612316	41
E1613B	WC-SGPD36FD	Total HpCDD	0.282	µg/kg	J	FD>RPD	L2612316	52
E1613B	WC-SGPD36FD	Total HpCDF	0.0705	µg/kg	J	FD>RPD	L2612316	40
E1613B	WC-SGPD36FD	Total HxCDD	0.0371	µg/kg	J	FD>RPD	L2612316	65
E1613B	WC-SGPD36FD	Total HxCDF	0.0622	µg/kg	J	FD>RPD	L2612316	58
E1613B	WC-SGPD36FD	Total PeCDD	0.00602	µg/kg	J	FD>RPD	L2612316	81
E1613B	WC-SGPD36FD	Total PeCDF	0.0378	µg/kg	J	FD>RPD	L2612316	64
E1613B	WC-SGPD36FD	Total TCDD	0.00226	µg/kg	J	FD>RPD	L2612316	49
E1613B	WC-SGPD36FD	Total TCDF	0.021	µg/kg	J	FD>RPD	L2612316	82
E1668	WC-SB11-0.0-1.0	Decachlorobiphenyl	0.0445	µg/kg	J	FD>RPD	L2645738	72
E1668	WC-SB11-0.0-1.0	Heptachlorobiphenyl	0.0289	µg/kg	J	FD>RPD	L2645738	95
E1668	WC-SB11-0.0-1.0	Hexachlorobiphenyl	0.0323	µg/kg	J	FD>RPD	L2645738	88
E1668	WC-SB11-0.0-1.0	Nonachlorobiphenyl	0.0143	µg/kg	J	FD>RPD	L2645738	59
E1668	WC-SB11-0.0-1.0	Octachlorobiphenyl	0.0146	µg/kg	J	FD>RPD	L2645738	77
E1668	WC-SB11-0.0-1.0	PCB-085/110/115/116/117	0.00653	µg/kg	J	FD>RPD	L2645738	54
E1668	WC-SB11-0.0-1.0	PCB-118	0.00276	µg/kg	J	FD>RPD	L2645738	61
E1668	WC-SB11-0.0-1.0	PCB-129/138/163	0.0075	µg/kg	J	FD>RPD	L2645738	88
E1668	WC-SB11-0.0-1.0	PCB-132	0.0022	µg/kg	J	FD>RPD	L2645738	110
E1668	WC-SB11-0.0-1.0	PCB-135/151	0.0024	µg/kg	J	FD>RPD	L2645738	82
E1668	WC-SB11-0.0-1.0	PCB-137/164	0.00082	µg/kg	J	FD>RPD	L2645738	130
E1668	WC-SB11-0.0-1.0	PCB-147/149	0.00495	µg/kg	J	FD>RPD	L2645738	104
E1668	WC-SB11-0.0-1.0	PCB-153/168	0.00849	µg/kg	J	FD>RPD	L2645738	23
E1668	WC-SB11-0.0-1.0	PCB-158	0.00088	µg/kg	J	FD>RPD	L2645738	84
E1668	WC-SB11-0.0-1.0	PCB-170	0.00239	µg/kg	J	FD>RPD	L2645738	134
E1668	WC-SB11-0.0-1.0	PCB-174	0.0018	µg/kg	J	FD>RPD	L2645738	142
E1668	WC-SB11-0.0-1.0	PCB-177	0.0014	µg/kg	J	FD>RPD	L2645738	126
E1668	WC-SB11-0.0-1.0	PCB-180/193	0.011	µg/kg	J	FD>RPD	L2645738	65
E1668	WC-SB11-0.0-1.0	PCB-187	0.00611	µg/kg	J	FD>RPD	L2645738	69
E1668	WC-SB11-0.0-1.0	PCB-194	0.00379	µg/kg	J	FD>RPD	L2645738	65
E1668	WC-SB11-0.0-1.0	PCB-198/199	0.00466	µg/kg	J	FD>RPD	L2645738	73
E1668	WC-SB11-0.0-1.0	PCB-20/28	0.008	µg/kg	J	FD>RPD	L2645738	100
E1668	WC-SB11-0.0-1.0	PCB-202	0.000847	µg/kg	J	FD>RPD	L2645738	93
E1668	WC-SB11-0.0-1.0	PCB-203	0.0028	µg/kg	J	FD>RPD	L2645738	72
E1668	WC-SB11-0.0-1.0	PCB-206	0.00936	µg/kg	J	FD>RPD	L2645738	46
E1668	WC-SB11-0.0-1.0	PCB-208	0.0028	µg/kg	J	FD>RPD	L2645738	102
E1668	WC-SB11-0.0-1.0	PCB-21/33	0.0048	µg/kg	J	FD>RPD	L2645738	92
E1668	WC-SB11-0.0-1.0	PCB-31	0.0065	µg/kg	J	FD>RPD	L2645738	96
E1668	WC-SB11-0.0-1.0	PCB-37	0.00446	µg/kg	J	FD>RPD	L2645738	115
E1668	WC-SB11-0.0-1.0	PCB-44/47/65	0.00617	µg/kg	J	FD>RPD	L2645738	64
E1668	WC-SB11-0.0-1.0	PCB-61/70/74/76	0.0068	µg/kg	J	FD>RPD	L2645738	51
E1668	WC-SB11-0.0-1.0	PCB-66	0.00408	µg/kg	J	FD>RPD	L2645738	98
E1668	WC-SB11-0.0-1.0	Pentachlorobiphenyl	0.0205	µg/kg	J	FD>RPD	L2645738	54
E1668	WC-SB11-0.0-1.0	Tetrachlorobiphenyl	0.0254	µg/kg	J	FD>RPD	L2645738	64
E1668	WC-SB11-0.0-1.0	Trichlorobiphenyl	0.0289	µg/kg	J	FD>RPD	L2645738	112
E1668	WC-SB11-0.0-1.0FD	Decachlorobiphenyl	0.0951	µg/kg	J	FD>RPD	L2645738	72
E1668	WC-SB11-0.0-1.0FD	Heptachlorobiphenyl	0.0807	µg/kg	J	FD>RPD	L2645738	95
E1668	WC-SB11-0.0-1.0FD	Hexachlorobiphenyl	0.0834	µg/kg	J	FD>RPD	L2645738	88
E1668	WC-SB11-0.0-1.0FD	Nonachlorobiphenyl	0.0264	µg/kg	J	FD>RPD	L2645738	59
E1668	WC-SB11-0.0-1.0FD	Octachlorobiphenyl	0.0328	µg/kg	J	FD>RPD	L2645738	77
E1668	WC-SB11-0.0-1.0FD	PCB-085/110/115/116/117	0.0114	µg/kg	J	FD>RPD	L2645738	54
E1668	WC-SB11-0.0-1.0FD	PCB-118	0.00516	µg/kg	J	FD>RPD	L2645738	61
E1668	WC-SB11-0.0-1.0FD	PCB-129/138/163	0.0193	µg/kg	J	FD>RPD	L2645738	88
E1668	WC-SB11-0.0-1.0FD	PCB-132	0.00761	µg/kg	J	FD>RPD	L2645738	110
E1668	WC-SB11-0.0-1.0FD	PCB-135/151	0.00574	µg/kg	J	FD>RPD	L2645738	82
E1668	WC-SB11-0.0-1.0FD	PCB-137/164	0.00385	µg/kg	J	FD>RPD	L2645738	130
E1668	WC-SB11-0.0-1.0FD	PCB-147/149	0.0156	µg/kg	J	FD>RPD	L2645738	104
E1668	WC-SB11-0.0-1.0FD	PCB-153/168	0.0107	µg/kg	J	FD>RPD	L2645738	23
E1668	WC-SB11-0.0-1.0FD	PCB-158	0.00216	µg/kg	J	FD>RPD	L2645738	84
E1668	WC-SB11-0.0-1.0FD	PCB-170	0.012	µg/kg	J	FD>RPD	L2645738	134
E1668	WC-SB11-0.0-1.0FD	PCB-174	0.0107	µg/kg	J	FD>RPD	L2645738	142
E1668	WC-SB11-0.0-1.0FD	PCB-177	0.00621	µg/kg	J	FD>RPD	L2645738	126
E1668	WC-SB11-0.0-1.0FD	PCB-180/193	0.0216	µg/kg	J	FD>RPD	L2645738	65
E1668	WC-SB11-0.0-1.0FD	PCB-187	0.0125	µg/kg	J	FD>RPD	L2645738	69
E1668	WC-SB11-0.0-1.0FD	PCB-194	0.00743	µg/kg	J	FD>RPD	L2645738	65
E1668	WC-SB11-0.0-1.0FD	PCB-198/199	0.01	µg/kg	J	FD>RPD	L2645738	73
E1668	WC-SB11-0.0-1.0FD	PCB-20/28	0.00265	µg/kg	J	FD>RPD	L2645738	100
E1668	WC-SB11-0.0-1.0FD	PCB-202	0.00232	µg/kg	J	FD>RPD	L2645738	93
E1668	WC-SB11-0.0-1.0FD	PCB-203	0.00595	µg/kg	J	FD>RPD	L2645738	72
E1668	WC-SB11-0.0-1.0FD	PCB-206	0.0149	µg/kg	J	FD>RPD	L2645738	46
E1668	WC-SB11-0.0-1.0FD	PCB-208	0.00866	µg/kg	J	FD>RPD	L2645738	102
E1668	WC-SB11-0.0-1.0FD	PCB-21/33	0.00178	µg/kg	J	FD>RPD	L2645738	92
E1668	WC-SB11-0.0-1.0FD	PCB-31	0.00229	µg/kg	J	FD>RPD	L2645738	96
E1668	WC-SB11-0.0-1.0FD	PCB-37	0.0012	µg/kg	UJ	FD>RPD	L2645738	115
E1668	WC-SB11-0.0-1.0FD	PCB-44/47/65	0.00318	µg/kg	J	FD>RPD	L2645738	64
E1668	WC-SB11-0.0-1.0FD	PCB-61/70/74/76	0.00404	µg/kg	J	FD>RPD	L2645738	51
E1668	WC-SB11-0.0-1.0FD	PCB-66	0.0014	µg/kg	J	FD>RPD	L2645738	98
E1668	WC-SB11-0.0-1.0FD	Pentachlorobiphenyl	0.0357	µg/kg	J	FD>RPD	L2645738	54

Table H-8. Field Duplicate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG	%RPD
E1668	WC-SB11-0.0-1.0FD	Tetrachlorobiphenyl	0.0131	µg/kg	J	FD>RPD	L2645738	64
E1668	WC-SB11-0.0-1.0FD	Trichlorobiphenyl	0.00816	µg/kg	J	FD>RPD	L2645738	112
E1699M	WC-SB11-0.0-1.0	4,4'-DDT	0.451	µg/kg	J	FD>RPD	L2645738	73
E1699M	WC-SB11-0.0-1.0FD	4,4'-DDT	0.97	µg/kg	J	FD>RPD	L2645738	73
E1699M	WC-SGPD17	4,4'-DDD	1.2	µg/kg	J	FD>RPD	K2108076	59
E1699M	WC-SGPD17FD	4,4'-DDD	2.2	µg/kg	J	FD>RPD	K2108076	59
SW8082A	WC-SCPD35-2.0-3.0	Aroclor 1242	36	µg/kg	J	FD>RPD	K2107489	32
SW8082A	WC-SCPD35-2.0-3.0FD	Aroclor 1242	26	µg/kg	J	FD>RPD	K2107489	32
SW8082A	WC-SGPD36	Aroclor 1242	140	µg/kg	J	FD>RPD	K2107752	157
SW8082A	WC-SGPD36	Aroclor 1254	110	µg/kg	J	FD>RPD	K2107752	167
SW8082A	WC-SGPD36	Aroclor 1260	38	µg/kg	J	FD>RPD	K2107752	146
SW8082A	WC-SGPD36FD	Aroclor 1242	17	µg/kg	J	FD>RPD	K2107752	157
SW8082A	WC-SGPD36FD	Aroclor 1254	10	µg/kg	J	FD>RPD	K2107752	167
SW8082A	WC-SGPD36FD	Aroclor 1260	5.9	µg/kg	J	FD>RPD	K2107752	146
SW8270DSIM	WC-SCPD28-4.0-5.0	2-Methylnaphthalene	20	µg/kg	J	FD>RPD	K2107278	174
SW8270DSIM	WC-SCPD28-4.0-5.0	Acenaphthene	32	µg/kg	J	FD>RPD	K2107278	192
SW8270DSIM	WC-SCPD28-4.0-5.0	Acenaphthylene	5.9	µg/kg	J	FD>RPD	K2107278	168
SW8270DSIM	WC-SCPD28-4.0-5.0	Anthracene	28	µg/kg	J	FD>RPD	K2107278	193
SW8270DSIM	WC-SCPD28-4.0-5.0	Benzo(a)anthracene	46	µg/kg	J	FD>RPD	K2107278	197
SW8270DSIM	WC-SCPD28-4.0-5.0	Benzo(a)pyrene	25	µg/kg	J	FD>RPD	K2107278	156
SW8270DSIM	WC-SCPD28-4.0-5.0	Benzo(b)fluoranthene	47	µg/kg	J	FD>RPD	K2107278	189
SW8270DSIM	WC-SCPD28-4.0-5.0	Benzo(g,h,i)perylene	21	µg/kg	J	FD>RPD	K2107278	188
SW8270DSIM	WC-SCPD28-4.0-5.0	Benzo(k)fluoranthene	16	µg/kg	J	FD>RPD	K2107278	190
SW8270DSIM	WC-SCPD28-4.0-5.0	Chrysene	64	µg/kg	J	FD>RPD	K2107278	189
SW8270DSIM	WC-SCPD28-4.0-5.0	Dibenzofuran	20	µg/kg	J	FD>RPD	K2107278	181
SW8270DSIM	WC-SCPD28-4.0-5.0	Fluoranthene	230	µg/kg	J	FD>RPD	K2107278	196
SW8270DSIM	WC-SCPD28-4.0-5.0	Fluorene	47	µg/kg	J	FD>RPD	K2107278	191
SW8270DSIM	WC-SCPD28-4.0-5.0	Indeno(1,2,3-cd)pyrene	18	µg/kg	J	FD>RPD	K2107278	188
SW8270DSIM	WC-SCPD28-4.0-5.0	Naphthalene	30	µg/kg	J	FD>RPD	K2107278	175
SW8270DSIM	WC-SCPD28-4.0-5.0	Phenanthrene	210	µg/kg	J	FD>RPD	K2107278	195
SW8270DSIM	WC-SCPD28-4.0-5.0	Pyrene	200	µg/kg	J	FD>RPD	K2107278	189
SW8270DSIM	WC-SCPD28-4.0-5.0FD	2-Methylnaphthalene	1.4	µg/kg	J	FD>RPD	K2107278	174
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Acenaphthene	0.67	µg/kg	J	FD>RPD	K2107278	192
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Acenaphthylene	0.51	µg/kg	J	FD>RPD	K2107278	168
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Anthracene	0.47	µg/kg	UJ	FD>RPD	K2107278	193
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Benzo(a)anthracene	0.37	µg/kg	UJ	FD>RPD	K2107278	197
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Benzo(a)pyrene	3.1	µg/kg	J	FD>RPD	K2107278	156
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Benzo(b)fluoranthene	1.3	µg/kg	J	FD>RPD	K2107278	189
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Benzo(g,h,i)perylene	0.65	µg/kg	UJ	FD>RPD	K2107278	188
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Benzo(k)fluoranthene	0.39	µg/kg	UJ	FD>RPD	K2107278	190
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Chrysene	1.8	µg/kg	J	FD>RPD	K2107278	189
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Dibenzofuran	0.97	µg/kg	UJ	FD>RPD	K2107278	181
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Fluoranthene	2.3	µg/kg	J	FD>RPD	K2107278	196
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Fluorene	1.1	µg/kg	J	FD>RPD	K2107278	191
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Indeno(1,2,3-cd)pyrene	0.58	µg/kg	UJ	FD>RPD	K2107278	188
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Naphthalene	2	µg/kg	J	FD>RPD	K2107278	175
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Phenanthrene	2.4	µg/kg	J	FD>RPD	K2107278	195
SW8270DSIM	WC-SCPD28-4.0-5.0FD	Pyrene	5.6	µg/kg	J	FD>RPD	K2107278	189
SW8270DSIM	WC-SCPD35-2.0-3.0	2-Methylnaphthalene	23	µg/kg	J	FD>RPD	K2107489	81
SW8270DSIM	WC-SCPD35-2.0-3.0	Acenaphthene	33	µg/kg	J	FD>RPD	K2107489	61
SW8270DSIM	WC-SCPD35-2.0-3.0	Acenaphthylene	17	µg/kg	J	FD>RPD	K2107489	74
SW8270DSIM	WC-SCPD35-2.0-3.0	Anthracene	36	µg/kg	J	FD>RPD	K2107489	77
SW8270DSIM	WC-SCPD35-2.0-3.0	Benzo(a)anthracene	110	µg/kg	J	FD>RPD	K2107489	31
SW8270DSIM	WC-SCPD35-2.0-3.0	Benzo(a)pyrene	110	µg/kg	J	FD>RPD	K2107489	24
SW8270DSIM	WC-SCPD35-2.0-3.0	Benzo(g,h,i)perylene	88	µg/kg	J	FD>RPD	K2107489	39
SW8270DSIM	WC-SCPD35-2.0-3.0	Chrysene	170	µg/kg	J	FD>RPD	K2107489	26
SW8270DSIM	WC-SCPD35-2.0-3.0	Dibenzofuran	17	µg/kg	J	FD>RPD	K2107489	61
SW8270DSIM	WC-SCPD35-2.0-3.0	Fluoranthene	360	µg/kg	J	FD>RPD	K2107489	47
SW8270DSIM	WC-SCPD35-2.0-3.0	Fluorene	38	µg/kg	J	FD>RPD	K2107489	59
SW8270DSIM	WC-SCPD35-2.0-3.0	Indeno(1,2,3-cd)pyrene	81	µg/kg	J	FD>RPD	K2107489	30
SW8270DSIM	WC-SCPD35-2.0-3.0	Naphthalene	48	µg/kg	J	FD>RPD	K2107489	68
SW8270DSIM	WC-SCPD35-2.0-3.0	Phenanthrene	230	µg/kg	J	FD>RPD	K2107489	67
SW8270DSIM	WC-SCPD35-2.0-3.0	Pyrene	350	µg/kg	J	FD>RPD	K2107489	49
SW8270DSIM	WC-SCPD35-2.0-3.0FD	2-Methylnaphthalene	54	µg/kg	J	FD>RPD	K2107489	81
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Acenaphthene	62	µg/kg	J	FD>RPD	K2107489	61
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Acenaphthylene	37	µg/kg	J	FD>RPD	K2107489	74
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Anthracene	81	µg/kg	J	FD>RPD	K2107489	77
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Benzo(a)anthracene	150	µg/kg	J	FD>RPD	K2107489	31
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Benzo(a)pyrene	140	µg/kg	J	FD>RPD	K2107489	24
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Benzo(g,h,i)perylene	130	µg/kg	J	FD>RPD	K2107489	39
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Chrysene	220	µg/kg	J	FD>RPD	K2107489	26
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Dibenzofuran	32	µg/kg	J	FD>RPD	K2107489	61
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Fluoranthene	580	µg/kg	J	FD>RPD	K2107489	47
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Fluorene	70	µg/kg	J	FD>RPD	K2107489	59
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Indeno(1,2,3-cd)pyrene	110	µg/kg	J	FD>RPD	K2107489	30
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Naphthalene	98	µg/kg	J	FD>RPD	K2107489	68
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Phenanthrene	460	µg/kg	J	FD>RPD	K2107489	67
SW8270DSIM	WC-SCPD35-2.0-3.0FD	Pyrene	580	µg/kg	J	FD>RPD	K2107489	49
SW8270DSIM	WC-SGPD17	Acenaphthene	54	µg/kg	J	FD>RPD	K2108076	27
SW8270DSIM	WC-SGPD17	Benzo(k)fluoranthene	28	µg/kg	J	FD>RPD	K2108076	30
SW8270DSIM	WC-SGPD17	Chrysene	87	µg/kg	J	FD>RPD	K2108076	32
SW8270DSIM	WC-SGPD17	Dibenzofuran	42	µg/kg	J	FD>RPD	K2108076	29
SW8270DSIM	WC-SGPD17	Fluorene	88	µg/kg	J	FD>RPD	K2108076	22
SW8270DSIM	WC-SGPD17	Pyrene	430	µg/kg	J	FD>RPD	K2108076	28
SW8270DSIM	WC-SGPD17FD	Acenaphthene	71	µg/kg	J	FD>RPD	K2108076	27
SW8270DSIM	WC-SGPD17FD	Benzo(k)fluoranthene	38	µg/kg	J	FD>RPD	K2108076	30
SW8270DSIM	WC-SGPD17FD	Chrysene	120	µg/kg	J	FD>RPD	K2108076	32
SW8270DSIM	WC-SGPD17FD	Dibenzofuran	56	µg/kg	J	FD>RPD	K2108076	29
SW8270DSIM	WC-SGPD17FD	Fluorene	110	µg/kg	J	FD>RPD	K2108076	22
SW8270DSIM	WC-SGPD17FD	Pyrene	570	µg/kg	J	FD>RPD	K2108076	28
SW8270DSIM	WC-SGPD36	2-Methylnaphthalene	15	µg/kg	J	FD>RPD	K2107752	109
SW8270DSIM	WC-SGPD36	Acenaphthene	11	µg/kg	J	FD>RPD	K2107752	101

Table H-8. Field Duplicate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG	%RPD
SW8270DSIM	WC-SGPD36	Acenaphthylene	7.9	µg/kg	J	FD>RPD	K2107752	98
SW8270DSIM	WC-SGPD36	Anthracene	20	µg/kg	J	FD>RPD	K2107752	58
SW8270DSIM	WC-SGPD36	Benzo(a)anthracene	38	µg/kg	J	FD>RPD	K2107752	29
SW8270DSIM	WC-SGPD36	Benzo(b)fluoranthene	44	µg/kg	J	FD>RPD	K2107752	24
SW8270DSIM	WC-SGPD36	Benzo(g,h,i)perylene	31	µg/kg	J	FD>RPD	K2107752	34
SW8270DSIM	WC-SGPD36	Chrysene	57	µg/kg	J	FD>RPD	K2107752	42
SW8270DSIM	WC-SGPD36	Dibenzofuran	6.3	µg/kg	J	FD>RPD	K2107752	60
SW8270DSIM	WC-SGPD36	Fluoranthene	120	µg/kg	J	FD>RPD	K2107752	74
SW8270DSIM	WC-SGPD36	Fluorene	14	µg/kg	J	FD>RPD	K2107752	52
SW8270DSIM	WC-SGPD36	Indeno(1,2,3-cd)pyrene	24	µg/kg	J	FD>RPD	K2107752	34
SW8270DSIM	WC-SGPD36	Naphthalene	49	µg/kg	J	FD>RPD	K2107752	160
SW8270DSIM	WC-SGPD36	Pyrene	140	µg/kg	J	FD>RPD	K2107752	63
SW8270DSIM	WC-SGPD36FD	2-Methylnaphthalene	4.4	µg/kg	J	FD>RPD	K2107752	109
SW8270DSIM	WC-SGPD36FD	Acenaphthene	3.6	µg/kg	J	FD>RPD	K2107752	101
SW8270DSIM	WC-SGPD36FD	Acenaphthylene	2.7	µg/kg	J	FD>RPD	K2107752	98
SW8270DSIM	WC-SGPD36FD	Anthracene	11	µg/kg	J	FD>RPD	K2107752	58
SW8270DSIM	WC-SGPD36FD	Benzo(a)anthracene	51	µg/kg	J	FD>RPD	K2107752	29
SW8270DSIM	WC-SGPD36FD	Benzo(b)fluoranthene	56	µg/kg	J	FD>RPD	K2107752	24
SW8270DSIM	WC-SGPD36FD	Benzo(g,h,i)perylene	22	µg/kg	J	FD>RPD	K2107752	34
SW8270DSIM	WC-SGPD36FD	Chrysene	87	µg/kg	J	FD>RPD	K2107752	42
SW8270DSIM	WC-SGPD36FD	Dibenzofuran	3.4	µg/kg	J	FD>RPD	K2107752	60
SW8270DSIM	WC-SGPD36FD	Fluoranthene	260	µg/kg	J	FD>RPD	K2107752	74
SW8270DSIM	WC-SGPD36FD	Fluorene	8.2	µg/kg	J	FD>RPD	K2107752	52
SW8270DSIM	WC-SGPD36FD	Indeno(1,2,3-cd)pyrene	17	µg/kg	J	FD>RPD	K2107752	34
SW8270DSIM	WC-SGPD36FD	Naphthalene	5.5	µg/kg	J	FD>RPD	K2107752	160
SW8270DSIM	WC-SGPD36FD	Pyrene	270	µg/kg	J	FD>RPD	K2107752	63
SW9060	WC-SCPD48-3.0-4.0	Total Organic Carbon	0.84	%	J	FD>RPD	K2107158	71
SW9060	WC-SCPD48-3.0-4.0FD	Total Organic Carbon	1.76	%	J	FD>RPD	K2107158	71
SW9060	WC-SGPD36	Total Organic Carbon	0.73	%	J	FD>RPD	K2107752	32
SW9060	WC-SGPD36FD	Total Organic Carbon	1.01	%	J	FD>RPD	K2107752	32
E1613B	WC-SGPD20A	1,2,3,4,6,7,8-HpCDF	0.356	µg/kg	J	FD>RPD	L2692261	34
E1613B	WC-SGPD20A	1,2,3,6,7,8-HxCDF	0.0246	µg/kg	J	FD>RPD	L2692261	30
E1613B	WC-SGPD20A	2,3,4,6,7,8-HxCDF	0.0195	µg/kg	J	FD>RPD	L2692261	31
E1613B	WC-SGPD20A	2,3,4,7,8-PeCDF	0.0239	µg/kg	J	FD>RPD	L2692261	37
E1613B	WC-SGPD20A	Total HpCDF	0.727	µg/kg	J	FD>RPD	L2692261	30
E1613B	WC-SGPD20A	Total HxCDF	0.405	µg/kg	J	FD>RPD	L2692261	27
E1613B	WC-SGPD20A	Total PeCDD	0.0335	µg/kg	J	FD>RPD	L2692261	23
E1613B	WC-SGPD20A	Total PeCDF	0.4	µg/kg	J	FD>RPD	L2692261	47
E1613B	WC-SGPD20A	Total TCDD	0.0146	µg/kg	J	FD>RPD	L2692261	41
E1613B	WC-SGPD20A	Total TCDF	0.155	µg/kg	J	FD>RPD	L2692261	51
E1613B	WC-SGPD20AFD	1,2,3,4,6,7,8-HpCDF	0.253	µg/kg	J	FD>RPD	L2692261	34
E1613B	WC-SGPD20AFD	1,2,3,6,7,8-HxCDF	0.0182	µg/kg	J	FD>RPD	L2692261	30
E1613B	WC-SGPD20AFD	2,3,4,6,7,8-HxCDF	0.0142	µg/kg	J	FD>RPD	L2692261	31
E1613B	WC-SGPD20AFD	2,3,4,7,8-PeCDF	0.0165	µg/kg	J	FD>RPD	L2692261	37
E1613B	WC-SGPD20AFD	Total HpCDF	0.54	µg/kg	J	FD>RPD	L2692261	30
E1613B	WC-SGPD20AFD	Total HxCDF	0.309	µg/kg	J	FD>RPD	L2692261	27
E1613B	WC-SGPD20AFD	Total PeCDD	0.0266	µg/kg	J	FD>RPD	L2692261	23
E1613B	WC-SGPD20AFD	Total PeCDF	0.247	µg/kg	J	FD>RPD	L2692261	47
E1613B	WC-SGPD20AFD	Total TCDD	0.00962	µg/kg	J	FD>RPD	L2692261	41
E1613B	WC-SGPD20AFD	Total TCDF	0.0916	µg/kg	J	FD>RPD	L2692261	51
SW8082A	WC-SGPD20A	Aroclor 1254	7.4	µg/kg	UJ	FD>RPD	K2202475	68
SW8082A	WC-SGPD20A	Aroclor 1260	15	µg/kg	J	FD>RPD	K2202475	46
SW8082A	WC-SGPD20AFD	Aroclor 1254	15	µg/kg	J	FD>RPD	K2202475	68
SW8082A	WC-SGPD20AFD	Aroclor 1260	24	µg/kg	J	FD>RPD	K2202475	46
SW8270DSIM	WC-SGPD20A	2-Methylnaphthalene	66	µg/kg	J	FD>RPD	K2202475	50
SW8270DSIM	WC-SGPD20AFD	2-Methylnaphthalene	110	µg/kg	J	FD>RPD	K2202475	50

Notes:
% = percent
µg/kg = microgram per kilogram
FD>RPD = Field duplicate relative percent difference greater than acceptance criterion
ID = Identifier

Qualifier Definitions
J = Analyte was present but reported value may not be accurate or precise.
UJ = The analyte was not detected above the detection limit objective; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table H-9. Laboratory Duplicate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG	%RPD
D6913/D7928	WC-SB10-0.0-1.0	Clay (<2 um)	9.8	%	J	LabDupRPD	K2111070	21.5
D6913/D7928	WC-SGPD17	Clay (<2 um)	16.6	%	J	LabDupRPD	K2108076	22.8
E1613B	WC-SCPD24-3.0-4.0	1,2,3,4,6,7,8-HpCDD	0.00263	µg/kg	J	LabDupRPD	L2659632	37.5
E1613B	WC-SCPD24-3.0-4.0	Total HpCDD	0.0068	µg/kg	J	LabDupRPD	L2659632	186.4
E1613B	WC-SCPD24-3.0-4.0	Total HxCDD	0.00138	µg/kg	J	LabDupRPD	L2659632	168.0
E1613B	WC-SCPD28-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.104	µg/kg	J	LabDupRPD	L2608823	24.5
E1613B	WC-SCPD28-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0141	µg/kg	J	LabDupRPD	L2608823	40.3
E1613B	WC-SCPD28-1.0-2.0	1,2,3,4,7,8-HxCDF	0.0532	µg/kg	J	LabDupRPD	L2608823	53.0
E1613B	WC-SCPD28-1.0-2.0	1,2,3,6,7,8-HxCDF	0.0214	µg/kg	J	LabDupRPD	L2608823	57.1
E1613B	WC-SCPD28-1.0-2.0	1,2,3,7,8,9-HxCDF	0.00547	µg/kg	J	LabDupRPD	L2608823	36.8
E1613B	WC-SCPD28-1.0-2.0	1,2,3,7,8-PeCDF	0.0214	µg/kg	J	LabDupRPD	L2608823	51.8
E1613B	WC-SCPD28-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0116	µg/kg	J	LabDupRPD	L2608823	41.3
E1613B	WC-SCPD28-1.0-2.0	2,3,4,7,8-PeCDF	0.0121	µg/kg	J	LabDupRPD	L2608823	30.9
E1613B	WC-SCPD28-1.0-2.0	2,3,7,8-TCDF	0.0113	µg/kg	J	LabDupRPD	L2608823	21.7
E1613B	WC-SCPD28-1.0-2.0	Total HxCDF	0.213	µg/kg	J	LabDupRPD	L2608823	21.9
E1613B	WC-SCPD28-1.0-2.0	Total PeCDD	0.0209	µg/kg	J	LabDupRPD	L2608823	25.8
E1613B	WC-SCPD32-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00877	µg/kg	J	LabDupRPD	L2606300	48.6
E1613B	WC-SCPD32-1.0-2.0	1,2,3,7,8,9-HxCDF	0.00263	µg/kg	J	LabDupRPD	L2606300	138.2
E1613B	WC-SCPD32-1.0-2.0	1,2,3,7,8-PeCDD	0.00215	µg/kg	J	LabDupRPD	L2606300	30.4
E1613B	WC-SCPD32-1.0-2.0	1,2,3,7,8-PeCDF	0.00486	µg/kg	J	LabDupRPD	L2606300	48.8
E1613B	WC-SCPD32-1.0-2.0	2,3,4,7,8-PeCDF	0.01	µg/kg	J	LabDupRPD	L2606300	29.8
E1613B	WC-SCPD32-1.0-2.0	2,3,7,8-TCDF	0.00276	µg/kg	J	LabDupRPD	L2606300	59.0
E1613B	WC-SCPD32-1.0-2.0	Total PeCDD	0.0135	µg/kg	J	LabDupRPD	L2606300	36.4
E1613B	WC-SCPD32-1.0-2.0	Total PeCDF	0.125	µg/kg	J	LabDupRPD	L2606300	20.1
E1613B	WC-SCPD32-1.0-2.0	Total TCDD	0.00941	µg/kg	J	LabDupRPD	L2606300	129.6
E1613B	WC-SCPD32-6.0-7.0	2,3,7,8-TCDD	0.000228	µg/kg	J	LabDupRPD	L2659655	99.0
E1613B	WC-SCPD32-6.0-7.0	1,2,3,4,7,8-HxCDD	0.00057	µg/kg	J	LabDupRPD	L2659655	81
E1613B	WC-SCPD32-6.0-7.0	Total PeCDD	0.017	µg/kg	J	LabDupRPD	L2659655	56.2
E1613B	WC-SCPD32-6.0-7.0	Total TCDD	0.00762	µg/kg	J	LabDupRPD	L2659655	40.0
E1613B	WC-SCPD47-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.0393	µg/kg	J	LabDupRPD	L2611545	32.5
E1613B	WC-SCPD47-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.00728	µg/kg	J	LabDupRPD	L2611545	35.6
E1613B	WC-SCPD47-1.0-2.0	1,2,3,4,7,8-HxCDD	0.000441	µg/kg	J	LabDupRPD	L2611545	45.7
E1613B	WC-SCPD47-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00251	µg/kg	J	LabDupRPD	L2611545	34.0
E1613B	WC-SCPD47-1.0-2.0	1,2,3,6,7,8-HxCDF	0.000969	µg/kg	J	LabDupRPD	L2611545	37.9
E1613B	WC-SCPD47-1.0-2.0	1,2,3,7,8,9-HxCDD	0.00126	µg/kg	J	LabDupRPD	L2611545	40.8
E1613B	WC-SCPD47-1.0-2.0	1,2,3,7,8,9-HxCDF	0.00047	µg/kg	J	LabDupRPD	L2611545	44.2
E1613B	WC-SCPD47-1.0-2.0	1,2,3,7,8-PeCDD	0.000245	µg/kg	J	LabDupRPD	L2611545	36.1
E1613B	WC-SCPD47-1.0-2.0	1,2,3,7,8-PeCDF	0.0013	µg/kg	J	LabDupRPD	L2611545	28.5
E1613B	WC-SCPD47-1.0-2.0	2,3,4,6,7,8-HxCDF	0.000634	µg/kg	J	LabDupRPD	L2611545	32.5
E1613B	WC-SCPD47-1.0-2.0	2,3,4,7,8-PeCDF	0.00105	µg/kg	J	LabDupRPD	L2611545	26.9
E1613B	WC-SCPD47-1.0-2.0	2,3,7,8-TCDF	0.00103	µg/kg	J	LabDupRPD	L2611545	37.7
E1613B	WC-SCPD47-1.0-2.0	OCDD	0.344	µg/kg	J	LabDupRPD	L2611545	48.8
E1613B	WC-SCPD47-1.0-2.0	OCDF	0.019	µg/kg	J	LabDupRPD	L2611545	42.8
E1613B	WC-SCPD47-1.0-2.0	Total HpCDD	0.0975	µg/kg	J	LabDupRPD	L2611545	30.4
E1613B	WC-SCPD47-1.0-2.0	Total HpCDF	0.0203	µg/kg	J	LabDupRPD	L2611545	25.6
E1613B	WC-SCPD47-1.0-2.0	Total HxCDD	0.0159	µg/kg	J	LabDupRPD	L2611545	28.0
E1613B	WC-SCPD47-1.0-2.0	Total HxCDF	0.0153	µg/kg	J	LabDupRPD	L2611545	46.2
E1613B	WC-SCPD47-1.0-2.0	Total PeCDD	0.00199	µg/kg	J	LabDupRPD	L2611545	91.9
E1613B	WC-SCPD47-1.0-2.0	Total TCDD	0.000541	µg/kg	J	LabDupRPD	L2611545	143.3
E1613B	WC-SCPD47-1.0-2.0	Total TCDF	0.00445	µg/kg	J	LabDupRPD	L2611545	52.1
E1613B	WC-SGPD02	1,2,3,4,6,7,8-HpCDD	0.131	µg/kg	J	LabDupRPD	L2611632	39.1
E1613B	WC-SGPD02	1,2,3,4,6,7,8-HpCDF	0.0112	µg/kg	J	LabDupRPD	L2611632	30.6
E1613B	WC-SGPD02	1,2,3,4,7,8,9-HpCDF	0.00099	µg/kg	J	LabDupRPD	L2611632	23.5
E1613B	WC-SGPD02	1,2,3,4,7,8-HxCDD	0.000799	µg/kg	J	LabDupRPD	L2611632	26.8
E1613B	WC-SGPD02	1,2,3,4,7,8-HxCDF	0.00144	µg/kg	J	LabDupRPD	L2611632	53.3
E1613B	WC-SGPD02	1,2,3,6,7,8-HxCDD	0.00328	µg/kg	J	LabDupRPD	L2611632	35.5
E1613B	WC-SGPD02	1,2,3,6,7,8-HxCDF	0.000766	µg/kg	J	LabDupRPD	L2611632	32.6
E1613B	WC-SGPD02	1,2,3,7,8,9-HxCDD	0.00167	µg/kg	J	LabDupRPD	L2611632	33.6
E1613B	WC-SGPD02	1,2,3,7,8-PeCDD	0.000444	µg/kg	J	LabDupRPD	L2611632	50.1
E1613B	WC-SGPD02	1,2,3,7,8-PeCDF	0.000596	µg/kg	J	LabDupRPD	L2611632	42.5
E1613B	WC-SGPD02	2,3,4,6,7,8-HxCDF	0.000892	µg/kg	J	LabDupRPD	L2611632	34.6
E1613B	WC-SGPD02	2,3,4,7,8-PeCDF	0.000881	µg/kg	J	LabDupRPD	L2611632	37.5
E1613B	WC-SGPD02	2,3,7,8-TCDD	0.000135	µg/kg	J	LabDupRPD	L2611632	48.3
E1613B	WC-SGPD02	2,3,7,8-TCDF	0.000584	µg/kg	J	LabDupRPD	L2611632	31.1
E1613B	WC-SGPD02	OCDD	1.13	µg/kg	J	LabDupRPD	L2611632	58.6
E1613B	WC-SGPD02	OCDF	0.0382	µg/kg	J	LabDupRPD	L2611632	34.0
E1613B	WC-SGPD02	Total HpCDD	0.4	µg/kg	J	LabDupRPD	L2611632	42.1
E1613B	WC-SGPD02	Total HpCDF	0.0312	µg/kg	J	LabDupRPD	L2611632	27.7
E1613B	WC-SGPD02	Total HxCDD	0.0436	µg/kg	J	LabDupRPD	L2611632	35.0
E1613B	WC-SGPD02	Total HxCDF	0.0209	µg/kg	J	LabDupRPD	L2611632	31.6
E1613B	WC-SGPD02	Total PeCDD	0.00364	µg/kg	J	LabDupRPD	L2611632	35.2
E1613B	WC-SGPD02	Total PeCDF	0.00883	µg/kg	J	LabDupRPD	L2611632	87.4
E1613B	WC-SGPD02	Total TCDD	0.000354	µg/kg	J	LabDupRPD	L2611632	39.5
E1613B	WC-SGPD10	1,2,3,4,6,7,8-HpCDF	0.0271	µg/kg	J	LabDupRPD	L2659646	27.7
E1613B	WC-SGPD10	1,2,3,4,7,8,9-HpCDF	0.00252	µg/kg	J	LabDupRPD	L2659646	50.7
E1613B	WC-SGPD10	1,2,3,4,7,8-HxCDF	0.0047	µg/kg	J	LabDupRPD	L2659646	48.0
E1613B	WC-SGPD10	OCDF	0.0932	µg/kg	J	LabDupRPD	L2659646	34.5
E1613B	WC-SGPD10	Total HpCDF	0.0799	µg/kg	J	LabDupRPD	L2659646	31.8
E1613B	WC-SGPD10	Total PeCDF	0.0176	µg/kg	J	LabDupRPD	L2659646	27.5
E1613B	WC-SGPD39	1,2,3,4,7,8-HxCDF	0.00771	µg/kg	J	LabDupRPD	L2658841	57.2
E1613B	WC-SGPD39	1,2,3,4,7,8-HxCDD	0.001	µg/kg	J	LabDupRPD	L2658841	94
E1613B	WC-SGPD39	1,2,3,6,7,8-HxCDD	0.00557	µg/kg	J	LabDupRPD	L2658841	43.6
E1613B	WC-SGPD39	1,2,3,7,8,9-HxCDD	0.00334	µg/kg	J	LabDupRPD	L2658841	48.5
E1613B	WC-SGPD39	2,3,7,8-TCDD	0.00021	µg/kg	J	LabDupRPD	L2658841	89

Table H-9. Laboratory Duplicate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG	%RPD
E1613B	WC-SGPD39	2,3,7,8-TCDF	0.00269	µg/kg	J	LabDupRPD	L2658841	34.4
E1613B	WC-SGPD39	Total HxCDD	0.0582	µg/kg	J	LabDupRPD	L2658841	22.7
E1613B	WC-SGPD39	Total PeCDD	0.00277	µg/kg	J	LabDupRPD	L2658841	67.3
E1613B	WC-SGPD39	Total PeCDF	0.108	µg/kg	J	LabDupRPD	L2658841	87.2
E1613B	WC-SGPD39	Total TCDF	0.161	µg/kg	J	LabDupRPD	L2658841	122.8
E1613B	WC-SGPD12A	1,2,3,4,6,7,8-HpCDD	0.12	µg/kg	J	LabDupRPD	L2692261	40
E1613B	WC-SGPD12A	1,2,3,4,6,7,8-HpCDF	0.0211	µg/kg	J	LabDupRPD	L2692261	38
E1613B	WC-SGPD12A	1,2,3,4,7,8-HxCDF	0.00803	µg/kg	J	LabDupRPD	L2692261	45
E1613B	WC-SGPD12A	2,3,4,6,7,8-HxCDF	0.0023	µg/kg	J	LabDupRPD	L2692261	68
E1613B	WC-SGPD12A	2,3,4,7,8-PeCDF	0.00403	µg/kg	J	LabDupRPD	L2692261	29
E1613B	WC-SGPD12A	2,3,7,8-TCDD	0.000165	µg/kg	J	LabDupRPD	L2692261	74
E1613B	WC-SGPD12A	OCDD	1.06	µg/kg	J	LabDupRPD	L2692261	35
E1613B	WC-SGPD12A	OCDF	0.0472	µg/kg	J	LabDupRPD	L2692261	38
E1613B	WC-SGPD12A	Total HpCDD	0.304	µg/kg	J	LabDupRPD	L2692261	45
E1613B	WC-SGPD12A	Total HpCDF	0.0548	µg/kg	J	LabDupRPD	L2692261	36
E1613B	WC-SGPD12A	Total HxCDD	0.0344	µg/kg	J	LabDupRPD	L2692261	45
E1613B	WC-SGPD12A	Total HxCDF	0.0328	µg/kg	J	LabDupRPD	L2692261	75
E1613B	WC-SGPD12A	Total PeCDD	0.0058	µg/kg	J	LabDupRPD	L2692261	62
E1613B	WC-SGPD12A	Total PeCDF	0.0225	µg/kg	J	LabDupRPD	L2692261	91
E1613B	WC-SGPD12A	Total TCDD	0.00245	µg/kg	J	LabDupRPD	L2692261	86
E1613B	WC-SGPD12A	Total TCDF	0.0116	µg/kg	J	LabDupRPD	L2692261	95
E1668	WC-SGPD12	Monochlorobiphenyl	0.046	µg/kg	J	LabDupRPD	L2675125	50.3
E1668	WC-SGPD12	PCB-1	0.00993	µg/kg	J	LabDupRPD	L2675125	65.5
E1668	WC-SGPD12	PCB-111	0.0055	µg/kg	J	LabDupRPD	L2675125	43
E1668	WC-SGPD12	PCB-121	0.00093	µg/kg	J	LabDupRPD	L2675125	88
E1668	WC-SGPD12	PCB-186	0.00057	µg/kg	J	LabDupRPD	L2675125	23
E1668	WC-SGPD12	PCB-188	0.003	µg/kg	J	LabDupRPD	L2675125	43
E1668	WC-SGPD12	PCB-204	0.00081	µg/kg	J	LabDupRPD	L2675125	160
E1668	WC-SGPD12	PCB-27	0.0036	µg/kg	J	LabDupRPD	L2675125	48
E1668	WC-SGPD12	PCB-34	0.0022	µg/kg	J	LabDupRPD	L2675125	42
E1668	WC-SGPD12	PCB-103	0.0616	µg/kg	J	LabDupRPD	L2675125	38.1
E1668	WC-SGPD12	PCB-12/13	0.0149	µg/kg	J	LabDupRPD	L2675125	35.4
E1668	WC-SGPD12	PCB-120	0.0288	µg/kg	J	LabDupRPD	L2675125	27.8
E1668	WC-SGPD12	PCB-123	0.0269	µg/kg	J	LabDupRPD	L2675125	25.1
E1668	WC-SGPD12	PCB-133	0.116	µg/kg	J	LabDupRPD	L2675125	31.9
E1668	WC-SGPD12	PCB-141	0.883	µg/kg	J	LabDupRPD	L2675125	34.4
E1668	WC-SGPD12	PCB-146	1.05	µg/kg	J	LabDupRPD	L2675125	21.3
E1668	WC-SGPD12	PCB-148	0.0231	µg/kg	J	LabDupRPD	L2675125	53.1
E1668	WC-SGPD12	PCB-150	0.0135	µg/kg	J	LabDupRPD	L2675125	50.0
E1668	WC-SGPD12	PCB-154	0.0944	µg/kg	J	LabDupRPD	L2675125	42.3
E1668	WC-SGPD12	PCB-155	0.00123	µg/kg	J	LabDupRPD	L2675125	33.8
E1668	WC-SGPD12	PCB-159	0.0655	µg/kg	J	LabDupRPD	L2675125	24.2
E1668	WC-SGPD12	PCB-174	2.39	µg/kg	J	LabDupRPD	L2675125	21.0
E1668	WC-SGPD12	PCB-175	0.0925	µg/kg	J	LabDupRPD	L2675125	24.2
E1668	WC-SGPD12	PCB-178	0.569	µg/kg	J	LabDupRPD	L2675125	23.0
E1668	WC-SGPD12	PCB-179	1.08	µg/kg	J	LabDupRPD	L2675125	24.4
E1668	WC-SGPD12	PCB-181	0.0237	µg/kg	J	LabDupRPD	L2675125	23.6
E1668	WC-SGPD12	PCB-184	0.0046	µg/kg	J	LabDupRPD	L2675125	45.3
E1668	WC-SGPD12	PCB-187	3.21	µg/kg	J	LabDupRPD	L2675125	22.2
E1668	WC-SGPD12	PCB-189	0.0552	µg/kg	J	LabDupRPD	L2675125	21.5
E1668	WC-SGPD12	PCB-19	0.00805	µg/kg	J	LabDupRPD	L2675125	40.2
E1668	WC-SGPD12	PCB-191	0.0735	µg/kg	J	LabDupRPD	L2675125	23.7
E1668	WC-SGPD12	PCB-197	0.0331	µg/kg	J	LabDupRPD	L2675125	40.7
E1668	WC-SGPD12	PCB-2	0.0214	µg/kg	J	LabDupRPD	L2675125	52.7
E1668	WC-SGPD12	PCB-200	0.158	µg/kg	J	LabDupRPD	L2675125	24.4
E1668	WC-SGPD12	PCB-201	0.151	µg/kg	J	LabDupRPD	L2675125	21.3
E1668	WC-SGPD12	PCB-205	0.0414	µg/kg	J	LabDupRPD	L2675125	21.2
E1668	WC-SGPD12	PCB-25	0.0181	µg/kg	J	LabDupRPD	L2675125	21.7
E1668	WC-SGPD12	PCB-26/29	0.0317	µg/kg	J	LabDupRPD	L2675125	22.9
E1668	WC-SGPD12	PCB-3	0.0147	µg/kg	J	LabDupRPD	L2675125	33.4
E1668	WC-SGPD12	PCB-32	0.0178	µg/kg	J	LabDupRPD	L2675125	22.4
E1668	WC-SGPD12	PCB-4	0.0122	µg/kg	J	LabDupRPD	L2675125	72.3
E1668	WC-SGPD12	PCB-46	0.0125	µg/kg	J	LabDupRPD	L2675125	24.6
E1668	WC-SGPD12	PCB-6	0.00952	µg/kg	J	LabDupRPD	L2675125	60.1
E1668	WC-SGPD12	PCB-68	0.0517	µg/kg	J	LabDupRPD	L2675125	27.5
E1668	WC-SGPD12	PCB-7	0.00203	µg/kg	J	LabDupRPD	L2675125	47.7
E1668	WC-SGPD12	PCB-72	0.0567	µg/kg	J	LabDupRPD	L2675125	22.3
E1668	WC-SGPD12	PCB-9	0.00241	µg/kg	J	LabDupRPD	L2675125	51.9
NWTPH-Dx	WC-SB02-0.0-1.0	Diesel Range Organics	17	mg/kg	J	LabDupRPD	K2111070	146.9
NWTPH-Dx	WC-SB02-0.0-1.0	Residual Range Organics (C25-C36)	130	mg/kg	J	LabDupRPD	K2111070	183.5
SW6020B	WC-SB02-0.0-1.0	Arsenic	8.83	mg/kg	J	LabDupRPD	K2111070	31.3
SW6020B	WC-SB02-0.0-1.0	Lead	13.8	mg/kg	J	LabDupRPD	K2111070	106.9
SW6020B	WC-SB02-0.0-1.0	Zinc	89.1	mg/kg	J	LabDupRPD	K2111070	31.9
SW9060	WC-SCPD40-8.0-9.0	Total Organic Carbon	0.12	%	J	LabDupRPD	K2205401	34

Notes:
% = percent
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
LabDupRPD = Laboratory duplicate relative percent difference greater than acceptance criterion
ID = Identifier

Qualifier Definitions
J = Analyte was present but reported value may not be accurate or precise.

Table H-10 Laboratory Control Sample Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD10-2.0-3.0	1,2,3,7,8,9-HxCDD	0.000268	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD10-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00026	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD10-4.0-5.0	1,2,3,7,8,9-HxCDD	0.00028	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD11-1.0-2.0	1,2,3,7,8,9-HxCDD	0.00292	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD11-2.0-3.0	1,2,3,7,8,9-HxCDD	0.00752	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD11-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00828	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD11-4.0-5.0	1,2,3,7,8,9-HxCDD	0.00953	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD21-5.0-6.0	1,2,3,7,8,9-HxCDD	0.00375	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD21-6.0-7.0	1,2,3,7,8,9-HxCDD	0.0062	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD22-1.0-2.0	1,2,3,7,8,9-HxCDD	0.00748	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD22-2.0-3.0	1,2,3,7,8,9-HxCDD	0.00981	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD22-3.0-4.0	1,2,3,7,8,9-HxCDD	0.0274	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD22-4.0-5.0	1,2,3,7,8,9-HxCDD	0.0216	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD24-1.0-2.0	1,2,3,7,8,9-HxCDD	0.000326	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SCPD24-2.0-3.0	1,2,3,7,8,9-HxCDD	0.000145	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SGPD11	1,2,3,7,8,9-HxCDD	0.0028	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SGPD10	1,2,3,7,8,9-HxCDD	0.00328	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SGPD22	1,2,3,7,8,9-HxCDD	0.00462	µg/kg	J+	LCS>UCL	L2659646
E1613B	WC-SGPD24	1,2,3,7,8,9-HxCDD	0.00246	µg/kg	J+	LCS>UCL	L2659646
E1699M	WC-SB01-0.0-1.0	Aldrin	0.018	µg/kg	UJ	LCS<LCL	L2645768
E1699M	WC-SB02-0.0-1.0	Aldrin	0.033	µg/kg	UJ	LCS<LCL	L2645716
E1699M	WC-SB03-0.0-1.0	Aldrin	0.026	µg/kg	UJ	LCS<LCL	L2645768
E1699M	WC-SB04-0.0-1.0	Aldrin	0.017	µg/kg	UJ	LCS<LCL	L2645768
E1699M	WC-SB09-0.0-1.0	Aldrin	0.012	µg/kg	UJ	LCS<LCL	L2645768
E1699M	WC-SB10-0.0-1.0	Aldrin	0.025	µg/kg	UJ	LCS<LCL	L2645716
E1699M	WC-SB11-0.0-1.0	Aldrin	0.018	µg/kg	UJ	LCS<LCL	L2645738
E1699M	WC-SB11-0.0-1.0FD	Aldrin	0.019	µg/kg	UJ	LCS<LCL	L2645738
E1699M	WC-SB12-0.0-1.0	Aldrin	0.031	µg/kg	UJ	LCS<LCL	L2645738
E1699M	WC-SCPD03-1.0-2.0	4,4'-DDE	2.5	µg/kg	J+	LCS>UCL	K2106883
E1699M	WC-SCPD03-2.0-3.0	4,4'-DDE	3.7	µg/kg	J+	LCS>UCL	K2106883
E1699M	WC-SCPD03-3.0-4.0	4,4'-DDE	2.9	µg/kg	J+	LCS>UCL	K2106883
E1699M	WC-SCPD03-4.0-5.0	4,4'-DDE	2.8	µg/kg	J+	LCS>UCL	K2106883
E1699M	WC-SCPD38-13.0-14.0	2,4'-DDD	17	µg/kg	J+	LCS>UCL	K2200746
E1699M	WC-SCPD38-14.0-14.3	2,4'-DDD	1.9	µg/kg	J+	LCS>UCL	K2200746
E1699M	WC-SCPD39-12.0-13.0	2,4'-DDD	11	µg/kg	J+	LCS>UCL	K2200746
E1699M	WC-SCPD39-13.0-13.9	2,4'-DDD	13	µg/kg	J+	LCS>UCL	K2200746
E1699M	WC-SCPD39-8.0-9.0	2,4'-DDD	1.3	µg/kg	J+	LCS>UCL	K2200746
E1699M	WC-SCPD39-9.0-10.0	2,4'-DDD	2.7	µg/kg	J+	LCS>UCL	K2200746
E1699M	WC-SCPD48-7.0-8.0	2,4'-DDD	7.2	µg/kg	J+	LCS>UCL	K2200746
E1699M	WC-SCPD48-8.0-9.0	2,4'-DDD	2.4	µg/kg	J+	LCS>UCL	K2200746
E1699M	WC-SCPD52-8.0-9.0	2,4'-DDD	2.5	µg/kg	J+	LCS>UCL	K2200746
E1699M	WC-SCPD12A-1.0-2.0	2,4'-DDD	1.3	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SCPD12A-1.0-2.0	4,4'-DDE	1.8	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SCPD12A-2.0-3.0	2,4'-DDD	41	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SCPD12A-2.0-3.0	4,4'-DDE	36	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SCPD12A-3.0-4.0	2,4'-DDD	350	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SCPD12A-3.0-4.0	4,4'-DDE	26	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SCPD12A-4.0-4.8	4,4'-DDE	0.54	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SCPD20A-1.0-2.0	4,4'-DDE	1.7	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SGPD12A	2,4'-DDD	8.6	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SGPD12A	4,4'-DDE	4.7	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SGPD20A	4,4'-DDE	2.1	µg/kg	J+	LCS>UCL	K2202475
E1699M	WC-SGPD20AFD	4,4'-DDE	1.8	µg/kg	J+	LCS>UCL	K2202475
SW7471A	WC-SB11-0.0-1.0	Mercury	0.035	mg/kg	J-	LCS<LCL	K2110977
SW7471A	WC-SB11-0.0-1.0FD	Mercury	0.033	mg/kg	J-	LCS<LCL	K2110977
SW7471A	WC-SB12-0.0-1.0	Mercury	0.043	mg/kg	J-	LCS<LCL	K2110977
SW8082A	WC-SCPD03-1.0-2.0	Aroclor 1016	1.8	µg/kg	UJ	LCS<LCL	K2106883
SW8082A	WC-SCPD03-2.0-3.0	Aroclor 1016	1.7	µg/kg	UJ	LCS<LCL	K2106883
SW8082A	WC-SCPD03-3.0-4.0	Aroclor 1016	1.6	µg/kg	UJ	LCS<LCL	K2106883
SW8082A	WC-SCPD03-4.0-5.0	Aroclor 1016	1.8	µg/kg	UJ	LCS<LCL	K2106883
SW8082A	WC-SCPD14-1.0-2.0	Aroclor 1016	0.81	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD14-1.0-2.0	Aroclor 1260	16	µg/kg	J-	LCS<LCL	K2107340
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1016	0.61	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1260	0.61	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1016	0.71	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1260	4.6	µg/kg	J-	LCS<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1016	0.68	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1260	0.68	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1016	0.67	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1260	0.67	µg/kg	UJ	LCS<LCL	K2107340

Table H-10 Laboratory Control Sample Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1016	0.64	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1260	0.64	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD28-1.0-2.0	Aroclor 1016	0.86	µg/kg	UJ	LCS<LCL	K2107278
SW8082A	WC-SCPD28-2.0-3.0	Aroclor 1016	0.81	µg/kg	UJ	LCS<LCL	K2107278
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1016	0.7	µg/kg	UJ	LCS<LCL	K2107278
SW8082A	WC-SCPD28-4.0-5.0	Aroclor 1016	0.79	µg/kg	UJ	LCS<LCL	K2107278
SW8082A	WC-SCPD28-4.0-5.0FD	Aroclor 1016	0.78	µg/kg	UJ	LCS<LCL	K2107278
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1016	1.1	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1260	4.3	µg/kg	J-	LCS<LCL	K2107340
SW8082A	WC-SCPD41-2.0-3.0	Aroclor 1016	0.92	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD41-2.0-3.0	Aroclor 1260	7.5	µg/kg	J-	LCS<LCL	K2107340
SW8082A	WC-SCPD41-3.0-4.0	Aroclor 1016	0.92	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD41-3.0-4.0	Aroclor 1260	15	µg/kg	J-	LCS<LCL	K2107340
SW8082A	WC-SCPD41-4.0-5.0	Aroclor 1016	0.9	µg/kg	UJ	LCS<LCL	K2107340
SW8082A	WC-SCPD41-4.0-5.0	Aroclor 1260	17	µg/kg	J-	LCS<LCL	K2107340

Notes:
mg/kg = milligram per kilogram
µg/kg = microgram per kilogram
ID = Identifier
LCS<LCL = Laboratory control sample recovery less than the lower control limit
LCS>UCL = Laboratory control sample recovery greater than the upper control limit

Qualifier Definitions
J+ = Analyte was present but reported value may not be accurate or precise, high bias.
J- = Analyte was present but reported value may not be accurate or precise, low bias.
UJ = The analyte was not detected above the detection limit objective; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table H-11. Matrix Spike/Matrix Spike Duplicate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD48-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.547	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD48-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.199	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD48-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.0279	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD48-2.0-3.0	1,2,3,4,7,8-HxCDF	0.139	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD48-2.0-3.0	1,2,3,6,7,8-HxCDF	0.0395	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD48-2.0-3.0	1,2,3,7,8,9-HxCDF	0.0162	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD48-2.0-3.0	1,2,3,7,8-PeCDD	0.00348	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD48-2.0-3.0	1,2,3,7,8-PeCDF	0.0687	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD48-2.0-3.0	2,3,4,7,8-PeCDF	0.0338	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD48-2.0-3.0	2,3,7,8-TCDF	0.0244	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD48-2.0-3.0	OCDF	0.511	µg/kg	J	MSRPD	L2606306
E1613B	WC-SCPD52-3.0-4.0	2,3,7,8-TCDF	0.0165	µg/kg	J-	MS<LCL	L2611560
E1613B	WC-SCPD52-3.0-4.0	OCDD	1.44	µg/kg	J-	MS<LCL|MSD<LCL	L2611560
E1613B	WC-SCPD52-3.0-4.0	OCDF	0.125	µg/kg	J-	MS<LCL	L2611560
E1613B	WC-SGPD18	2,3,7,8-TCDF	0.00709	µg/kg	J	MSRPD	L2615164
E1613B	WC-SGPD32	1,2,3,4,6,7,8-HpCDD	0.148	µg/kg	J+	MSD>UCL|MSRPD	L2612314
E1613B	WC-SGPD32	1,2,3,4,6,7,8-HpCDF	0.0398	µg/kg	J+	MSD>UCL|MSRPD	L2612314
E1613B	WC-SGPD32	2,3,7,8-TCDF	0.00471	µg/kg	J-	MS<LCL	L2612314
E1613B	WC-SGPD32	OCDD	2.09	µg/kg	J-	MS<LCL|MSD>UCL|MSRPD	L2612314
E1613B	WC-SGPD32	OCDF	0.118	µg/kg	J-	MS<LCL|MSD>UCL|MSRPD	L2612314
E1613B	WC-SGPD34A	1,2,3,4,6,7,8-HpCDD	0.373	µg/kg	J+	MS>UCL	K2202673
E1613B	WC-SGPD34A	OCDD	3.22	µg/kg	J-	MSD<LCL	K2202673
E1699M	WC-SB02-0.0-1.0	Aldrin	0.033	µg/kg	UJ	MS<LCL	L2645716
E1699M	WC-SCPD36-1.0-2.0	4,4'-DDE	7.7	µg/kg	J-	MS<LCL	K2107222
E1699M	WC-SCPD36-12.0-12.9	2,4'-DDE	0.64	µg/kg	UJ	MS<LCL|MSD<LCL	K2200746
E1699M	WC-SCPD48-2.0-3.0	2,4'-DDE	1.5	µg/kg	J-	MS<LCL	K2107158
E1699M	WC-SCPD48-2.0-3.0	4,4'-DDD	19	µg/kg	J+	MS>UCL|MSRPD	K2107158
E1699M	WC-SCPD50-1.0-2.0	2,4'-DDE	4	µg/kg	J-	MS<LCL|MSD<LCL	K2107395
E1699M	WC-SCPD50-1.0-2.0	4,4'-DDE	20	µg/kg	J-	MS<LCL|MSD<LCL	K2107395
E1699M	WC-SGPD18	2,4'-DDD	5.7	µg/kg	J-	MS<LCL	K2108076
E1699M	WC-SGPD44	4,4'-DDT	1	µg/kg	J	MSRPD	K2108034
E1699M	WC-SCPD26A-1.0-2.0	4,4'-DDE	34	µg/kg	J+	MS>UCL	K2204432
E1699M	WC-SCPD26A-1.0-2.0	4,4'-DDT	13	µg/kg	J+	MS>UCL|MSRPD	K2204432
E1699M	WC-SGPD12A	2,4'-DDD	8.6	µg/kg	J-	MSD<LCL	K2202475
E1699M	WC-SGPD12A	4,4'-DDD	24	µg/kg	J-	MS<LCL|MSD<LCL	K2202475
SW8082A	WC-SCPD11-5.0-6.0	Aroclor 1260	27	µg/kg	J-	MS<LCL|MSD<LCL	K2200743
SW8082A	WC-SCPD32-1.0-2.0	Aroclor 1260	25	µg/kg	J-	MS<LCL|MSD<LCL	K2107104
SW8082A	WC-SCPD32-6.0-7.0	Aroclor 1260	11	µg/kg	J-	MS<LCL|MSD<LCL	K2111942
SW8082A	WC-SCPD36-1.0-2.0	Aroclor 1260	19	µg/kg	J-	MS<LCL|MSD<LCL	K2107222
SW8082A	WC-SCPD36-12.0-12.9	Aroclor 1260	20	µg/kg	J-	MS<LCL|MSD<LCL	K2200746
SW8082A	WC-SCPD48-2.0-3.0	Aroclor 1260	60	µg/kg	J+	MS>UCL	K2107158
SW8082A	WC-SCPD16A-1.0-2.0	Aroclor 1016	0.85	µg/kg	UJ	MSD<LCL	K2203345
SW8082A	WC-SCPD16A-1.0-2.0	Aroclor 1260	22	µg/kg	J-	MSD<LCL	K2203345
SW8270DSIM	WC-SCPD03-1.0-2.0	Pyrene	170	µg/kg	J+	MSD>UCL	K2106883
SW8270DSIM	WC-SCPD14-1.0-2.0	Fluoranthene	560	µg/kg	J	MSRPD	K2107340
SW8270DSIM	WC-SCPD14-1.0-2.0	Phenanthrene	660	µg/kg	J-	MSD<LCL|MSRPD	K2107340
SW8270DSIM	WC-SCPD18-2.0-3.0	2-Methylnaphthalene	0.67	µg/kg	J	MSRPD	K2107637
SW8270DSIM	WC-SCPD18-2.0-3.0	Benzo(a)anthracene	1.2	µg/kg	J	MSRPD	K2107637
SW8270DSIM	WC-SCPD18-2.0-3.0	Phenanthrene	0.98	µg/kg	J	MSRPD	K2107637
SW8270DSIM	WC-SCPD18-2.0-3.0	Pyrene	1.4	µg/kg	J	MSRPD	K2107637
SW8270DSIM	WC-SCPD24-3.0-4.0	Acenaphthene	390	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
SW8270DSIM	WC-SCPD24-3.0-4.0	Anthracene	450	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
SW8270DSIM	WC-SCPD24-3.0-4.0	Chrysene	410	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
SW8270DSIM	WC-SCPD24-3.0-4.0	Dibenzofuran	360	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
SW8270DSIM	WC-SCPD24-3.0-4.0	Fluoranthene	1700	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
SW8270DSIM	WC-SCPD24-3.0-4.0	Fluorene	640	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
SW8270DSIM	WC-SCPD24-3.0-4.0	Pyrene	1400	µg/kg	J-	MS<LCL|MSD<LCL	K2111941
SW8270DSIM	WC-SCPD36-1.0-2.0	Fluoranthene	270	µg/kg	J	MSRPD	K2107222
SW8270DSIM	WC-SCPD36-1.0-2.0	Pyrene	370	µg/kg	J+	MSD>UCL|MSRPD	K2107222
SW8270DSIM	WC-SCPD36-12.0-12.9	2-Methylnaphthalene	160	µg/kg	J-	MS<LCL|MSD<LCL	K2200746
SW8270DSIM	WC-SCPD36-12.0-12.9	Fluoranthene	910	µg/kg	J-	MS<LCL|MSD<LCL	K2200746
SW8270DSIM	WC-SCPD36-12.0-12.9	Phenanthrene	1500	µg/kg	J-	MS<LCL|MSD<LCL	K2200746
SW8270DSIM	WC-SCPD36-12.0-12.9	Pyrene	1400	µg/kg	J-	MS<LCL|MSD<LCL	K2200746
SW8270DSIM	WC-SCPD48-2.0-3.0	Acenaphthene	89	µg/kg	J	MSRPD	K2107158
SW8270DSIM	WC-SCPD48-2.0-3.0	Benzo(a)pyrene	79	µg/kg	J	MSRPD	K2107158
SW8270DSIM	WC-SCPD48-2.0-3.0	Benzo(b)fluoranthene	100	µg/kg	J	MSRPD	K2107158
SW8270DSIM	WC-SCPD48-2.0-3.0	Indeno(1,2,3-cd)pyrene	58	µg/kg	J	MSRPD	K2107158
SW8270DSIM	WC-SCPD52-3.0-4.0	Benzo(a)anthracene	220	µg/kg	J-	MSD<LCL	K2107489
SW8270DSIM	WC-SCPD52-3.0-4.0	Benzo(a)pyrene	180	µg/kg	J-	MSD<LCL	K2107489
SW8270DSIM	WC-SCPD52-3.0-4.0	Benzo(b)fluoranthene	260	µg/kg	J-	MS<LCL|MSD<LCL	K2107489
SW8270DSIM	WC-SCPD52-3.0-4.0	Chrysene	340	µg/kg	J-	MS<LCL|MSD<LCL	K2107489
SW8270DSIM	WC-SCPD52-3.0-4.0	Fluoranthene	410	µg/kg	J-	MS<LCL|MSD<LCL	K2107489
SW8270DSIM	WC-SCPD52-3.0-4.0	Phenanthrene	930	µg/kg	J-	MS<LCL|MSD<LCL	K2107489
SW8270DSIM	WC-SCPD52-3.0-4.0	Pyrene	410	µg/kg	J-	MSD<LCL	K2107489
SW8270DSIM	WC-SGPD10	Acenaphthene	18	µg/kg	J	MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Acenaphthylene	8.9	µg/kg	J	MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Anthracene	20	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Benzo(a)anthracene	26	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Benzo(a)pyrene	28	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Benzo(b)fluoranthene	32	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Benzo(g,h,i)perylene	17	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Benzo(k)fluoranthene	11	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Chrysene	41	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Dibenzo(a,h)anthracene	2.5	µg/kg	J-	MSD<LCL|MSRPD	K2111932

Table H-11. Matrix Spike/Matrix Spike Duplicate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8270DSIM	WC-SGPD10	Dibenzofuran	18	µg/kg	J	MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Fluoranthene	110	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Fluorene	30	µg/kg	J	MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Indeno(1,2,3-cd)pyrene	14	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Phenanthrene	120	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SGPD10	Pyrene	110	µg/kg	J-	MSD<LCL|MSRPD	K2111932
SW8270DSIM	WC-SCPD12A-1.0-2.0	Fluoranthene	760	µg/kg	J-	MSD<LCL	K2202475
SW8270DSIM	WC-SCPD12A-1.0-2.0	Phenanthrene	1200	µg/kg	J-	MS<LCL|MSD<LCL	K2202475
SW8270DSIM	WC-SCPD16A-1.0-2.0	Fluoranthene	1200	µg/kg	J-	MS<LCL	K2203345
SW8270DSIM	WC-SCPD16A-1.0-2.0	Naphthalene	510	µg/kg	J-	MS<LCL	K2203345
SW8270DSIM	WC-SCPD16A-1.0-2.0	Phenanthrene	1700	µg/kg	J-	MS<LCL|MSD<LCL	K2203345
SW8270DSIM	WC-SCPD16A-1.0-2.0	Pyrene	1100	µg/kg	J-	MS<LCL	K2203345
SW8270DSIM	WC-SCPD46-9.0-10.0	Fluoranthene	530	µg/kg	J	MSRPD	K2203194
SW8270DSIM	WC-SCPD46-9.0-10.0	Phenanthrene	930	µg/kg	J-	MSD<LCL|MSRPD	K2203194
SW8270DSIM	WC-SCPD46-9.0-10.0	Pyrene	700	µg/kg	J-	MSD<LCL|MSRPD	K2203194
SW8270DSIM	WC-SGPD07A	Fluoranthene	350	µg/kg	J+	MSD>UCL|MSRPD	K2204707
SW8270DSIM	WC-SGPD07A	Phenanthrene	520	µg/kg	J+	MSD>UCL|MSRPD	K2204707
SW8270DSIM	WC-SGPD07A	Pyrene	260	µg/kg	J+	MSD>UCL|MSRPD	K2204707
SW8270DSIM	WC-SGPD12A	Acenaphthylene	3.4	µg/kg	J	MSRPD	K2202475
SW8270DSIM	WC-SGPD12A	Benzo(a)anthracene	18	µg/kg	J	MSRPD	K2202475
SW8270DSIM	WC-SGPD12A	Benzo(b)fluoranthene	20	µg/kg	J	MSRPD	K2202475
SW8270DSIM	WC-SGPD12A	Chrysene	29	µg/kg	J	MSRPD	K2202475
SW8270DSIM	WC-SGPD12A	Naphthalene	33	µg/kg	J	MSRPD	K2202475
SW8270DSIM	WC-SGPD34A	Fluoranthene	1700	µg/kg	J-	MS<LCL|MSD<LCL	K2202673
SW8270DSIM	WC-SGPD34A	Phenanthrene	1700	µg/kg	J-	MS<LCL|MSD<LCL	K2202673
SW8270DSIM	WC-SGPD34A	Pyrene	1100	µg/kg	J-	MS<LCL|MSD<LCL	K2202673
SW9060	WC-SCPD48-2.0-3.0	Total Organic Carbon	1.71	%	J+	MS>UCL|MSRPD	K2107158

Notes:
% = percent
µg/kg = microgram per kilogram
ID = Identifier
MS<LCL = Matrix spike recovery less than the lower control limit
MS>UCL = Matrix spike recovery greater than the upper control limit
MSRPD = Matrix spike/matrix spike duplicate relative percent difference greater than acceptance criterion
MSD<LCL = Matrix spike duplicate recovery less than the lower control limit
MSD>UCL = Matrix spike duplicate recovery greater than the upper control limit

Qualifier Definitions
J = Analyte was present but reported value may not be accurate or precise.
J+ = Analyte was present but reported value may not be accurate or precise, high bias.
J- = Analyte was present but reported value may not be accurate or precise, low bias.
UJ = The analyte was not detected above the detection limit objective; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SB02-0.0-1.0	1,2,3,4,6,7,8-HpCDD	0.0168	µg/kg	J-	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,4,6,7,8-HpCDF	0.0062	µg/kg	J-	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,4,7,8,9-HpCDF	0.00033	µg/kg	J-	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,4,7,8-HxCDD	0.00011	µg/kg	J-	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,4,7,8-HxCDF	0.000365	µg/kg	J-	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,6,7,8-HxCDD	0.000706	µg/kg	J-	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,6,7,8-HxCDF	0.0002	µg/kg	J-	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,7,8,9-HxCDF	0.000051	µg/kg	UJ	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,7,8-PeCDD	0.000056	µg/kg	UJ	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,7,8-PeCDF	0.00012	µg/kg	J-	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	2,3,4,6,7,8-HxCDF	0.0015	µg/kg	J-	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	2,3,7,8-TCDD	0.000089	µg/kg	UJ	Sur<LCL	L2645716
E1613B	WC-SB02-0.0-1.0	OCDD	0.133	µg/kg	J-	Sur<LCL	L2645716
E1613B	WC-SB09-0.0-1.0	1,2,3,4,6,7,8-HpCDD	0.00976	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,4,6,7,8-HpCDF	0.00354	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,4,7,8,9-HpCDF	0.000217	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,4,7,8-HxCDD	0.00011	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,4,7,8-HxCDF	0.00035	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,6,7,8-HxCDD	0.000412	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,6,7,8-HxCDF	0.00019	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,7,8,9-HxCDD	0.00023	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,7,8,9-HxCDF	0.000124	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,7,8-PeCDD	0.0000767	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,7,8-PeCDF	0.00013	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	2,3,4,6,7,8-HxCDF	0.00039	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	2,3,4,7,8-PeCDF	0.000165	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	2,3,7,8-TCDD	0.000049	µg/kg	UJ	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	2,3,7,8-TCDF	0.000064	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	OCDD	0.0806	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	OCDF	0.0108	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	Total HpCDD	0.0208	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	Total HpCDF	0.0105	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	Total HxCDD	0.00259	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	Total HxCDF	0.00581	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	Total PeCDD	0.0000767	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	Total PeCDF	0.00165	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	Total TCDD	0.000129	µg/kg	J-	Sur<LCL	L2645768
E1613B	WC-SB09-0.0-1.0	Total TCDF	0.000059	µg/kg	UJ	Sur<LCL	L2645768
E1613B	WC-SB11-0.0-1.0FD	1,2,3,4,6,7,8-HpCDD	0.0455	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,4,6,7,8-HpCDF	0.0248	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,4,7,8,9-HpCDF	0.0012	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,4,7,8-HxCDD	0.00073	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,4,7,8-HxCDF	0.002	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,6,7,8-HxCDD	0.00276	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,6,7,8-HxCDF	0.001	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,7,8,9-HxCDD	0.0014	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,7,8,9-HxCDF	0.00052	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,7,8-PeCDD	0.000655	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,7,8-PeCDF	0.0003	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	2,3,4,6,7,8-HxCDF	0.0046	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	2,3,4,7,8-PeCDF	0.00071	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	2,3,7,8-TCDD	0.00013	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	2,3,7,8-TCDF	0.00014	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	OCDD	0.361	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	OCDF	0.0386	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	Total HpCDD	0.0944	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	Total HpCDF	0.0649	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	Total HxCDD	0.00966	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	Total HxCDF	0.0433	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	Total PeCDD	0.000655	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	Total PeCDF	0.00826	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	Total TCDD	0.00013	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB11-0.0-1.0FD	Total TCDF	0.00014	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,4,6,7,8-HpCDD	0.00672	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,4,6,7,8-HpCDF	0.00142	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,4,7,8,9-HpCDF	0.00013	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,4,7,8-HxCDD	0.00032	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,4,7,8-HxCDF	0.0002	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,6,7,8-HxCDD	0.0003	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,6,7,8-HxCDF	0.00021	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,7,8,9-HxCDD	0.00031	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,7,8,9-HxCDF	0.0003	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,7,8-PeCDD	0.00019	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,7,8-PeCDF	0.00012	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	2,3,4,6,7,8-HxCDF	0.000274	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	2,3,4,7,8-PeCDF	0.000088	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	2,3,7,8-TCDD	0.00018	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	2,3,7,8-TCDF	0.00012	µg/kg	UJ	Sur<LCL	L2645738

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SB12-0.0-1.0	OCDD	0.0497	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	OCDF	0.0025	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	Total HpCDD	0.00672	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	Total HpCDF	0.00343	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	Total HxCDD	0.00189	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	Total HxCDF	0.00152	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	Total PeCDD	0.000238	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	Total PeCDF	0.000095	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	Total TCDD	0.000558	µg/kg	J-	Sur<LCL	L2645738
E1613B	WC-SB12-0.0-1.0	Total TCDF	0.00012	µg/kg	UJ	Sur<LCL	L2645738
E1613B	WC-SCPD03-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.124	µg/kg	J-	Sur<LCL	L2603308
E1613B	WC-SCPD03-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.023	µg/kg	J-	Sur<LCL	L2603308
E1613B	WC-SCPD03-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.0012	µg/kg	J-	Sur<LCL	L2603308
E1613B	WC-SCPD03-2.0-3.0	1,2,3,7,8-PeCDD	0.000973	µg/kg	J-	Sur<LCL	L2603308
E1613B	WC-SCPD03-2.0-3.0	2,3,4,7,8-PeCDF	0.00203	µg/kg	J-	Sur<LCL	L2603308
E1613B	WC-SCPD03-2.0-3.0	OCDD	1.23	µg/kg	J-	Sur<LCL	L2603308
E1613B	WC-SCPD03-3.0-4.0	OCDD	2.43	µg/kg	J-	Sur<LCL	L2603308
E1613B	WC-SCPD11-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0221	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD11-5.0-6.0	2,3,7,8-TCDF	0.00293	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD11-5.0-6.0	OCDD	2.8	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD14-2.0-3.0	OCDD	0.0782	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD14-3.0-4.0	1,2,3,4,6,7,8-HpCDD	0.00697	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD14-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.000933	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD14-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.00028	µg/kg	UJ	Sur<LCL	L2608826
E1613B	WC-SCPD14-3.0-4.0	1,2,3,7,8,9-HxCDF	0.00013	µg/kg	UJ	Sur<LCL	L2608826
E1613B	WC-SCPD14-3.0-4.0	2,3,4,7,8-PeCDF	0.000053	µg/kg	UJ	Sur<LCL	L2608826
E1613B	WC-SCPD14-3.0-4.0	OCDD	0.0565	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD14-4.0-5.0	OCDD	0.0287	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD18-1.0-2.0FD	OCDD	0.0241	µg/kg	J-	Sur<LCL	L2611619
E1613B	WC-SCPD18-2.0-3.0	OCDD	0.0103	µg/kg	J-	Sur<LCL	L2611619
E1613B	WC-SCPD18-3.0-4.0	OCDD	0.00958	µg/kg	J-	Sur<LCL	L2611619
E1613B	WC-SCPD18-4.0-5.0	OCDD	0.00601	µg/kg	J-	Sur<LCL	L2611619
E1613B	WC-SCPD19-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.00012	µg/kg	UJ	Sur<LCL	L2606435
E1613B	WC-SCPD19-2.0-3.0	OCDD	0.018	µg/kg	J-	Sur<LCL	L2606435
E1613B	WC-SCPD21-7.0-8.0	1,2,3,4,6,7,8-HpCDD	0.0711	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-7.0-8.0	1,2,3,4,6,7,8-HpCDF	0.0317	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-7.0-8.0	1,2,3,4,7,8,9-HpCDF	0.00197	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-7.0-8.0	1,2,3,4,7,8-HxCDD	0.000377	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-7.0-8.0	1,2,3,6,7,8-HxCDF	0.00301	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-7.0-8.0	1,2,3,7,8,9-HxCDF	0.000628	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-7.0-8.0	1,2,3,7,8-PeCDF	0.00083	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-7.0-8.0	2,3,4,6,7,8-HxCDF	0.00146	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-7.0-8.0	2,3,7,8-TCDF	0.000446	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-7.0-8.0	OCDD	1.34	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,4,6,7,8-HpCDD	0.0866	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,4,6,7,8-HpCDF	0.154	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,4,7,8,9-HpCDF	0.0489	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,4,7,8-HxCDD	0.000697	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,4,7,8-HxCDF	0.255	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,6,7,8-HxCDD	0.0042	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,6,7,8-HxCDF	0.054	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,7,8,9-HxCDF	0.0204	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,7,8-PeCDD	0.00103	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,7,8-PeCDF	0.055	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	2,3,4,6,7,8-HxCDF	0.00969	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	2,3,4,7,8-PeCDF	0.021	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	2,3,7,8-TCDF	0.00701	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD21-8.0-8.8	OCDD	1.53	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD22-7.0-8.0	1,2,3,4,6,7,8-HpCDF	0.0912	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD22-7.0-8.0	1,2,3,6,7,8-HxCDF	0.0212	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD22-7.0-8.0	OCDD	1.45	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD22-8.0-8.7	1,2,3,4,6,7,8-HpCDF	0.0572	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD22-8.0-8.7	1,2,3,4,7,8,9-HpCDF	0.00343	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD22-8.0-8.7	OCDD	2.13	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD23-1.0-2.0	OCDD	0.633	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD23-3.0-4.0	2,3,7,8-TCDF	0.000034	µg/kg	UJ	Sur<LCL	L2608826
E1613B	WC-SCPD24-4.0-5.0	1,2,3,7,8-PeCDD	0.000049	µg/kg	UJ	Sur<LCL	L2659632
E1613B	WC-SCPD27-4.0-5.0	1,2,3,4,7,8-HxCDD	0.00013	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD27-4.0-5.0	1,2,3,6,7,8-HxCDD	0.0002	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD27-4.0-5.0	1,2,3,7,8,9-HxCDD	0.00047	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD27-4.0-5.0	1,2,3,7,8-PeCDD	0.000073	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD27-4.0-5.0	1,2,3,7,8-PeCDF	0.000043	µg/kg	UJ	Sur<LCL	L2659632
E1613B	WC-SCPD27-4.0-5.0	2,3,4,7,8-PeCDF	0.000041	µg/kg	UJ	Sur<LCL	L2659632
E1613B	WC-SCPD27-4.0-5.0	2,3,7,8-TCDD	0.000077	µg/kg	UJ	Sur<LCL	L2659632
E1613B	WC-SCPD28-1.0-2.0	OCDD	3.82	µg/kg	J-	Sur<LCL	L2608823
E1613B	WC-SCPD28-3.0-4.0	OCDD	0.769	µg/kg	J-	Sur<LCL	L2608823
E1613B	WC-SCPD29-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.688	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.329	µg/kg	J-	Sur<LCL	L2659632

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD29-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.0212	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	1,2,3,4,7,8-HxCDD	0.00565	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	1,2,3,4,7,8-HxCDF	0.0491	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	1,2,3,6,7,8-HxCDD	0.0274	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	1,2,3,6,7,8-HxCDF	0.0375	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	1,2,3,7,8,9-HxCDD	0.0155	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	1,2,3,7,8,9-HxCDF	0.0094	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	1,2,3,7,8-PeCDD	0.00442	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	1,2,3,7,8-PeCDF	0.021	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	2,3,4,6,7,8-HxCDF	0.0197	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	2,3,4,7,8-PeCDF	0.0224	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	2,3,7,8-TCDD	0.0016	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	2,3,7,8-TCDF	0.013	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	OCDD	11.1	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	OCDF	0.543	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	Total HpCDD	1.56	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	Total HpCDF	0.792	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	Total HxCDD	0.232	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	Total HxCDF	0.523	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	Total PeCDD	0.0352	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	Total PeCDF	0.246	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	Total TCDD	0.0126	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-2.0-3.0	Total TCDF	0.108	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD29-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0315	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD29-5.0-6.0	OCDD	1.04	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD29-6.0-7.0	OCDD	0.774	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD30-8.0-9.0	1,2,3,4,6,7,8-HpCDF	1.12	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD30-8.0-9.0	OCDD	1.39	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD30-9.0-9.8	OCDD	0.994	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.204	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD31-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.056	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD31-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00323	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD31-1.0-2.0	OCDD	2.23	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD31-10.0-11.0	OCDD	0.171	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-11.0-12.0	1,2,3,4,6,7,8-HpCDF	0.000102	µg/kg	UJ	Sur<LCL	K2200743
E1613B	WC-SCPD31-11.0-12.0	OCDD	0.00749	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-2.0-3.0	OCDD	4.35	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD31-4.0-5.0	1,2,3,7,8-PeCDD	0.0022	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD31-4.0-5.0	2,3,4,7,8-PeCDF	0.00952	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD31-4.0-5.0	OCDD	6.83	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD31-8.0-9.0	1,2,3,4,6,7,8-HpCDD	0.101	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-8.0-9.0	1,2,3,4,6,7,8-HpCDF	0.0632	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-8.0-9.0	1,2,3,4,7,8,9-HpCDF	0.00656	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-8.0-9.0	1,2,3,6,7,8-HxCDF	0.00819	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-8.0-9.0	1,2,3,7,8,9-HxCDF	0.00396	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-8.0-9.0	2,3,4,6,7,8-HxCDF	0.00389	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-8.0-9.0	2,3,7,8-TCDD	0.000743	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-8.0-9.0	2,3,7,8-TCDF	0.00523	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD31-8.0-9.0	OCDD	1.37	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD32-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.181	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD32-5.0-6.0	1,2,3,4,7,8-HxCDD	0.000838	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD32-5.0-6.0	1,2,3,6,7,8-HxCDD	0.0115	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD32-5.0-6.0	2,3,7,8-TCDD	0.00067	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD32-5.0-6.0	2,3,7,8-TCDF	0.003	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD32-5.0-6.0	OCDD	3.15	µg/kg	J-	Sur<LCL	L2659632
E1613B	WC-SCPD33-1.0-2.0	OCDD	1.31	µg/kg	J-	Sur<LCL	L2659655
E1613B	WC-SCPD33-2.0-3.0	OCDD	0.0202	µg/kg	J-	Sur<LCL	L2659655
E1613B	WC-SCPD35-10.0-11.0	1,2,3,4,6,7,8-HpCDF	0.0791	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD35-10.0-11.0	OCDD	1.76	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD35-11.0-12.0	OCDD	10.7	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD35-4.0-5.0	2,3,7,8-TCDF	0.014	µg/kg	J-	Sur<LCL	L2611560
E1613B	WC-SCPD36-1.0-2.0	OCDD	2.89	µg/kg	J-	Sur<LCL	L2606446
E1613B	WC-SCPD36-11.0-12.0	1,2,3,4,6,7,8-HpCDD	0.029	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,4,6,7,8-HpCDF	0.0649	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,4,7,8,9-HpCDF	0.000882	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,4,7,8-HxCDD	0.000191	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,4,7,8-HxCDF	0.00108	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,6,7,8-HxCDD	0.00164	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,6,7,8-HxCDF	0.00549	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,7,8,9-HxCDF	0.000371	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,7,8-PeCDF	0.000289	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	2,3,4,6,7,8-HxCDF	0.00227	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	2,3,7,8-TCDD	0.000189	µg/kg	UJ	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	2,3,7,8-TCDF	0.000201	µg/kg	UJ	Sur<LCL	K2200743
E1613B	WC-SCPD36-11.0-12.0	OCDD	0.598	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-12.0-12.9	1,2,3,4,6,7,8-HpCDF	0.307	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD36-12.0-12.9	1,2,3,7,8,9-HxCDF	0.00313	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD36-12.0-12.9	OCDD	1.6	µg/kg	J-	Sur<LCL	K2200746

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD36-4.0-5.0	OCDD	4.47	µg/kg	J-	Sur<LCL	L2606446
E1613B	WC-SCPD36-7.0-8.0	OCDD	1.95	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-8.0-9.0	1,2,3,4,6,7,8-HpCDF	0.23	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD36-8.0-9.0	OCDD	2.15	µg/kg	J-	Sur<LCL	K2200743
E1613B	WC-SCPD38-10.0-11.0	1,2,3,4,6,7,8-HpCDF	0.0776	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD38-10.0-11.0	OCDD	2.94	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD38-13.0-14.0	1,2,3,4,6,7,8-HpCDF	0.172	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD38-9.0-10.0	1,2,3,4,6,7,8-HpCDF	0.0907	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD38-9.0-10.0	1,2,3,4,7,8,9-HpCDF	0.0115	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD38-9.0-10.0	1,2,3,6,7,8-HxCDF	0.0151	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD38-9.0-10.0	OCDD	3.96	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-12.0-13.0	1,2,3,4,6,7,8-HpCDD	1.36	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-12.0-13.0	1,2,3,4,6,7,8-HpCDF	0.45	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-12.0-13.0	1,2,3,4,7,8,9-HpCDF	0.0425	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-12.0-13.0	1,2,3,6,7,8-HxCDF	0.0396	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-12.0-13.0	1,2,3,7,8,9-HxCDF	0.0171	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-12.0-13.0	2,3,7,8-TCDF	0.0444	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-12.0-13.0	OCDD	13.7	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,4,6,7,8-HpCDD	0.609	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,4,6,7,8-HpCDF	0.288	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,4,7,8,9-HpCDF	0.0281	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,4,7,8-HxCDD	0.00442	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,4,7,8-HxCDF	0.101	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,6,7,8-HxCDD	0.0234	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,6,7,8-HxCDF	0.0309	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,7,8,9-HxCDF	0.0138	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,7,8-PeCDD	0.00288	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,7,8-PeCDF	0.0529	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	2,3,4,6,7,8-HxCDF	0.0156	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	2,3,4,7,8-PeCDF	0.0345	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	2,3,7,8-TCDD	0.00313	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	2,3,7,8-TCDF	0.0248	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-13.0-13.9	OCDD	7.82	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-4.0-5.0	2,3,7,8-TCDD	0.00104	µg/kg	J-	Sur<LCL	L2658841
E1613B	WC-SCPD39-8.0-9.0	1,2,3,4,6,7,8-HpCDD	0.0737	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,4,6,7,8-HpCDF	0.023	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,4,7,8,9-HpCDF	0.00164	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,4,7,8-HxCDD	0.000806	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,4,7,8-HxCDF	0.00372	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,6,7,8-HxCDD	0.00283	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,6,7,8-HxCDF	0.00267	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,7,8,9-HxCDF	0.00068	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,7,8-PeCDF	0.00151	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	2,3,4,6,7,8-HxCDF	0.00138	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	2,3,4,7,8-PeCDF	0.00203	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	2,3,7,8-TCDD	0.000426	µg/kg	UJ	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	2,3,7,8-TCDF	0.000787	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-8.0-9.0	OCDD	1.08	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-9.0-10.0	1,2,3,4,6,7,8-HpCDF	0.0288	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-9.0-10.0	1,2,3,4,7,8,9-HpCDF	0.00278	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-9.0-10.0	1,2,3,6,7,8-HxCDF	0.00382	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD39-9.0-10.0	OCDD	1.6	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD41-4.0-5.0	1,2,3,4,6,7,8-HpCDD	0.307	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD41-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.00552	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD41-4.0-5.0	1,2,3,7,8-PeCDD	0.00137	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD41-4.0-5.0	1,2,3,7,8-PeCDF	0.00742	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD41-4.0-5.0	2,3,4,7,8-PeCDF	0.00518	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD41-4.0-5.0	2,3,7,8-TCDD	0.00063	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD41-4.0-5.0	2,3,7,8-TCDF	0.00699	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD41-4.0-5.0	OCDD	3	µg/kg	J-	Sur<LCL	L2608826
E1613B	WC-SCPD42-4.0-5.0	OCDD	0.0745	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD42-5.0-6.0	OCDD	0.00027	µg/kg	UJ	Sur<LCL	L2606306
E1613B	WC-SCPD42-6.0-7.0	OCDD	0.00036	µg/kg	UJ	Sur<LCL	L2606306
E1613B	WC-SCPD44-2.0-3.0	OCDD	2.11	µg/kg	J-	Sur<LCL	L2606446
E1613B	WC-SCPD44-4.0-5.0	OCDD	0.736	µg/kg	J-	Sur<LCL	L2606446
E1613B	WC-SCPD46-2.0-3.0	2,3,7,8-TCDD	0.00038	µg/kg	J-	Sur<LCL	L2608839
E1613B	WC-SCPD46-2.0-3.0	2,3,7,8-TCDF	0.0148	µg/kg	J-	Sur<LCL	L2608839
E1613B	WC-SCPD48-1.0-2.0	OCDD	5.57	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD48-2.0-3.0	OCDD	5.78	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD48-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.0258	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD48-3.0-4.0	2,3,4,7,8-PeCDF	0.0195	µg/kg	J-	Sur<LCL	L2606306
E1613B	WC-SCPD48-7.0-8.0	1,2,3,4,6,7,8-HpCDF	0.0601	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD48-7.0-8.0	OCDD	2.71	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD48-8.0-9.0	1,2,3,4,6,7,8-HpCDF	0.0126	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD48-8.0-9.0	OCDD	0.388	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD48-9.0-9.5	1,2,3,4,6,7,8-HpCDF	0.000164	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD48-9.0-9.5	OCDD	0.0221	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD50-3.0-4.0	1,2,3,7,8-PeCDD	0.000103	µg/kg	J+	Sur>UCL	L2608839

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD50-3.0-4.0	1,2,3,7,8-PeCDF	0.00023	µg/kg	J+	Sur>UCL	L2608839
E1613B	WC-SCPD50-3.0-4.0	2,3,4,7,8-PeCDF	0.000221	µg/kg	J+	Sur>UCL	L2608839
E1613B	WC-SCPD52-7.0-8.0	1,2,3,4,6,7,8-HpCDF	0.0263	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD52-8.0-9.0	1,2,3,4,6,7,8-HpCDF	0.026	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD52-8.0-9.0	OCDD	1.35	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD52-9.0-9.2	1,2,3,4,6,7,8-HpCDD	0.0113	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD52-9.0-9.2	1,2,3,4,6,7,8-HpCDF	0.00224	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD52-9.0-9.2	1,2,3,4,7,8,9-HpCDF	0.000222	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD52-9.0-9.2	1,2,3,6,7,8-HxCDF	0.000255	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD52-9.0-9.2	2,3,4,7,8-PeCDF	0.000281	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SCPD52-9.0-9.2	2,3,7,8-TCDF	0.000201	µg/kg	UJ	Sur<LCL	K2200746
E1613B	WC-SCPD52-9.0-9.2	OCDD	0.108	µg/kg	J-	Sur<LCL	K2200746
E1613B	WC-SGPD04	OCDD	0.658	µg/kg	J-	Sur<LCL	L2611632
E1613B	WC-SGPD11	OCDD	1.11	µg/kg	J-	Sur<LCL	L2659646
E1613B	WC-SGPD35	1,2,3,4,6,7,8-HpCDD	0.241	µg/kg	J-	Sur<LCL	L2611619
E1613B	WC-SGPD35	OCDD	1.8	µg/kg	J-	Sur<LCL	L2611619
E1613B	WC-SGPD36	OCDD	0.739	µg/kg	J-	Sur<LCL	L2612316
E1613B	WC-SGPD44	OCDD	1.1	µg/kg	J-	Sur<LCL	L2615160
E1613B	WC-SGPD48	OCDD	0.606	µg/kg	J-	Sur<LCL	L2614662
E1613B	WC-SB11-3.0-4.0	2,3,7,8-TCDF	0.000461	µg/kg	UJ	Sur<LCL	K2204428
E1613B	WC-SB11-4.0-5.0	2,3,7,8-TCDD	0.000622	µg/kg	UJ	Sur<LCL	K2204428
E1613B	WC-SB11-4.0-5.0	2,3,7,8-TCDF	0.000582	µg/kg	UJ	Sur<LCL	K2204428
E1613B	WC-SCPD01-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.246	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.0223	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00488	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0228	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	1,2,3,4,7,8-HxCDF	0.0038	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	1,2,3,6,7,8-HxCDD	0.0193	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	1,2,3,6,7,8-HxCDF	0.00205	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000918	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	1,2,3,7,8-PeCDD	0.0106	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	1,2,3,7,8-PeCDF	0.00138	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	2,3,4,6,7,8-HxCDF	0.00252	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	2,3,4,7,8-PeCDF	0.00109	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	2,3,7,8-TCDD	0.0015	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	2,3,7,8-TCDF	0.0015	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-1.0-2.0	OCDD	1.12	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.0405	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.00406	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.000801	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	1,2,3,4,7,8-HxCDD	0.000932	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	1,2,3,4,7,8-HxCDF	0.000527	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	1,2,3,6,7,8-HxCDD	0.00101	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	1,2,3,6,7,8-HxCDF	0.000562	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	1,2,3,7,8,9-HxCDF	0.000592	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	1,2,3,7,8-PeCDD	0.000797	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	1,2,3,7,8-PeCDF	0.00102	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	2,3,4,6,7,8-HxCDF	0.000677	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	2,3,4,7,8-PeCDF	0.000942	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	2,3,7,8-TCDD	0.00177	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	2,3,7,8-TCDF	0.00131	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-2.0-3.0	OCDD	0.313	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,4,6,7,8-HpCDD	0.166	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.00941	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.000801	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,4,7,8-HxCDD	0.000363	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,4,7,8-HxCDF	0.0011	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,6,7,8-HxCDD	0.00273	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,6,7,8-HxCDF	0.00128	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,7,8,9-HxCDF	0.000408	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,7,8-PeCDD	0.000402	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	2,3,4,6,7,8-HxCDF	0.000622	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	2,3,7,8-TCDD	0.000904	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	2,3,7,8-TCDF	0.000714	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-3.0-4.0	OCDD	1.12	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,4,6,7,8-HpCDD	0.156	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.0114	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.000349	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000496	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,4,7,8-HxCDF	0.00131	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,6,7,8-HxCDD	0.00334	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,6,7,8-HxCDF	0.00113	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,7,8,9-HxCDF	0.000467	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-4.0-5.0	2,3,4,6,7,8-HxCDF	0.000704	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD01-4.0-5.0	OCDD	1.29	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-8.0-9.0	1,2,3,6,7,8-HxCDF	0.0116	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-8.0-9.0	OCDD	1.37	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,4,6,7,8-HpCDD	0.0524	µg/kg	J-	Sur<LCL	K2203181

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD03-9.0-9.8	1,2,3,4,6,7,8-HpCDF	0.0419	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,4,7,8,9-HpCDF	0.00871	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,4,7,8-HxCDD	0.00372	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,4,7,8-HxCDF	0.0177	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,6,7,8-HxCDD	0.00261	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,6,7,8-HxCDF	0.00412	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,7,8,9-HxCDF	0.00224	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,7,8-PeCDD	0.000661	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	2,3,4,6,7,8-HxCDF	0.00139	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	2,3,7,8-TCDD	0.000777	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	2,3,7,8-TCDF	0.000717	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD03-9.0-9.8	OCDD	0.514	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.161	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0679	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.00475	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-5.0-6.0	OCDD	3.38	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,4,6,7,8-HpCDD	0.0396	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,4,6,7,8-HpCDF	0.0444	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,4,7,8,9-HpCDF	0.00595	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,7,8,9-HxCDF	0.00596	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,7,8-PeCDD	0.00621	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,7,8-PeCDF	0.00656	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-6.0-7.0	OCDD	0.778	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.0596	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0694	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.00264	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,7,8-HxCDD	0.000653	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,7,8-HxCDF	0.00346	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,6,7,8-HxCDD	0.00273	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,6,7,8-HxCDF	0.0102	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,7,8,9-HxCDD	0.00158	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,7,8,9-HxCDF	0.00178	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,7,8-PeCDD	0.00113	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,7,8-PeCDF	0.00154	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	2,3,4,6,7,8-HxCDF	0.0032	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	2,3,4,7,8-PeCDF	0.00362	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	2,3,7,8-TCDD	0.000379	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	2,3,7,8-TCDF	0.00109	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	OCDD	1.59	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-5.0-6.0	OCDF	0.0761	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,4,6,7,8-HpCDD	0.0445	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,4,6,7,8-HpCDF	0.0425	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,4,7,8,9-HpCDF	0.00137	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD06-6.0-7.0	OCDD	0.992	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.116	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0238	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.00175	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,7,8-HxCDD	0.00166	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,7,8-HxCDF	0.00356	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,6,7,8-HxCDD	0.00466	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,6,7,8-HxCDF	0.00288	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8,9-HxCDD	0.002	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8,9-HxCDF	0.00113	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8-PeCDD	0.000889	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8-PeCDF	0.00116	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	2,3,4,6,7,8-HxCDF	0.0015	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	2,3,4,7,8-PeCDF	0.00167	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	2,3,7,8-TCDD	0.000566	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	2,3,7,8-TCDF	0.000426	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	OCDD	1.91	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD07-5.0-6.0	OCDF	0.0747	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.283	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0875	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.00591	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	1,2,3,7,8,9-HxCDF	0.00143	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD08-5.0-6.0	OCDD	4.71	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,4,6,7,8-HpCDD	0.266	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,4,6,7,8-HpCDF	0.0676	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,4,7,8,9-HpCDF	0.00483	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,4,7,8-HxCDD	0.00198	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,6,7,8-HxCDF	0.00923	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,7,8,9-HxCDF	0.00178	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,7,8-PeCDD	0.00126	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,7,8-PeCDF	0.00229	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	2,3,4,7,8-PeCDF	0.00399	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-6.0-7.0	OCDD	4.47	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,4,6,7,8-HpCDD	0.187	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,4,6,7,8-HpCDF	0.0328	ug/kg	J-	Sur<LCL	K2208213

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD08-7.0-8.0	1,2,3,4,7,8,9-HpCDF	0.00259	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD08-7.0-8.0	OCDD	3.75	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,6,7,8-HpCDD	0.00367	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0000422	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.0000627	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,7,8-HxCDD	0.000197	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,7,8,9-HxCDF	0.000106	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,7,8-PeCDD	0.000133	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,7,8-PeCDF	0.000191	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	2,3,4,7,8-PeCDF	0.0000976	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	2,3,7,8-TCDD	0.000495	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	2,3,7,8-TCDF	0.000176	ug/kg	UJ	Sur<LCL	K2208213
E1613B	WC-SCPD45-5.0-6.0	OCDD	0.0582	ug/kg	J-	Sur<LCL	K2208213
E1613B	WC-SCPD05-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.843	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.0323	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0041	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0467	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00176	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,6,7,8-HxCDD	0.0425	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,6,7,8-HxCDF	0.00445	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,7,8,9-HxCDF	0.00125	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,7,8-PeCDD	0.0202	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,7,8-PeCDF	0.000835	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	2,3,4,6,7,8-HxCDF	0.00496	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	2,3,4,7,8-PeCDF	0.000933	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	2,3,7,8-TCDD	0.00236	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	2,3,7,8-TCDF	0.000596	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD05-1.0-2.0	OCDD	4.35	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.0851	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.0575	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.00144	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-2.0-3.0	1,2,3,6,7,8-HxCDD	0.00377	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-2.0-3.0	1,2,3,6,7,8-HxCDF	0.00651	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-2.0-3.0	2,3,4,6,7,8-HxCDF	0.00224	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD05-2.0-3.0	2,3,7,8-TCDD	0.000385	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD05-2.0-3.0	2,3,7,8-TCDF	0.000454	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD05-2.0-3.0	OCDD	1.67	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.0241	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.0112	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00082	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,4,7,8-HxCDD	0.000157	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00225	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,6,7,8-HxCDD	0.000855	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,6,7,8-HxCDF	0.00149	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000439	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,7,8-PeCDD	0.00027	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	2,3,4,6,7,8-HxCDF	0.000542	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	2,3,7,8-TCDD	0.00062	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	2,3,7,8-TCDF	0.000417	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD06-1.0-2.0	OCDD	0.345	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-2.0-3.0	1,2,3,6,7,8-HxCDF	0.00716	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,4,6,7,8-HpCDD	0.255	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.0477	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.00198	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,4,7,8-HxCDD	0.0115	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,4,7,8-HxCDF	0.00166	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,6,7,8-HxCDD	0.00985	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,6,7,8-HxCDF	0.00698	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,7,8,9-HxCDF	0.000502	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,7,8-PeCDD	0.00174	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,7,8-PeCDF	0.000839	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	2,3,4,6,7,8-HxCDF	0.00218	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	2,3,7,8-TCDD	0.000388	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	2,3,7,8-TCDF	0.000471	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD06-3.0-4.0	OCDD	2.08	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-4.0-5.0	1,2,3,6,7,8-HxCDD	0.00136	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-4.0-5.0	1,2,3,6,7,8-HxCDF	0.00355	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD06-4.0-5.0	OCDD	0.562	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD07-1.0-2.0	2,3,7,8-TCDD	0.000889	µg/kg	UJ	Sur<LCL	K2204707
E1613B	WC-SCPD07-3.0-4.0	2,3,7,8-TCDD	0.00098	µg/kg	UJ	Sur<LCL	K2204707
E1613B	WC-SCPD07-3.0-4.0	2,3,7,8-TCDF	0.000769	µg/kg	UJ	Sur<LCL	K2204707
E1613B	WC-SCPD08-1.0-2.0	2,3,7,8-TCDD	0.0005	µg/kg	UJ	Sur<LCL	K2204707
E1613B	WC-SCPD08-1.0-2.0	2,3,7,8-TCDF	0.000327	µg/kg	UJ	Sur<LCL	K2204707
E1613B	WC-SCPD09-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.0267	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.00571	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.00063	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	1,2,3,4,7,8-HxCDD	0.00021	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	1,2,3,4,7,8-HxCDF	0.00124	µg/kg	J-	Sur<LCL	K2203181

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD09-2.0-3.0	1,2,3,6,7,8-HxCDD	0.000954	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	1,2,3,6,7,8-HxCDF	0.000542	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	1,2,3,7,8-PeCDD	0.000304	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	2,3,4,6,7,8-HxCDF	0.000279	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	2,3,4,7,8-PeCDF	0.000289	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	2,3,7,8-TCDD	0.000407	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	2,3,7,8-TCDF	0.000561	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SCPD09-2.0-3.0	OCDD	0.463	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SCPD09-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.000262	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD09-3.0-4.0	1,2,3,7,8,9-HxCDF	0.0000981	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD09-3.0-4.0	2,3,7,8-TCDF	0.000247	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD09-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.000348	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD09-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.000207	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD09-4.0-5.0	1,2,3,4,7,8-HxCDF	0.000124	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD09-4.0-5.0	1,2,3,6,7,8-HxCDF	0.000109	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD09-4.0-5.0	1,2,3,7,8,9-HxCDF	0.000097	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD09-4.0-5.0	2,3,7,8-TCDF	0.000265	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.115	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.0213	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0014	µg/kg	UJ	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,4,7,8-HxCDD	0.00075	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00605	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,6,7,8-HxCDD	0.00422	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,6,7,8-HxCDF	0.00243	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,7,8,9-HxCDD	0.0026	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,7,8,9-HxCDF	0.0013	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,7,8-PeCDD	0.00064	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,7,8-PeCDF	0.00284	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0025	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	2,3,4,7,8-PeCDF	0.00255	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	2,3,7,8-TCDD	0.00024	µg/kg	UJ	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	2,3,7,8-TCDF	0.00276	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	OCDD	1.13	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	OCDF	0.058	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	Total HpCDD	0.333	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	Total HpCDF	0.0556	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	Total HxCDD	0.0403	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	Total HxCDF	0.0351	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	Total PeCDD	0.00319	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	Total PeCDF	0.0237	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	Total TCDD	0.00387	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-1.0-2.0	Total TCDF	0.0103	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.155	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.109	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.022	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	1,2,3,6,7,8-HxCDF	0.0374	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	1,2,3,7,8,9-HxCDF	0.0231	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	1,2,3,7,8-PeCDD	0.00084	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	1,2,3,7,8-PeCDF	0.0657	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	2,3,4,6,7,8-HxCDF	0.0193	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	2,3,4,7,8-PeCDF	0.0451	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	2,3,7,8-TCDF	0.0317	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-2.0-3.0	OCDD	2.42	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	1,2,3,4,6,7,8-HpCDD	0.143	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.141	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.0083	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	1,2,3,6,7,8-HxCDF	0.0139	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	1,2,3,7,8,9-HxCDF	0.00934	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	1,2,3,7,8-PeCDD	0.0029	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	1,2,3,7,8-PeCDF	0.0187	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	2,3,4,6,7,8-HxCDF	0.017	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	2,3,4,7,8-PeCDF	0.0268	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	2,3,7,8-TCDF	0.0133	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-3.0-4.0	OCDD	2.26	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	1,2,3,4,6,7,8-HpCDD	0.231	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	1,2,3,4,6,7,8-HpCDF	0.461	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	1,2,3,4,7,8,9-HpCDF	0.00719	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	1,2,3,7,8,9-HxCDD	0.0033	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	1,2,3,7,8,9-HxCDF	0.00427	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	1,2,3,7,8-PeCDD	0.00203	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	1,2,3,7,8-PeCDF	0.00207	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	2,3,4,7,8-PeCDF	0.019	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	2,3,7,8-TCDD	0.0004	µg/kg	UJ	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	2,3,7,8-TCDF	0.0011	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	OCDD	3.59	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD12A-4.0-4.8	OCDF	0.425	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.0453	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.142	µg/kg	J-	Sur<LCL	K2203345

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00165	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00198	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,6,7,8-HxCDD	0.00264	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,6,7,8-HxCDF	0.0109	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000835	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,7,8-PeCDD	0.000674	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0039	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-1.0-2.0	OCDD	0.798	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-2.0-3.0	OCDD	1.9	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.201	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-3.0-4.0	1,2,3,6,7,8-HxCDF	0.0136	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-3.0-4.0	OCDD	2.55	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD16A-4.0-4.3	1,2,3,4,6,7,8-HpCDF	0.0563	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD20A-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.51	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.00862	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-2.0-3.0	1,2,3,7,8-PeCDD	0.0017	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-2.0-3.0	1,2,3,7,8-PeCDF	0.0022	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-2.0-3.0	2,3,4,7,8-PeCDF	0.015	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-2.0-3.0	OCDD	3.49	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.424	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.00956	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-3.0-4.0	1,2,3,7,8-PeCDD	0.0018	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-3.0-4.0	1,2,3,7,8-PeCDF	0.00193	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-3.0-4.0	2,3,4,7,8-PeCDF	0.0103	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD20A-3.0-4.0	OCDD	7.32	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SCPD25-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.00607	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.00178	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.000295	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	1,2,3,4,7,8-HxCDF	0.000799	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	1,2,3,6,7,8-HxCDF	0.000165	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	1,2,3,7,8,9-HxCDF	0.000216	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	1,2,3,7,8-PeCDD	0.000242	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	1,2,3,7,8-PeCDF	0.00014	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	2,3,4,7,8-PeCDF	0.000109	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	2,3,7,8-TCDD	0.000557	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	2,3,7,8-TCDF	0.000304	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-2.0-3.0	OCDD	0.0634	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SCPD25-3.0-4.0	1,2,3,7,8-PeCDF	0.000168	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-3.0-4.0	2,3,4,7,8-PeCDF	0.00014	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-3.0-4.0	2,3,7,8-TCDD	0.000452	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-3.0-4.0	2,3,7,8-TCDF	0.000354	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.00823	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.000549	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	1,2,3,4,7,8-HxCDF	0.00019	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	1,2,3,6,7,8-HxCDF	0.000205	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	1,2,3,7,8,9-HxCDF	0.000257	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	1,2,3,7,8-PeCDD	0.000216	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	1,2,3,7,8-PeCDF	0.000204	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	2,3,4,6,7,8-HxCDF	0.000185	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	2,3,4,7,8-PeCDF	0.000172	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	2,3,7,8-TCDD	0.000737	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	2,3,7,8-TCDF	0.00047	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD25-4.0-5.0	OCDD	0.365	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SCPD26A-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.0961	µg/kg	J-	Sur<LCL	K2204432
E1613B	WC-SCPD26A-3.0-4.0	OCDD	0.567	µg/kg	J-	Sur<LCL	K2204432
E1613B	WC-SCPD32-9.0-10.0	1,2,3,4,6,7,8-HpCDF	0.0171	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD34A-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.0728	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.00642	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.000654	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-1.0-2.0	1,2,3,6,7,8-HxCDF	0.000847	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-1.0-2.0	OCDD	0.552	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.564	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.0499	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.0107	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-2.0-3.0	OCDD	1.16	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-3.0-3.3	1,2,3,4,6,7,8-HpCDD	0.0696	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-3.0-3.3	1,2,3,4,6,7,8-HpCDF	0.0286	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-3.0-3.3	1,2,3,4,7,8,9-HpCDF	0.00787	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-3.0-3.3	1,2,3,6,7,8-HxCDF	0.00261	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-3.0-3.3	1,2,3,7,8,9-HxCDF	0.00258	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-3.0-3.3	1,2,3,7,8-PeCDF	0.000731	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-3.0-3.3	2,3,7,8-TCDD	0.000718	µg/kg	UJ	Sur<LCL	K2202673
E1613B	WC-SCPD34A-3.0-3.3	2,3,7,8-TCDF	0.00245	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD34A-3.0-3.3	OCDD	0.475	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SCPD37-10.0-10.9	1,2,3,4,6,7,8-HpCDD	0.132	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	1,2,3,4,6,7,8-HpCDF	0.045	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	1,2,3,4,7,8,9-HpCDF	0.0088	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	1,2,3,4,7,8-HxCDF	0.0403	µg/kg	J-	Sur<LCL	K2203194

Table H-12. Surrogate Validation Findings
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Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD37-10.0-10.9	1,2,3,6,7,8-HxCDD	0.00581	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	1,2,3,6,7,8-HxCDF	0.0137	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	1,2,3,7,8,9-HxCDF	0.0043	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	1,2,3,7,8-PeCDD	0.00135	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	1,2,3,7,8-PeCDF	0.0234	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	2,3,4,6,7,8-HxCDF	0.00427	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	2,3,4,7,8-PeCDF	0.0113	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	2,3,7,8-TCDD	0.000303	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	2,3,7,8-TCDF	0.0152	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-10.0-10.9	OCDD	1.32	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-6.0-7.0	1,2,3,4,6,7,8-HpCDF	0.00328	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-6.0-7.0	1,2,3,4,7,8,9-HpCDF	0.000218	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-6.0-7.0	OCDD	0.152	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-9.0-10.0	1,2,3,4,6,7,8-HpCDD	0.0396	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-9.0-10.0	1,2,3,4,6,7,8-HpCDF	0.0288	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-9.0-10.0	1,2,3,4,7,8,9-HpCDF	0.0079	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-9.0-10.0	1,2,3,4,7,8-HxCDF	0.018	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-9.0-10.0	1,2,3,6,7,8-HxCDF	0.00528	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-9.0-10.0	1,2,3,7,8,9-HxCDF	0.0023	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-9.0-10.0	2,3,4,6,7,8-HxCDF	0.00167	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-9.0-10.0	2,3,7,8-TCDF	0.00321	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD37-9.0-10.0	OCDD	0.358	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.0244	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.00349	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00047	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00207	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,6,7,8-HxCDF	0.000657	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000343	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,7,8-PeCDD	0.000346	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,7,8-PeCDF	0.00116	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	2,3,4,6,7,8-HxCDF	0.000358	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	2,3,4,7,8-PeCDF	0.000981	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	2,3,7,8-TCDD	0.00105	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	2,3,7,8-TCDF	0.00108	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD40-1.0-2.0	OCDD	0.234	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.0495	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.0095	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.00087	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,6,7,8-HxCDF	0.0013	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,7,8,9-HxCDF	0.000422	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,7,8-PeCDF	0.00123	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-2.0-3.0	2,3,4,6,7,8-HxCDF	0.000667	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-2.0-3.0	2,3,7,8-TCDF	0.000479	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD40-2.0-3.0	OCDD	0.57	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-3.0-4.0	OCDD	1.81	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,4,6,7,8-HpCDD	0.0832	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.00897	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.000972	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,4,7,8-HxCDF	0.00372	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,6,7,8-HxCDF	0.00174	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,7,8,9-HxCDF	0.000628	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,7,8-PeCDF	0.00236	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	2,3,4,6,7,8-HxCDF	0.000865	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	2,3,4,7,8-PeCDF	0.00145	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	2,3,7,8-TCDD	0.00061	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	2,3,7,8-TCDF	0.000532	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD40-4.0-5.0	OCDD	1.09	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD40-8.0-9.0	1,2,3,4,6,7,8-HpCDD	0.00447	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SCPD40-8.0-9.0	1,2,3,4,6,7,8-HpCDF	0.000261	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-8.0-9.0	1,2,3,4,7,8,9-HpCDF	0.000307	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-8.0-9.0	1,2,3,7,8,9-HxCDF	0.000202	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-8.0-9.0	1,2,3,7,8-PeCDF	0.000176	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-8.0-9.0	2,3,7,8-TCDF	0.000164	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-8.0-9.0	OCDD	0.0343	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	1,2,3,4,6,7,8-HpCDD	0.00519	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	1,2,3,4,6,7,8-HpCDF	0.000246	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	1,2,3,4,7,8,9-HpCDF	0.000296	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	1,2,3,4,7,8-HxCDF	0.000173	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	1,2,3,6,7,8-HxCDF	0.000185	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	1,2,3,7,8,9-HxCDF	0.000252	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	1,2,3,7,8-PeCDD	0.00031	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	1,2,3,7,8-PeCDF	0.000129	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	2,3,4,6,7,8-HxCDF	0.000174	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	2,3,4,7,8-PeCDF	0.000103	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	2,3,7,8-TCDD	0.000557	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	2,3,7,8-TCDF	0.000403	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SCPD40-9.0-9.5	OCDD	0.0385	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SCPD41-7.0-8.0	1,2,3,4,6,7,8-HpCDD	0.00505	µg/kg	J-	Sur<LCL	K2203194

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD41-7.0-8.0	1,2,3,4,6,7,8-HpCDF	0.00144	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	1,2,3,4,7,8,9-HpCDF	0.000126	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	1,2,3,4,7,8-HxCDF	0.000479	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	1,2,3,6,7,8-HxCDD	0.000433	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	1,2,3,6,7,8-HxCDF	0.000176	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	1,2,3,7,8,9-HxCDF	0.000154	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	1,2,3,7,8-PeCDF	0.000153	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	2,3,4,6,7,8-HxCDF	0.000132	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	2,3,4,7,8-PeCDF	0.000129	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	2,3,7,8-TCDD	0.00041	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	2,3,7,8-TCDF	0.00043	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD41-7.0-8.0	OCDD	0.0518	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD43A-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.665	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.223	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0169	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	1,2,3,4,7,8-HxCDD	0.00367	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	1,2,3,4,7,8-HxCDF	0.0408	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	1,2,3,6,7,8-HxCDD	0.0175	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	1,2,3,6,7,8-HxCDF	0.0142	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	1,2,3,7,8,9-HxCDF	0.00574	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	1,2,3,7,8-PeCDD	0.00339	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	1,2,3,7,8-PeCDF	0.0232	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	2,3,4,6,7,8-HxCDF	0.00931	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	2,3,4,7,8-PeCDF	0.015	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	2,3,7,8-TCDD	0.00323	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	2,3,7,8-TCDF	0.0159	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-1.0-2.0	OCDD	9.02	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.263	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.108	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.0101	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-2.0-3.0	1,2,3,6,7,8-HxCDF	0.0129	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-2.0-3.0	OCDD	3.45	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-3.0-4.0	1,2,3,4,6,7,8-HpCDD	0.141	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.0788	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.00983	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD43A-3.0-4.0	OCDD	1.64	µg/kg	J-	Sur<LCL	K2203345
E1613B	WC-SCPD44-7.0-8.0	1,2,3,4,6,7,8-HpCDF	0.0000299	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD44-7.0-8.0	1,2,3,4,7,8-HxCDF	0.0000804	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD44-7.0-8.0	1,2,3,6,7,8-HxCDF	0.0000874	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD44-7.0-8.0	1,2,3,7,8,9-HxCDF	0.0000991	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD44-7.0-8.0	1,2,3,7,8-PeCDD	0.000133	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD44-7.0-8.0	1,2,3,7,8-PeCDF	0.000108	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD44-7.0-8.0	2,3,4,7,8-PeCDF	0.000213	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD44-7.0-8.0	2,3,7,8-TCDD	0.000562	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD44-7.0-8.0	2,3,7,8-TCDF	0.00048	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD44-7.0-8.0	OCDD	0.00331	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD44-8.0-8.9	1,2,3,4,6,7,8-HpCDF	0.00132	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,4,6,7,8-HpCDD	0.135	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,4,6,7,8-HpCDF	0.0367	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,4,7,8,9-HpCDF	0.00252	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,4,7,8-HxCDF	0.00772	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,6,7,8-HxCDD	0.0048	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,6,7,8-HxCDF	0.00318	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,7,8,9-HxCDF	0.00141	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	2,3,4,6,7,8-HxCDF	0.00228	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	2,3,7,8-TCDD	0.000413	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	2,3,7,8-TCDF	0.00246	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-12.0-13.0	OCDD	1.88	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-13.0-14.0	1,2,3,4,6,7,8-HpCDF	0.108	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-13.0-14.0	OCDD	2.06	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	1,2,3,4,6,7,8-HpCDD	0.0285	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	1,2,3,4,6,7,8-HpCDF	0.00433	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	1,2,3,4,7,8-HxCDF	0.000797	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	1,2,3,6,7,8-HxCDF	0.000277	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	1,2,3,7,8-PeCDD	0.000259	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	1,2,3,7,8-PeCDF	0.000591	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	2,3,4,6,7,8-HxCDF	0.00029	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	2,3,4,7,8-PeCDF	0.000187	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	2,3,7,8-TCDD	0.000704	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	2,3,7,8-TCDF	0.000552	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SCPD46-8.0-9.0	OCDD	0.329	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD53A-8.0-9.0	1,2,3,4,6,7,8-HpCDF	0.0212	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD53A-8.0-9.0	OCDD	1.38	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD53A-9.0-9.4	1,2,3,4,6,7,8-HpCDF	0.0515	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SCPD53A-9.0-9.4	OCDD	2.61	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SGPD01	1,2,3,4,6,7,8-HpCDD	0.234	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD01	1,2,3,4,6,7,8-HpCDF	0.00688	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD01	1,2,3,4,7,8,9-HpCDF	0.00109	µg/kg	J-	Sur<LCL	K2203181

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SGPD01	1,2,3,4,7,8-HxCDD	0.00155	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD01	1,2,3,4,7,8-HxCDF	0.000872	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD01	1,2,3,6,7,8-HxCDD	0.00561	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD01	1,2,3,6,7,8-HxCDF	0.000318	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD01	1,2,3,7,8,9-HxCDF	0.000339	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD01	1,2,3,7,8-PeCDD	0.000751	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD01	2,3,4,6,7,8-HxCDF	0.000348	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD01	2,3,7,8-TCDD	0.00098	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD01	2,3,7,8-TCDF	0.000722	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD01	OCDD	1.21	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD05	1,2,3,4,6,7,8-HpCDD	0.00735	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD05	1,2,3,4,6,7,8-HpCDF	0.00485	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD05	1,2,3,4,7,8,9-HpCDF	0.00137	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD05	1,2,3,4,7,8-HxCDD	0.000341	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD05	1,2,3,4,7,8-HxCDF	0.00161	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD05	1,2,3,6,7,8-HxCDD	0.000349	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD05	1,2,3,6,7,8-HxCDF	0.000362	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD05	1,2,3,7,8,9-HxCDF	0.00025	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD05	1,2,3,7,8-PeCDD	0.000143	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD05	1,2,3,7,8-PeCDF	0.000826	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD05	2,3,4,6,7,8-HxCDF	0.000218	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD05	2,3,4,7,8-PeCDF	0.000455	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD05	2,3,7,8-TCDD	0.00067	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD05	2,3,7,8-TCDF	0.000451	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD05	OCDD	0.0502	µg/kg	J-	Sur<LCL	K2203181
E1613B	WC-SGPD06A	1,2,3,6,7,8-HxCDF	0.000281	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD06A	2,3,7,8-TCDD	0.000927	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD06A	2,3,7,8-TCDF	0.000628	µg/kg	UJ	Sur<LCL	K2203181
E1613B	WC-SGPD08	2,3,7,8-TCDD	0.000723	µg/kg	UJ	Sur<LCL	K2204707
E1613B	WC-SGPD08	2,3,7,8-TCDF	0.000418	µg/kg	UJ	Sur<LCL	K2204707
E1613B	WC-SGPD12A	1,2,3,4,6,7,8-HpCDD	0.12	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD12A	1,2,3,4,6,7,8-HpCDF	0.0211	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD12A	1,2,3,4,7,8,9-HpCDF	0.0026	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD12A	1,2,3,6,7,8-HxCDF	0.0021	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD12A	1,2,3,7,8,9-HxCDF	0.0013	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD12A	1,2,3,7,8-PeCDD	0.00103	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD12A	1,2,3,7,8-PeCDF	0.0056	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD12A	2,3,4,6,7,8-HxCDF	0.0023	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD12A	2,3,4,7,8-PeCDF	0.00403	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD12A	2,3,7,8-TCDF	0.00471	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD12A	OCDD	1.06	µg/kg	J-	Sur<LCL	L2692261
E1613B	WC-SGPD16A	1,2,3,4,6,7,8-HpCDD	0.0351	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD16A	1,2,3,4,6,7,8-HpCDF	0.0574	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD16A	1,2,3,4,7,8,9-HpCDF	0.00127	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD16A	OCDD	0.456	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD25	1,2,3,4,6,7,8-HpCDF	0.00615	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SGPD25	1,2,3,4,7,8,9-HpCDF	0.00036	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SGPD25	1,2,3,6,7,8-HxCDF	0.000246	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SGPD25	1,2,3,7,8-PeCDF	0.00108	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SGPD25	2,3,4,7,8-PeCDF	0.000705	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SGPD25	2,3,7,8-TCDD	0.000468	µg/kg	UJ	Sur<LCL	K2205401
E1613B	WC-SGPD25	2,3,7,8-TCDF	0.000527	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SGPD25	OCDD	0.474	µg/kg	J-	Sur<LCL	K2205401
E1613B	WC-SGPD26A	1,2,3,4,6,7,8-HpCDD	0.0687	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD26A	1,2,3,4,6,7,8-HpCDF	0.0454	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD26A	1,2,3,4,7,8,9-HpCDF	0.00646	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD26A	1,2,3,6,7,8-HxCDF	0.00869	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD26A	1,2,3,7,8,9-HxCDF	0.00483	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD26A	2,3,7,8-TCDF	0.062	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD26A	OCDD	0.988	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD34A	OCDD	3.22	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD40	1,2,3,4,6,7,8-HpCDD	0.0913	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SGPD40	1,2,3,4,6,7,8-HpCDF	0.0123	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SGPD40	1,2,3,4,7,8,9-HpCDF	0.00153	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SGPD40	1,2,3,4,7,8-HxCDF	0.00163	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SGPD40	1,2,3,6,7,8-HxCDF	0.00105	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SGPD40	1,2,3,7,8,9-HxCDF	0.000502	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SGPD40	1,2,3,7,8-PeCDD	0.000678	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SGPD40	1,2,3,7,8-PeCDF	0.000423	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SGPD40	2,3,4,6,7,8-HxCDF	0.000858	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SGPD40	2,3,4,7,8-PeCDF	0.000416	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SGPD40	2,3,7,8-TCDD	0.00077	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SGPD40	2,3,7,8-TCDF	0.000847	µg/kg	UJ	Sur<LCL	K2203194
E1613B	WC-SGPD40	OCDD	0.756	µg/kg	J-	Sur<LCL	K2203194
E1613B	WC-SGPD43A	1,2,3,4,6,7,8-HpCDD	0.219	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD43A	1,2,3,4,6,7,8-HpCDF	0.0361	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD43A	1,2,3,4,7,8,9-HpCDF	0.00333	µg/kg	J-	Sur<LCL	K2202673
E1613B	WC-SGPD43A	1,2,3,6,7,8-HxCDF	0.00306	µg/kg	J-	Sur<LCL	K2202673

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SGPD43A	OCDD	5.02	µg/kg	J-	Sur<LCL	K2202673
E1668	WC-SB01-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.00607	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	Decachlorobiphenyl	0.00698	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	Dichlorobiphenyl	0.00624	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	Heptachlorobiphenyl	0.0696	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	Hexachlorobiphenyl	0.0978	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	Monochlorobiphenyl	0.00202	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	Nonachlorobiphenyl	0.00758	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	Octachlorobiphenyl	0.0238	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-085/110/115/116/117	0.0131	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-1	0.00072	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-10	0.00046	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-103	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-104	0.000092	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-105	0.00292	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-106	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-107	0.00049	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-108/124	0.0003	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-11	0.00624	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-111	0.0001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-112	0.0001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-114	0.000265	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-118	0.00621	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-12/13	0.0018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-120	0.0001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-121	0.0001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-122	0.00017	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-123	0.00015	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-126	0.00017	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-127	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-128/166	0.00515	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-129/138/163	0.0234	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-130	0.00196	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-131	0.00026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-132	0.00734	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-133	0.00049	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-134/143	0.00095	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-135/151	0.00666	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-136	0.0018	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-137/164	0.00329	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-139/140	0.0004	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-14	0.0019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-141	0.00276	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-142	0.00026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-144	0.00094	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-145	0.000058	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-146	0.00332	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-147/149	0.018	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-148	0.000079	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-15	0.0013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-150	0.000055	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-152	0.000056	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-153/168	0.0152	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-154	0.0004	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-155	0.000083	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-156/157	0.00234	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-158	0.00184	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-159	0.000338	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-16	0.00028	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-160	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-161	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-162	0.000234	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-165	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-167	0.000976	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-169	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-17	0.00034	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-170	0.00878	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-171/173	0.00249	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-172	0.0016	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-174	0.00791	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-175	0.00031	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-176	0.0009	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-177	0.00499	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-178	0.00189	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-179	0.00332	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-18/30	0.000527	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-180/193	0.0177	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-181	0.00011	µg/kg	UJ	Sur<LCL	L2645768

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB01-0.0-1.0	PCB-182	0.0001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-184	0.000071	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-185	0.000351	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-186	0.000077	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-187	0.0115	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-188	0.000087	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-189	0.00022	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-19	0.00057	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-190	0.0012	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-191	0.000335	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-192	0.000089	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-194	0.00565	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-195	0.0014	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-196	0.0024	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-197	0.000263	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-198/199	0.00791	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-2	0.00068	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-20/28	0.00103	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-200	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-201	0.00073	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-202	0.0012	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-203	0.004	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-204	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-205	0.0002	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-206	0.00538	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-207	0.0006	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-208	0.0016	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-21/33	0.00047	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-22	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-23	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-24	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-25	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-26/29	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-27	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-3	0.000617	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-31	0.00114	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-32	0.0003	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-34	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-35	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-36	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-37	0.000528	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-38	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-39	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-4	0.0017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-40/41/71	0.000849	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-42	0.00034	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-43	0.00027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-44/47/65	0.0018	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-45/51	0.000407	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-46	0.00025	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-48	0.00025	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-49/69	0.00073	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-5	0.00046	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-50/53	0.000363	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-52	0.0019	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-54	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-55	0.0003	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-56	0.000821	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-57	0.00029	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-58	0.00028	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-59/62/75	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-6	0.00046	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-60	0.00029	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-61/70/74/76	0.0025	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-63	0.0003	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-64	0.00062	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-66	0.0014	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-67	0.00025	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-68	0.00026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-7	0.00043	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-72	0.00029	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-73	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-77	0.00029	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-78	0.00032	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-79	0.00027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-8	0.00045	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-80	0.00025	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-81	0.00024	µg/kg	UJ	Sur<LCL	L2645768

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB01-0.0-1.0	PCB-82	0.00072	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-83/99	0.0037	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-84	0.00183	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-86/87/97/108/119/125	0.00382	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-88/91	0.0015	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-89	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-9	0.00045	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-90/101/113	0.00557	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-92	0.00129	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-93/98/100/102	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-94	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-95	0.00635	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	PCB-96	0.000057	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	Pentachlorobiphenyl	0.0486	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	Tetrachlorobiphenyl	0.0123	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB01-0.0-1.0	Trichlorobiphenyl	0.00434	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB02-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.007	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	Decachlorobiphenyl	0.0068	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	Dichlorobiphenyl	0.0024	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	Heptachlorobiphenyl	0.0951	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	Hexachlorobiphenyl	0.313	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	Monochlorobiphenyl	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	Nonachlorobiphenyl	0.0036	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	Octachlorobiphenyl	0.0239	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-085/110/115/116/117	0.0962	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-1	0.003	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-10	0.0026	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-103	0.0016	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-104	0.00052	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-105	0.0161	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-106	0.00066	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-107	0.0026	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-108/124	0.0023	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-11	0.003	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-111	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-112	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-114	0.00074	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-118	0.0377	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-12/13	0.0028	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-120	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-121	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-122	0.00069	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-123	0.0015	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-126	0.00065	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-127	0.00061	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-128/166	0.0171	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-129/138/163	0.0864	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-130	0.00548	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-131	0.00093	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-132	0.0266	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-133	0.00081	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-134/143	0.0026	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-135/151	0.0173	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-136	0.00604	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-137/164	0.0102	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-139/140	0.00208	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-14	0.0029	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-141	0.00992	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-142	0.0009	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-144	0.0024	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-145	0.00041	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-146	0.007	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-147/149	0.045	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-148	0.00057	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-15	0.0027	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-150	0.00039	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-152	0.0004	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-153/168	0.0508	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-154	0.00044	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-155	0.0005	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-156/157	0.013	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-158	0.0072	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-159	0.00054	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-16	0.0021	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-160	0.00056	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-161	0.00058	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-162	0.00053	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-165	0.00059	µg/kg	UJ	Sur<LCL	L2645716

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB02-0.0-1.0	PCB-167	0.00383	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-169	0.0006	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-17	0.0016	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-170	0.0125	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-171/173	0.00407	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-172	0.00207	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-174	0.0115	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-175	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-176	0.0017	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-177	0.00849	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-178	0.0019	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-179	0.00528	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-18/30	0.00173	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-180/193	0.024	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-181	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-182	0.00095	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-184	0.00069	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-185	0.00156	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-186	0.00076	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-187	0.015	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-188	0.00076	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-189	0.00078	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-19	0.0016	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-190	0.00074	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-191	0.00081	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-192	0.00083	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-194	0.00599	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-195	0.0016	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-196	0.0032	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-197	0.00047	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-198/199	0.00953	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-2	0.0017	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-20/28	0.0026	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-200	0.00057	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-201	0.00052	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-202	0.00049	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-203	0.0036	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-204	0.00054	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-205	0.00064	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-206	0.0036	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-207	0.0017	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-208	0.0015	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-21/33	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-22	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-23	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-24	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-25	0.00099	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-26/29	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-27	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-3	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-31	0.0021	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-32	0.00127	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-34	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-35	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-36	0.00094	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-37	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-38	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-39	0.00093	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-4	0.0057	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-40/41/71	0.00407	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-42	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-43	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-44/47/65	0.0065	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-45/51	0.0019	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-46	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-48	0.00098	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-49/69	0.00432	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-5	0.0026	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-50/53	0.00136	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-52	0.0124	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-54	0.00079	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-55	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-56	0.0017	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-57	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-58	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-59/62/75	0.001	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-6	0.0025	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-60	0.0011	µg/kg	UJ	Sur<LCL	L2645716

Table H-12. Surrogate Validation Findings
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Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB02-0.0-1.0	PCB-61/70/74/76	0.00914	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-63	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-64	0.00368	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-66	0.00406	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-67	0.00097	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-68	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-7	0.0024	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-72	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-73	0.00073	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-77	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-78	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-79	0.00097	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-8	0.0024	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-80	0.00094	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-81	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-82	0.0056	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-83/99	0.0277	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-84	0.0134	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-86/87/97/109/119/125	0.0291	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-88/91	0.0066	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-89	0.0019	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-9	0.0025	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-90/101/113	0.036	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-92	0.0112	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-93/98/100/102	0.0017	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-94	0.0018	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-95	0.0366	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	PCB-96	0.00047	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	Pentachlorobiphenyl	0.323	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	Tetrachlorobiphenyl	0.0501	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB02-0.0-1.0	Trichlorobiphenyl	0.0077	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB03-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.00033	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	Decachlorobiphenyl	0.00164	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	Dichlorobiphenyl	0.0026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	Heptachlorobiphenyl	0.00355	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	Hexachlorobiphenyl	0.0104	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	Monochlorobiphenyl	0.00038	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	Nonachlorobiphenyl	0.00036	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	Octachlorobiphenyl	0.000419	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-085/110/115/116/117	0.0024	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-1	0.00056	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-10	0.0027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-103	0.00023	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-104	0.00024	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-105	0.000767	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-106	0.0002	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-107	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-108/124	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-11	0.0042	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-111	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-112	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-114	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-118	0.00181	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-12/13	0.0039	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-120	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-121	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-122	0.0002	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-123	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-126	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-127	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-128/166	0.000659	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-129/138/163	0.0021	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-130	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-131	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-132	0.00119	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-133	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-134/143	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-135/151	0.001	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-136	0.000309	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-137/164	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-139/140	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-14	0.004	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-141	0.000395	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-142	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-144	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-145	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-146	0.00035	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-147/149	0.0019	µg/kg	J-	Sur<LCL	L2645768

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB03-0.0-1.0	PCB-148	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-15	0.0032	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-150	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-152	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-153/168	0.00184	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-154	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-155	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-156/157	0.000404	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-158	0.00023	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-159	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-16	0.00058	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-160	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-161	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-162	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-165	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-167	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-169	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-17	0.00045	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-170	0.00048	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-171/173	0.00023	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-172	0.00023	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-174	0.00059	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-175	0.00022	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-176	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-177	0.00024	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-178	0.00023	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-179	0.00025	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-18/30	0.00039	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-180/193	0.0011	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-181	0.00022	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-182	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-184	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-185	0.0002	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-186	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-187	0.0008	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-188	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-189	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-19	0.0014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-190	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-191	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-192	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-194	0.000419	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-195	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-196	0.00027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-197	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-198/199	0.00026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-2	0.00051	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-20/28	0.000787	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-200	0.0002	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-201	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-202	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-203	0.00024	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-204	0.0002	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-205	0.00011	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-206	0.0006	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-207	0.00036	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-208	0.00036	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-21/33	0.00049	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-22	0.00047	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-23	0.00046	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-24	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-25	0.00044	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-26/29	0.00044	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-27	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-3	0.00038	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-31	0.0006	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-32	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-34	0.00047	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-35	0.00051	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-36	0.00043	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-37	0.00042	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-38	0.00047	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-39	0.00044	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-4	0.0076	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-40/41/71	0.00028	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-42	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-43	0.00035	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-44/47/65	0.00112	µg/kg	J-	Sur<LCL	L2645768

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB03-0.0-1.0	PCB-45/51	0.00029	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-46	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-48	0.00028	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-49/69	0.00057	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-5	0.0027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-50/53	0.00027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-52	0.00106	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-54	0.00054	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-55	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-56	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-57	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-58	0.00031	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-59/62/75	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-6	0.0027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-60	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-61/70/74/76	0.00134	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-63	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-64	0.00032	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-66	0.000628	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-67	0.00028	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-68	0.0003	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-7	0.0026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-72	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-73	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-77	0.00026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-78	0.00036	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-79	0.0003	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-8	0.0027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-80	0.00028	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-81	0.00028	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-82	0.00031	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-83/99	0.00112	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-84	0.00047	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-86/87/97/108/119/125	0.00115	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-88/91	0.00026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-89	0.00029	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-9	0.0027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-90/101/113	0.00166	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-92	0.00044	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-93/98/100/102	0.00025	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-94	0.00027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-95	0.00128	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	PCB-96	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	Pentachlorobiphenyl	0.0111	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	Tetrachlorobiphenyl	0.00504	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB03-0.0-1.0	Trichlorobiphenyl	0.00188	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	Decachlorobiphenyl	0.0014	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	Dichlorobiphenyl	0.00551	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	Heptachlorobiphenyl	0.000632	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	Hexachlorobiphenyl	0.00264	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	Monochlorobiphenyl	0.000723	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	Nonachlorobiphenyl	0.00038	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	Octachlorobiphenyl	0.00037	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-085/110/115/116/117	0.0013	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-1	0.002	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-10	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-103	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-104	0.000077	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-105	0.00028	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-106	0.0003	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-107	0.00026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-108/124	0.00026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-11	0.00502	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-111	0.00012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-112	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-114	0.00024	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-118	0.000747	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-12/13	0.0003	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-120	0.00012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-121	0.00012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-122	0.0003	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-123	0.00029	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-126	0.00024	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-127	0.00028	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-128/166	0.00011	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-129/138/163	0.00099	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-130	0.00015	µg/kg	UJ	Sur<LCL	L2645768

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB04-0.0-1.0	PCB-131	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-132	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-133	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-134/143	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-135/151	0.000372	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-136	0.000096	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-137/164	0.00011	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-139/140	0.00012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-14	0.00031	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-141	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-142	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-144	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-145	0.000094	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-146	0.00012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-147/149	0.00077	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-148	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-15	0.00049	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-150	0.000089	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-152	0.000091	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-153/168	0.00051	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-154	0.0001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-155	0.00011	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-156/157	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-158	0.000085	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-159	0.000094	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-16	0.00027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-160	0.0001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-161	0.000094	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-162	0.000097	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-165	0.0001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-167	0.0001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-169	0.0001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-17	0.000236	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-170	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-171/173	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-172	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-174	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-175	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-176	0.00011	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-177	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-178	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-179	0.00011	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-18/30	0.00043	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-180/193	0.000322	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-181	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-182	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-184	0.000098	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-185	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-186	0.00011	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-187	0.00031	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-188	0.00012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-189	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-19	0.00041	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-190	0.00011	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-191	0.00012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-192	0.00012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-194	0.00037	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-195	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-196	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-197	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-198/199	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-2	0.000723	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-20/28	0.000745	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-200	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-201	0.00012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-202	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-203	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-204	0.00013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-205	0.00012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-206	0.00062	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-207	0.00038	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-208	0.00038	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-21/33	0.000451	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-22	0.00033	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-23	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-24	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-25	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-26/29	0.00017	µg/kg	UJ	Sur<LCL	L2645768

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB04-0.0-1.0	PCB-27	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-3	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-31	0.00065	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-32	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-34	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-35	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-36	0.00016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-37	0.00028	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-38	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-39	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-4	0.00092	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-40/41/71	0.000522	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-42	0.00022	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-43	0.00023	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-44/47/65	0.00084	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-45/51	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-46	0.00022	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-48	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-49/69	0.000404	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-5	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-50/53	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-52	0.000679	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-54	0.00023	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-55	0.00035	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-56	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-57	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-58	0.00032	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-59/62/75	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-6	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-60	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-61/70/74/76	0.000777	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-63	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-64	0.00015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-66	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-67	0.00029	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-68	0.00031	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-7	0.00032	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-72	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-73	0.00014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-77	0.0003	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-78	0.00037	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-79	0.00031	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-8	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-80	0.00028	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-81	0.0003	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-82	0.00021	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-83/99	0.00064	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-84	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-86/87/97/108/119/125	0.00054	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-88/91	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-89	0.00019	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-9	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-90/101/113	0.00065	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-92	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-93/98/100/102	0.00017	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-94	0.00018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-95	0.000738	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	PCB-96	0.000055	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	Pentachlorobiphenyl	0.0049	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	Tetrachlorobiphenyl	0.00322	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB04-0.0-1.0	Trichlorobiphenyl	0.00312	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.0084	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	Decachlorobiphenyl	0.00882	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	Dichlorobiphenyl	0.0035	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	Heptachlorobiphenyl	0.104	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	Hexachlorobiphenyl	0.0792	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	Monochlorobiphenyl	0.00027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	Nonachlorobiphenyl	0.00983	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	Octachlorobiphenyl	0.0326	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-085/110/115/116/117	0.011	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-1	0.00035	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-10	0.0012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-103	0.00069	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-104	0.00026	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-105	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-106	0.00036	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-107	0.00031	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-108/124	0.00032	µg/kg	UJ	Sur<LCL	L2645768

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB09-0.0-1.0	PCB-11	0.0035	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-111	0.00053	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-112	0.00055	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-114	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-118	0.0016	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-12/13	0.0012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-120	0.00055	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-121	0.00053	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-122	0.00035	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-123	0.00036	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-126	0.00032	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-127	0.00033	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-128/166	0.0054	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-129/138/163	0.0199	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-130	0.002	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-131	0.00066	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-132	0.00778	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-133	0.00059	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-134/143	0.00066	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-135/151	0.0042	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-136	0.0029	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-137/164	0.00443	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-139/140	0.00052	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-14	0.0013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-141	0.0012	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-142	0.00067	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-144	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-145	0.00025	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-146	0.00209	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-147/149	0.0187	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-148	0.00034	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-15	0.0011	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-150	0.00024	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-152	0.00024	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-153/168	0.00847	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-154	0.00027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-155	0.00041	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-156/157	0.00051	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-158	0.0021	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-159	0.00041	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-16	0.00092	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-160	0.00044	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-161	0.00041	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-162	0.00043	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-165	0.00044	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-167	0.00041	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-169	0.00042	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-17	0.00071	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-170	0.0137	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-171/173	0.0037	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-172	0.00288	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-174	0.011	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-175	0.0015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-176	0.0015	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-177	0.01	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-178	0.0025	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-179	0.0041	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-18/30	0.00083	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-180/193	0.0268	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-181	0.0015	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-182	0.0014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-184	0.001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-185	0.0014	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-186	0.0011	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-187	0.0169	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-188	0.0013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-189	0.00038	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-19	0.0013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-190	0.00259	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-191	0.0012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-192	0.0013	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-194	0.00784	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-195	0.0026	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-196	0.00432	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-197	0.00037	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-198/199	0.0105	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-2	0.00035	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-20/28	0.00063	µg/kg	UJ	Sur<LCL	L2645768

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB09-0.0-1.0	PCB-200	0.00037	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-201	0.0011	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-202	0.00324	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-203	0.003	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-204	0.00038	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-205	0.00048	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-206	0.00983	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-207	0.0016	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-208	0.0018	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-21/33	0.00069	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-22	0.00071	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-23	0.00068	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-24	0.00054	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-25	0.00065	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-26/29	0.00066	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-27	0.00053	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-3	0.00027	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-31	0.00065	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-32	0.00052	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-34	0.0007	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-35	0.00077	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-36	0.00065	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-37	0.00072	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-38	0.00071	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-39	0.00066	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-4	0.0025	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-40/41/71	0.00072	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-42	0.00085	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-43	0.00089	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-44/47/65	0.0013	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-45/51	0.00074	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-46	0.00083	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-48	0.0007	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-49/69	0.00065	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-5	0.0012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-50/53	0.00069	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-52	0.0018	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-54	0.00066	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-55	0.00097	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-56	0.00095	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-57	0.00095	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-58	0.0009	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-59/62/75	0.00054	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-6	0.0012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-60	0.00094	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-61/70/74/76	0.00089	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-63	0.00095	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-64	0.00056	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-66	0.00092	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-67	0.00081	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-68	0.00085	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-7	0.0012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-72	0.00095	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-73	0.00053	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-77	0.00089	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-78	0.001	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-79	0.00085	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-8	0.0012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-80	0.00079	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-81	0.00084	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-82	0.00092	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-83/99	0.00213	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-84	0.0014	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-86/87/97/108/119/125	0.00277	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-88/91	0.0014	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-89	0.00084	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-9	0.0012	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-90/101/113	0.00339	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-92	0.0008	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-93/98/100/102	0.00074	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-94	0.0008	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-95	0.0049	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	PCB-96	0.00023	µg/kg	UJ	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	Pentachlorobiphenyl	0.0286	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	Tetrachlorobiphenyl	0.0031	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB09-0.0-1.0	Trichlorobiphenyl	0.00083	µg/kg	J-	Sur<LCL	L2645768
E1668	WC-SB10-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.0018	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	Decachlorobiphenyl	0.00315	µg/kg	J-	Sur<LCL	L2645716

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB10-0.0-1.0	Dichlorobiphenyl	0.0076	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	Heptachlorobiphenyl	0.0162	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	Hexachlorobiphenyl	0.0154	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	Monochlorobiphenyl	0.0046	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	Nonachlorobiphenyl	0.0025	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	Octachlorobiphenyl	0.00573	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-085/110/115/116/117	0.0026	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-1	0.0088	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-10	0.011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-103	0.0015	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-104	0.0008	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-105	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-106	0.0014	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-107	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-108/124	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-11	0.01	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-111	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-112	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-114	0.0016	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-118	0.0014	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-12/13	0.0095	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-120	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-121	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-122	0.0014	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-123	0.0014	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-126	0.0015	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-127	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-128/166	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-129/138/163	0.0046	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-130	0.0017	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-131	0.0018	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-132	0.0026	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-133	0.0015	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-134/143	0.0017	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-135/151	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-136	0.00087	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-137/164	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-139/140	0.0014	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-14	0.0099	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-141	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-142	0.0017	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-144	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-145	0.00086	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-146	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-147/149	0.00463	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-148	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-15	0.0076	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-150	0.00083	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-152	0.00084	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-153/168	0.0036	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-154	0.00093	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-155	0.00073	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-156/157	0.0016	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-158	0.00095	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-159	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-16	0.005	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-160	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-161	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-162	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-165	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-167	0.001	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-169	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-17	0.0039	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-170	0.0031	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-171/173	0.002	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-172	0.002	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-174	0.0031	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-175	0.0019	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-176	0.0014	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-177	0.002	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-178	0.002	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-179	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-18/30	0.0033	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-180/193	0.00684	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-181	0.0018	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-182	0.0017	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-184	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-185	0.0019	µg/kg	UJ	Sur<LCL	L2645716

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB10-0.0-1.0	PCB-186	0.0014	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-187	0.0032	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-188	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-189	0.00097	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-19	0.007	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-190	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-191	0.0014	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-192	0.0015	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-194	0.0011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-195	0.0012	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-196	0.0012	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-197	0.00069	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-198/199	0.00263	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-2	0.0056	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-20/28	0.0032	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-200	0.00082	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-201	0.00076	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-202	0.00075	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-203	0.0019	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-204	0.00078	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-205	0.00099	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-206	0.0047	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-207	0.0028	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-208	0.0025	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-21/33	0.0034	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-22	0.0034	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-23	0.0035	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-24	0.0029	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-25	0.0033	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-26/29	0.0033	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-27	0.0029	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-3	0.0046	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-31	0.0033	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-32	0.0027	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-34	0.0036	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-35	0.0036	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-36	0.0031	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-37	0.0031	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-38	0.0034	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-39	0.0031	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-4	0.042	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-40/41/71	0.0025	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-42	0.0029	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-43	0.003	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-44/47/65	0.0023	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-45/51	0.0027	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-46	0.003	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-48	0.0025	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-49/69	0.0022	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-5	0.011	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-50/53	0.0025	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-52	0.0026	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-54	0.0031	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-55	0.0027	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-56	0.0027	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-57	0.0028	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-58	0.0026	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-59/62/75	0.0019	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-6	0.01	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-60	0.0026	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-61/70/74/76	0.0025	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-63	0.0026	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-64	0.0019	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-66	0.0026	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-67	0.0023	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-68	0.0024	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-7	0.0096	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-72	0.0026	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-73	0.0019	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-77	0.0023	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-78	0.0027	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-79	0.0023	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-8	0.0096	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-80	0.0022	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-81	0.0025	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-82	0.0019	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-83/99	0.0016	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-84	0.0018	µg/kg	UJ	Sur<LCL	L2645716

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB10-0.0-1.0	PCB-86/87/97/109/119/125	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-88/91	0.0016	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-89	0.0018	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-9	0.01	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-90/101/113	0.0013	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-92	0.0017	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-93/98/100/102	0.0016	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-94	0.0017	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-95	0.0034	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	PCB-96	0.0007	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	Pentachlorobiphenyl	0.006	µg/kg	J-	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	Tetrachlorobiphenyl	0.0019	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB10-0.0-1.0	Trichlorobiphenyl	0.0027	µg/kg	UJ	Sur<LCL	L2645716
E1668	WC-SB11-0.0-1.0	PCB-1	0.0058	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-105	0.0012	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-114	0.00085	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-118	0.00276	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-123	0.00088	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-126	0.0012	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-15	0.068	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-19	0.0029	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-202	0.000847	µg/kg	J+	Sur>UCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-3	0.0016	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-37	0.00446	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-4	0.016	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-54	0.0019	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-77	0.0017	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0	PCB-81	0.0015	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.0051	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	Decachlorobiphenyl	0.0951	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	Dichlorobiphenyl	0.013	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	Heptachlorobiphenyl	0.0807	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	Hexachlorobiphenyl	0.0834	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	Monochlorobiphenyl	0.0023	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	Nonachlorobiphenyl	0.0264	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	Octachlorobiphenyl	0.0328	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-085/110/115/116/117	0.0114	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-1	0.0012	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-10	0.0026	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-103	0.00066	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-104	0.00043	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-105	0.00246	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-106	0.0006	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-107	0.00052	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-108/124	0.00062	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-11	0.013	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-111	0.00049	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-112	0.00052	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-114	0.00058	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-118	0.00516	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-12/13	0.0027	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-120	0.00049	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-121	0.00051	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-122	0.00067	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-123	0.00064	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-126	0.00058	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-127	0.0006	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-128/166	0.0049	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-129/138/163	0.0193	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-130	0.00172	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-131	0.001	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-132	0.00761	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-133	0.00093	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-134/143	0.00125	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-135/151	0.00574	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-136	0.00219	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-137/164	0.00385	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-139/140	0.00081	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-14	0.0029	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-141	0.00253	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-142	0.001	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-144	0.00039	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-145	0.00029	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-146	0.00248	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-147/149	0.0156	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-148	0.00039	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-15	0.0021	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-150	0.00027	µg/kg	UJ	Sur<LCL	L2645738

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB11-0.0-1.0FD	PCB-152	0.00028	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-153/168	0.0107	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-154	0.00031	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-155	0.00029	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-156/157	0.0025	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-158	0.00216	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-159	0.00064	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-16	0.0015	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-160	0.00063	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-161	0.00067	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-162	0.00063	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-165	0.00069	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-167	0.00087	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-169	0.00062	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-17	0.00144	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-170	0.012	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-171/173	0.0026	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-172	0.00197	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-174	0.0107	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-175	0.00066	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-176	0.00122	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-177	0.00621	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-178	0.00197	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-179	0.0035	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-18/30	0.00097	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-180/193	0.0216	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-181	0.00064	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-182	0.00061	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-184	0.00044	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-185	0.00072	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-186	0.00049	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-187	0.0125	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-188	0.00045	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-189	0.00084	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-19	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-190	0.0013	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-191	0.00051	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-192	0.00053	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-194	0.00743	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-195	0.00275	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-196	0.0035	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-197	0.00047	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-198/199	0.01	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-2	0.0023	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-20/28	0.00265	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-200	0.00053	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-201	0.000889	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-202	0.00232	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-203	0.00595	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-204	0.00051	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-205	0.00055	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-206	0.0149	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-207	0.0028	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-208	0.00866	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-21/33	0.00178	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-22	0.0015	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-23	0.0015	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-24	0.00082	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-25	0.0013	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-26/29	0.0014	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-27	0.00083	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-3	0.00062	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-31	0.00229	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-32	0.00079	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-34	0.0015	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-35	0.0015	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-36	0.0013	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-37	0.0012	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-38	0.0015	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-39	0.0013	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-4	0.0067	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-40/41/71	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-42	0.0013	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-43	0.0013	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-44/47/65	0.00318	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-45/51	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-46	0.0013	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-48	0.0011	µg/kg	UJ	Sur<LCL	L2645738

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB11-0.0-1.0FD	PCB-49/69	0.00098	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-5	0.0026	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-50/53	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-52	0.00283	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-54	0.00084	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-55	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-56	0.00165	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-57	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-58	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-59/62/75	0.00081	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-6	0.0025	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-60	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-61/70/74/76	0.00404	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-63	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-64	0.00084	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-66	0.0014	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-67	0.00094	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-68	0.001	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-7	0.0024	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-72	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-73	0.00081	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-77	0.00091	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-78	0.0011	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-79	0.00094	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-8	0.0022	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-80	0.00093	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-81	0.0009	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-82	0.00084	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-83/99	0.00233	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-84	0.00204	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-86/87/97/108/119/125	0.0035	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-88/91	0.00072	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-89	0.0008	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-9	0.0025	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-90/101/113	0.0045	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-92	0.00076	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-93/98/100/102	0.00071	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-94	0.00077	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-95	0.0043	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-96	0.0004	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	Pentachlorobiphenyl	0.0357	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	Tetrachlorobiphenyl	0.0131	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB11-0.0-1.0FD	Trichlorobiphenyl	0.00816	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	Decachlorobiphenyl	0.00283	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-1	0.0027	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-105	0.0013	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-114	0.00028	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-118	0.0015	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-123	0.0003	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-126	0.00029	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-15	0.0033	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-155	0.00019	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-189	0.00026	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-19	0.00056	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-3	0.00153	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-4	0.0023	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-77	0.00067	µg/kg	J-	Sur<LCL	L2645738
E1668	WC-SB12-0.0-1.0	PCB-81	0.00035	µg/kg	UJ	Sur<LCL	L2645738
E1668	WC-SGPD12	PCB-1	0.00993	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD12	PCB-19	0.00805	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD12	PCB-3	0.0147	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD12	PCB-4	0.0122	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD12	PCB-54	0.00139	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	Decachlorobiphenyl	2.6	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	Decachlorobiphenyl	2.6	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-1	0.0859	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-105	0.927	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-114	0.0479	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-118	3.22	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-123	0.0287	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-126	0.0012	µg/kg	UJ	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-15	0.12	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-189	0.0865	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-19	0.0411	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-3	0.102	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-4	0.0753	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-54	0.00287	µg/kg	J-	Sur<LCL	L2675125
E1668	WC-SGPD20	PCB-77	0.12	µg/kg	J-	Sur<LCL	L2675125

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SGPD20	PCB-81	0.0028	µg/kg	J-	Sur<LCL	L2675125
E1699M	WC-SB02-0.0-1.0	2,4'-DDE	0.019	µg/kg	UJ	Sur<LCL	L2645716
E1699M	WC-SB02-0.0-1.0	4,4'-DDE	0.163	µg/kg	J-	Sur<LCL	L2645716
E1699M	WC-SB02-0.0-1.0	4,4'-DDT	0.467	µg/kg	J-	Sur<LCL	L2645716
E1699M	WC-SB02-0.0-1.0	gamma-BHC (Lindane)	0.048	µg/kg	UJ	Sur<LCL	L2645716
E1699M	WC-SB02-0.0-1.0	Oxychlordane	0.015	µg/kg	UJ	Sur<LCL	L2645716
E1699M	WC-SB02-0.0-1.0	trans-Nonachlor	0.052	µg/kg	UJ	Sur<LCL	L2645716
E1699M	WC-SB03-0.0-1.0	gamma-BHC (Lindane)	0.054	µg/kg	UJ	Sur<LCL	L2645768
E1699M	WC-SB10-0.0-1.0	4,4'-DDT	0.083	µg/kg	UJ	Sur<LCL	L2645716
E1699M	WC-SB11-0.0-1.0	2,4'-DDE	0.029	µg/kg	UJ	Sur<LCL	L2645738
E1699M	WC-SB11-0.0-1.0	4,4'-DDE	0.039	µg/kg	UJ	Sur<LCL	L2645738
E1699M	WC-SB11-0.0-1.0	gamma-BHC (Lindane)	0.06	µg/kg	UJ	Sur<LCL	L2645738
E1699M	WC-SB11-0.0-1.0	Oxychlordane	0.02	µg/kg	UJ	Sur<LCL	L2645738
E1699M	WC-SB11-0.0-1.0	trans-Nonachlor	0.074	µg/kg	UJ	Sur<LCL	L2645738
E1699M	WC-SCPD06-5.0-6.0	2,4'-DDD	1.8	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD06-5.0-6.0	4,4'-DDD	7.1	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD06-5.0-6.0	4,4'-DDE	2.8	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD06-6.0-7.0	2,4'-DDD	1.1	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD06-6.0-7.0	4,4'-DDD	5	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD06-6.0-7.0	4,4'-DDE	1.5	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD07-5.0-6.0	2,4'-DDD	0.64	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD07-5.0-6.0	4,4'-DDD	3.6	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD07-5.0-6.0	4,4'-DDE	5.4	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-5.0-6.0	2,4'-DDD	4.9	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-5.0-6.0	2,4'-DDE	1.9	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-5.0-6.0	4,4'-DDD	27	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-5.0-6.0	4,4'-DDE	24	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-6.0-7.0	2,4'-DDD	4.2	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-6.0-7.0	2,4'-DDE	1.3	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-6.0-7.0	4,4'-DDD	21	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-6.0-7.0	4,4'-DDE	19	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-7.0-8.0	2,4'-DDD	1.4	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-7.0-8.0	4,4'-DDD	6.1	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD08-7.0-8.0	4,4'-DDE	6.8	ug/kg	J+	Sur>UCL	K2208213
E1699M	WC-SCPD10-1.0-2.0	2,4'-DDD	0.4	µg/kg	UJ	Sur<LCL	K2111932
E1699M	WC-SCPD10-1.0-2.0	2,4'-DDE	0.5	µg/kg	UJ	Sur<LCL	K2111932
E1699M	WC-SCPD10-1.0-2.0	2,4'-DDT	0.59	µg/kg	UJ	Sur<LCL	K2111932
E1699M	WC-SCPD10-1.0-2.0	4,4'-DDD	0.22	µg/kg	UJ	Sur<LCL	K2111932
E1699M	WC-SCPD10-1.0-2.0	4,4'-DDE	0.44	µg/kg	UJ	Sur<LCL	K2111932
E1699M	WC-SCPD10-1.0-2.0	4,4'-DDT	0.3	µg/kg	UJ	Sur<LCL	K2111932
E1699M	WC-SCPD11-5.0-6.0	2,4'-DDD	0.51	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-5.0-6.0	2,4'-DDE	0.63	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-5.0-6.0	2,4'-DDT	0.75	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-5.0-6.0	4,4'-DDD	1.5	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD11-5.0-6.0	4,4'-DDE	4	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD11-5.0-6.0	4,4'-DDT	0.38	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-6.0-7.0	2,4'-DDD	0.5	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-6.0-7.0	2,4'-DDE	0.62	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-6.0-7.0	2,4'-DDT	0.74	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-6.0-7.0	4,4'-DDD	1.4	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD11-6.0-7.0	4,4'-DDE	2.7	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD11-6.0-7.0	4,4'-DDT	0.37	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-7.0-8.0	2,4'-DDD	0.47	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-7.0-8.0	2,4'-DDE	0.58	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-7.0-8.0	2,4'-DDT	0.69	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD11-7.0-8.0	4,4'-DDD	1.5	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD11-7.0-8.0	4,4'-DDE	3.7	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD11-7.0-8.0	4,4'-DDT	0.35	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD14-1.0-2.0	2,4'-DDD	0.54	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD14-1.0-2.0	2,4'-DDE	0.61	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-1.0-2.0	2,4'-DDT	0.72	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-1.0-2.0	4,4'-DDD	2.2	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD14-1.0-2.0	4,4'-DDE	3.8	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD14-1.0-2.0	4,4'-DDT	0.36	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-2.0-3.0	2,4'-DDD	0.35	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-2.0-3.0	2,4'-DDE	0.44	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-2.0-3.0	2,4'-DDT	0.53	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-2.0-3.0	4,4'-DDD	0.2	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-2.0-3.0	4,4'-DDE	0.39	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-2.0-3.0	4,4'-DDT	0.27	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-3.0-4.0	2,4'-DDD	0.36	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-3.0-4.0	2,4'-DDE	0.46	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-3.0-4.0	2,4'-DDT	0.54	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-3.0-4.0	4,4'-DDD	0.2	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-3.0-4.0	4,4'-DDE	0.4	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD14-3.0-4.0	4,4'-DDT	0.27	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD21-7.0-8.0	2,4'-DDD	3.4	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD21-7.0-8.0	2,4'-DDE	0.9	µg/kg	J-	Sur<LCL	K2200743

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1699M	WC-SCPD21-7.0-8.0	2,4'-DDT	0.63	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD21-7.0-8.0	4,4'-DDD	12	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD21-7.0-8.0	4,4'-DDE	6.4	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD21-7.0-8.0	4,4'-DDT	0.32	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD22-7.0-8.0	2,4'-DDD	32	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD22-7.0-8.0	2,4'-DDE	4.7	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD22-7.0-8.0	2,4'-DDT	0.69	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD22-7.0-8.0	4,4'-DDD	36	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD22-7.0-8.0	4,4'-DDE	16	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD22-7.0-8.0	4,4'-DDT	0.35	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD23-1.0-2.0	2,4'-DDD	0.43	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-1.0-2.0	2,4'-DDE	0.53	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-1.0-2.0	2,4'-DDT	0.63	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-1.0-2.0	4,4'-DDD	1.4	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD23-1.0-2.0	4,4'-DDE	1.3	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD23-1.0-2.0	4,4'-DDT	0.32	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-2.0-3.0	2,4'-DDD	0.39	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-2.0-3.0	2,4'-DDE	0.49	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-2.0-3.0	2,4'-DDT	0.58	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-2.0-3.0	4,4'-DDD	0.22	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-2.0-3.0	4,4'-DDE	0.43	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-2.0-3.0	4,4'-DDT	0.29	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-3.0-4.0	2,4'-DDD	0.42	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-3.0-4.0	2,4'-DDE	0.53	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-3.0-4.0	2,4'-DDT	0.63	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-3.0-4.0	4,4'-DDD	0.24	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-3.0-4.0	4,4'-DDE	0.47	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-3.0-4.0	4,4'-DDT	0.32	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-4.0-5.0	2,4'-DDD	0.38	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-4.0-5.0	2,4'-DDE	0.48	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-4.0-5.0	2,4'-DDT	0.57	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-4.0-5.0	4,4'-DDD	0.21	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-4.0-5.0	4,4'-DDE	0.42	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD23-4.0-5.0	4,4'-DDT	0.29	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD24-4.0-5.0	2,4'-DDD	1.5	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD24-4.0-5.0	2,4'-DDE	0.58	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD24-4.0-5.0	2,4'-DDT	0.69	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD24-4.0-5.0	4,4'-DDD	4.2	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD24-4.0-5.0	4,4'-DDE	0.51	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD24-4.0-5.0	4,4'-DDT	1.1	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD27-2.0-3.0	2,4'-DDD	0.56	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-2.0-3.0	2,4'-DDE	0.7	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-2.0-3.0	2,4'-DDT	0.83	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-2.0-3.0	4,4'-DDD	1.3	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD27-2.0-3.0	4,4'-DDE	1.3	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD27-2.0-3.0	4,4'-DDT	0.42	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-3.0-4.0	2,4'-DDD	0.44	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-3.0-4.0	2,4'-DDE	0.54	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-3.0-4.0	2,4'-DDT	0.65	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-3.0-4.0	4,4'-DDD	0.24	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-3.0-4.0	4,4'-DDE	0.48	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-3.0-4.0	4,4'-DDT	0.33	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-4.0-5.0	2,4'-DDD	0.44	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-4.0-5.0	2,4'-DDE	0.55	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-4.0-5.0	2,4'-DDT	0.65	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-4.0-5.0	4,4'-DDD	0.25	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-4.0-5.0	4,4'-DDE	0.49	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD27-4.0-5.0	4,4'-DDT	0.33	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-1.0-2.0	2,4'-DDD	0.64	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-1.0-2.0	2,4'-DDE	0.65	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-1.0-2.0	2,4'-DDT	0.77	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-1.0-2.0	4,4'-DDD	2.1	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-1.0-2.0	4,4'-DDE	2.8	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-1.0-2.0	4,4'-DDT	0.39	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-2.0-3.0	2,4'-DDD	1.9	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-2.0-3.0	2,4'-DDE	1.1	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-2.0-3.0	2,4'-DDT	0.81	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-2.0-3.0	4,4'-DDD	5.2	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-2.0-3.0	4,4'-DDE	6.7	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-2.0-3.0	4,4'-DDT	0.41	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-3.0-4.0	2,4'-DDD	0.54	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-3.0-4.0	2,4'-DDE	1.6	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-3.0-4.0	2,4'-DDT	0.81	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-3.0-4.0	4,4'-DDD	7.5	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-3.0-4.0	4,4'-DDE	12	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-3.0-4.0	4,4'-DDT	0.41	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-4.0-5.0	2,4'-DDD	2.3	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-4.0-5.0	2,4'-DDE	1.7	µg/kg	J-	Sur<LCL	K2111941

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1699M	WC-SCPD29-4.0-5.0	2,4'-DDT	0.77	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-4.0-5.0	4,4'-DDD	6.4	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-4.0-5.0	4,4'-DDE	9.3	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD29-4.0-5.0	4,4'-DDT	0.39	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD29-5.0-6.0	2,4'-DDD	25	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD29-5.0-6.0	2,4'-DDE	5.6	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD29-5.0-6.0	2,4'-DDT	0.66	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD29-5.0-6.0	4,4'-DDD	41	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD29-5.0-6.0	4,4'-DDE	18	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD29-5.0-6.0	4,4'-DDT	0.33	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-2.0-3.0	2,4'-DDD	1.4	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-2.0-3.0	2,4'-DDE	0.72	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-2.0-3.0	2,4'-DDT	0.8	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD30-2.0-3.0	4,4'-DDD	4.5	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-2.0-3.0	4,4'-DDE	6.8	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-2.0-3.0	4,4'-DDT	0.4	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD30-3.0-4.0	2,4'-DDD	1.8	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-3.0-4.0	2,4'-DDE	0.72	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-3.0-4.0	2,4'-DDT	0.84	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD30-3.0-4.0	4,4'-DDD	5.9	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-3.0-4.0	4,4'-DDE	4.5	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-3.0-4.0	4,4'-DDT	0.42	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD30-4.0-5.0	2,4'-DDD	2.5	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-4.0-5.0	2,4'-DDE	2.7	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-4.0-5.0	2,4'-DDT	0.83	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD30-4.0-5.0	4,4'-DDD	7.2	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-4.0-5.0	4,4'-DDE	18	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD30-4.0-5.0	4,4'-DDT	0.42	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD30-8.0-9.0	2,4'-DDD	0.51	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-8.0-9.0	2,4'-DDE	0.64	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-8.0-9.0	2,4'-DDT	0.76	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-8.0-9.0	4,4'-DDD	0.29	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-8.0-9.0	4,4'-DDE	0.57	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-8.0-9.0	4,4'-DDT	0.38	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-9.0-9.8	2,4'-DDD	0.47	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-9.0-9.8	2,4'-DDE	0.59	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-9.0-9.8	2,4'-DDT	0.7	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-9.0-9.8	4,4'-DDD	0.26	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-9.0-9.8	4,4'-DDE	0.52	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD30-9.0-9.8	4,4'-DDT	0.35	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-10.0-11.0	2,4'-DDD	0.36	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-10.0-11.0	2,4'-DDE	0.45	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-10.0-11.0	2,4'-DDT	0.54	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-10.0-11.0	4,4'-DDD	0.2	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-10.0-11.0	4,4'-DDE	0.4	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-10.0-11.0	4,4'-DDT	0.27	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-11.0-12.0	2,4'-DDD	0.32	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-11.0-12.0	2,4'-DDE	0.4	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-11.0-12.0	2,4'-DDT	0.48	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-11.0-12.0	4,4'-DDD	0.18	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-11.0-12.0	4,4'-DDE	0.36	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-11.0-12.0	4,4'-DDT	0.24	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-5.0-6.0	2,4'-DDD	1.8	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD31-5.0-6.0	2,4'-DDE	0.66	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD31-5.0-6.0	2,4'-DDT	0.78	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD31-5.0-6.0	4,4'-DDD	4.3	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD31-5.0-6.0	4,4'-DDE	2.9	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD31-5.0-6.0	4,4'-DDT	0.39	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD31-6.0-7.0	2,4'-DDD	1.8	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD31-6.0-7.0	2,4'-DDE	1.9	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD31-6.0-7.0	2,4'-DDT	0.83	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD31-6.0-7.0	4,4'-DDD	6.3	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD31-6.0-7.0	4,4'-DDE	13	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD31-6.0-7.0	4,4'-DDT	0.42	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD31-8.0-9.0	2,4'-DDD	24	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD31-8.0-9.0	2,4'-DDE	5.3	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD31-8.0-9.0	2,4'-DDT	0.68	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD31-8.0-9.0	4,4'-DDD	42	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD31-8.0-9.0	4,4'-DDE	20	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD31-8.0-9.0	4,4'-DDT	6.4	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD32-5.0-6.0	2,4'-DDD	1.8	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD32-5.0-6.0	2,4'-DDE	0.65	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD32-5.0-6.0	2,4'-DDT	0.77	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD32-5.0-6.0	4,4'-DDD	2.6	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD32-5.0-6.0	4,4'-DDE	1.1	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SCPD32-5.0-6.0	4,4'-DDT	0.39	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD35-11.0-12.0	2,4'-DDD	3.6	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD35-11.0-12.0	2,4'-DDE	1.8	µg/kg	J-	Sur<LCL	K2200743

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1699M	WC-SCPD35-11.0-12.0	2,4'-DDT	0.7	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD35-11.0-12.0	4,4'-DDD	7.6	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD35-11.0-12.0	4,4'-DDE	13	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD35-11.0-12.0	4,4'-DDT	0.35	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD36-7.0-8.0	2,4'-DDD	86	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD36-7.0-8.0	2,4'-DDE	15	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD36-7.0-8.0	2,4'-DDT	0.64	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD36-7.0-8.0	4,4'-DDD	130	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD36-7.0-8.0	4,4'-DDE	47	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD36-7.0-8.0	4,4'-DDT	0.32	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD36-8.0-9.0	2,4'-DDD	93	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD36-8.0-9.0	2,4'-DDE	8.7	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD36-8.0-9.0	2,4'-DDT	0.71	µg/kg	UJ	Sur<LCL	K2200743
E1699M	WC-SCPD36-8.0-9.0	4,4'-DDD	130	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD36-8.0-9.0	4,4'-DDE	41	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD36-8.0-9.0	4,4'-DDT	19	µg/kg	J-	Sur<LCL	K2200743
E1699M	WC-SCPD41-1.0-2.0	2,4'-DDD	0.61	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-1.0-2.0	2,4'-DDE	0.76	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-1.0-2.0	2,4'-DDT	0.9	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-1.0-2.0	4,4'-DDD	1.1	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-1.0-2.0	4,4'-DDE	1.7	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-1.0-2.0	4,4'-DDT	0.45	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-2.0-3.0	2,4'-DDD	0.78	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-2.0-3.0	2,4'-DDE	0.68	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-2.0-3.0	2,4'-DDT	0.81	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-2.0-3.0	4,4'-DDD	2.6	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-2.0-3.0	4,4'-DDE	2.6	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-2.0-3.0	4,4'-DDT	0.49	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-3.0-4.0	2,4'-DDD	0.73	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-3.0-4.0	2,4'-DDE	0.74	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-3.0-4.0	2,4'-DDT	0.87	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-3.0-4.0	4,4'-DDD	3.1	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-3.0-4.0	4,4'-DDE	3.2	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-3.0-4.0	4,4'-DDT	0.44	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-4.0-5.0	2,4'-DDD	0.88	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-4.0-5.0	2,4'-DDE	0.71	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-4.0-5.0	2,4'-DDT	0.85	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD41-4.0-5.0	4,4'-DDD	3.5	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-4.0-5.0	4,4'-DDE	3.4	µg/kg	J-	Sur<LCL	K2107340
E1699M	WC-SCPD41-4.0-5.0	4,4'-DDT	0.43	µg/kg	UJ	Sur<LCL	K2107340
E1699M	WC-SCPD42-6.0-7.0	2,4'-DDD	0.34	µg/kg	UJ	Sur<LCL	K2107158
E1699M	WC-SCPD42-6.0-7.0	2,4'-DDE	0.43	µg/kg	UJ	Sur<LCL	K2107158
E1699M	WC-SCPD42-6.0-7.0	2,4'-DDT	0.51	µg/kg	UJ	Sur<LCL	K2107158
E1699M	WC-SCPD42-6.0-7.0	4,4'-DDD	0.19	µg/kg	UJ	Sur<LCL	K2107158
E1699M	WC-SCPD42-6.0-7.0	4,4'-DDE	0.38	µg/kg	UJ	Sur<LCL	K2107158
E1699M	WC-SCPD42-6.0-7.0	4,4'-DDT	0.26	µg/kg	UJ	Sur<LCL	K2107158
E1699M	WC-SCPD48-1.0-2.0	2,4'-DDD	2.3	µg/kg	J-	Sur<LCL	K2107158
E1699M	WC-SCPD48-1.0-2.0	2,4'-DDE	1.2	µg/kg	J-	Sur<LCL	K2107158
E1699M	WC-SCPD48-1.0-2.0	2,4'-DDT	0.62	µg/kg	UJ	Sur<LCL	K2107158
E1699M	WC-SCPD48-1.0-2.0	4,4'-DDD	8.4	µg/kg	J-	Sur<LCL	K2107158
E1699M	WC-SCPD48-1.0-2.0	4,4'-DDE	8.2	µg/kg	J-	Sur<LCL	K2107158
E1699M	WC-SCPD48-1.0-2.0	4,4'-DDT	0.31	µg/kg	UJ	Sur<LCL	K2107158
E1699M	WC-SGPD13	4,4'-DDD	1.2	µg/kg	J+	Sur>UCL	K2107846
E1699M	WC-SGPD13	4,4'-DDE	3	µg/kg	J+	Sur>UCL	K2107846
E1699M	WC-SGPD27	2,4'-DDD	0.81	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SGPD27	2,4'-DDE	0.87	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD27	2,4'-DDT	1.1	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD27	4,4'-DDD	1.9	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SGPD27	4,4'-DDE	1.1	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SGPD27	4,4'-DDT	0.52	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD29	2,4'-DDD	0.78	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD29	2,4'-DDE	0.98	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD29	2,4'-DDT	1.2	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD29	4,4'-DDD	0.7	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SGPD29	4,4'-DDE	0.87	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD29	4,4'-DDT	0.58	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD30	2,4'-DDD	0.61	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD30	2,4'-DDE	0.77	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD30	2,4'-DDT	0.91	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SGPD30	4,4'-DDD	2	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SGPD30	4,4'-DDE	5.5	µg/kg	J-	Sur<LCL	K2111941
E1699M	WC-SGPD30	4,4'-DDT	0.46	µg/kg	UJ	Sur<LCL	K2111941
E1699M	WC-SCPD06-4.0-5.0	2,4'-DDD	0.77	µg/kg	J+	Sur>UCL	K2203181
E1699M	WC-SCPD06-4.0-5.0	4,4'-DDD	3.5	µg/kg	J+	Sur>UCL	K2203181
E1699M	WC-SCPD06-4.0-5.0	4,4'-DDE	1.9	µg/kg	J+	Sur>UCL	K2203181
E1699M	WC-SCPD07-1.0-2.0	4,4'-DDD	5.2	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD07-1.0-2.0	4,4'-DDE	3.4	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD07-2.0-3.0	4,4'-DDD	3.7	µg/kg	J+	Sur>UCL	K2204707

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1699M	WC-SCPD07-2.0-3.0	4,4'-DDE	4.2	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD07-3.0-4.0	2,4'-DDD	0.93	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD07-3.0-4.0	4,4'-DDD	6.2	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD07-3.0-4.0	4,4'-DDE	4.2	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD07-4.0-5.0	2,4'-DDD	1.5	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD07-4.0-5.0	4,4'-DDD	8.1	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD07-4.0-5.0	4,4'-DDE	6.6	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-1.0-2.0	2,4'-DDD	0.47	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-1.0-2.0	4,4'-DDD	2.4	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-1.0-2.0	4,4'-DDE	3.9	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-2.0-3.0	2,4'-DDD	0.53	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-2.0-3.0	4,4'-DDD	2.2	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-2.0-3.0	4,4'-DDE	5.3	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-2.0-3.0	4,4'-DDT	1.2	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-3.0-4.0	2,4'-DDD	1.2	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-3.0-4.0	2,4'-DDE	0.84	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-3.0-4.0	4,4'-DDD	6.1	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD08-3.0-4.0	4,4'-DDE	10	µg/kg	J+	Sur>UCL	K2204707
E1699M	WC-SCPD26A-1.0-2.0	2,4'-DDE	14	µg/kg	J+	Sur>UCL	K2204432
E1699M	WC-SCPD26A-1.0-2.0	4,4'-DDE	34	µg/kg	J+	Sur>UCL	K2204432
E1699M	WC-SCPD26A-1.0-2.0	4,4'-DDT	13	µg/kg	J+	Sur>UCL	K2204432
E1699M	WC-SCPD40-2.0-3.0	2,4'-DDD	0.83	µg/kg	J+	Sur>UCL	K2203194
E1699M	WC-SCPD40-2.0-3.0	4,4'-DDD	3	µg/kg	J+	Sur>UCL	K2203194
E1699M	WC-SCPD40-2.0-3.0	4,4'-DDE	2.9	µg/kg	J+	Sur>UCL	K2203194
E1699M	WC-SCPD43A-2.0-3.0	2,4'-DDE	11	µg/kg	J+	Sur>UCL	K2203345
E1699M	WC-SCPD43A-2.0-3.0	4,4'-DDE	74	µg/kg	J+	Sur>UCL	K2203345
E1699M	WC-SCPD53A-9.0-9.4	2,4'-DDD	0.49	µg/kg	J+	Sur>UCL	K2203194
E1699M	WC-SCPD53A-9.0-9.4	4,4'-DDD	2.9	µg/kg	J+	Sur>UCL	K2203194
E1699M	WC-SCPD53A-9.0-9.4	4,4'-DDE	5	µg/kg	J+	Sur>UCL	K2203194
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1016	0.61	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1221	0.61	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1232	0.61	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1242	0.61	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1248	0.61	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1254	0.61	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1260	0.61	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1262	0.61	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD14-4.0-5.0	Aroclor 1268	0.61	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD21-1.0-2.0	Aroclor 1016	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-1.0-2.0	Aroclor 1221	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-1.0-2.0	Aroclor 1232	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-1.0-2.0	Aroclor 1242	30	µg/kg	J-	Sur<LCL	K2107104
SW8082A	WC-SCPD21-1.0-2.0	Aroclor 1248	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-1.0-2.0	Aroclor 1254	31	µg/kg	J-	Sur<LCL	K2107104
SW8082A	WC-SCPD21-1.0-2.0	Aroclor 1260	23	µg/kg	J-	Sur<LCL	K2107104
SW8082A	WC-SCPD21-1.0-2.0	Aroclor 1262	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-1.0-2.0	Aroclor 1268	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-3.0-4.0	Aroclor 1016	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-3.0-4.0	Aroclor 1221	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-3.0-4.0	Aroclor 1232	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-3.0-4.0	Aroclor 1242	29	µg/kg	J-	Sur<LCL	K2107104
SW8082A	WC-SCPD21-3.0-4.0	Aroclor 1248	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-3.0-4.0	Aroclor 1254	46	µg/kg	J-	Sur<LCL	K2107104
SW8082A	WC-SCPD21-3.0-4.0	Aroclor 1260	47	µg/kg	J-	Sur<LCL	K2107104
SW8082A	WC-SCPD21-3.0-4.0	Aroclor 1262	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD21-3.0-4.0	Aroclor 1268	0.78	µg/kg	UJ	Sur<LCL	K2107104
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1016	0.71	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1221	0.71	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1232	0.71	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1242	0.71	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1248	4.9	µg/kg	J-	Sur<LCL	K2107340
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1254	8.4	µg/kg	J-	Sur<LCL	K2107340
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1260	4.6	µg/kg	J-	Sur<LCL	K2107340
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1262	0.71	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1268	0.71	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1016	0.68	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1221	0.68	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1232	0.68	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1242	0.68	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1248	0.68	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1254	0.68	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1260	0.68	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1262	0.68	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-2.0-3.0	Aroclor 1268	0.68	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1016	0.67	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1221	0.67	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1232	0.67	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1242	0.67	µg/kg	UJ	Sur<LCL	K2107340

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1248	0.67	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1254	0.67	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1260	0.67	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1262	0.67	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-3.0-4.0	Aroclor 1268	0.67	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1016	0.64	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1221	0.64	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1232	0.64	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1242	0.64	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1248	0.64	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1254	0.64	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1260	0.64	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1262	0.64	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD23-4.0-5.0	Aroclor 1268	0.64	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD28-1.0-2.0	Aroclor 1016	0.86	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-1.0-2.0	Aroclor 1221	0.86	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-1.0-2.0	Aroclor 1232	0.86	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-1.0-2.0	Aroclor 1242	28	µg/kg	J-	Sur<LCL	K2107278
SW8082A	WC-SCPD28-1.0-2.0	Aroclor 1248	0.86	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-1.0-2.0	Aroclor 1254	51	µg/kg	J-	Sur<LCL	K2107278
SW8082A	WC-SCPD28-1.0-2.0	Aroclor 1260	30	µg/kg	J-	Sur<LCL	K2107278
SW8082A	WC-SCPD28-1.0-2.0	Aroclor 1262	0.86	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-1.0-2.0	Aroclor 1268	0.86	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1016	0.7	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1221	0.7	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1232	0.7	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1242	0.7	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1248	8.1	µg/kg	J-	Sur<LCL	K2107278
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1254	7.9	µg/kg	J-	Sur<LCL	K2107278
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1260	12	µg/kg	J-	Sur<LCL	K2107278
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1262	0.7	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1268	0.7	µg/kg	UJ	Sur<LCL	K2107278
SW8082A	WC-SCPD29-7.0-8.0	Aroclor 1016	4.3	µg/kg	UJ	Sur<LCL	K2200743
SW8082A	WC-SCPD29-7.0-8.0	Aroclor 1221	15	µg/kg	UJ	Sur<LCL	K2200743
SW8082A	WC-SCPD29-7.0-8.0	Aroclor 1232	6.5	µg/kg	UJ	Sur<LCL	K2200743
SW8082A	WC-SCPD29-7.0-8.0	Aroclor 1242	5	µg/kg	UJ	Sur<LCL	K2200743
SW8082A	WC-SCPD29-7.0-8.0	Aroclor 1248	6.7	µg/kg	UJ	Sur<LCL	K2200743
SW8082A	WC-SCPD29-7.0-8.0	Aroclor 1254	5.1	µg/kg	UJ	Sur<LCL	K2200743
SW8082A	WC-SCPD29-7.0-8.0	Aroclor 1260	0.98	µg/kg	UJ	Sur<LCL	K2200743
SW8082A	WC-SCPD29-7.0-8.0	Aroclor 1262	0.92	µg/kg	UJ	Sur<LCL	K2200743
SW8082A	WC-SCPD29-7.0-8.0	Aroclor 1268	1.2	µg/kg	UJ	Sur<LCL	K2200743
SW8082A	WC-SCPD36-3.0-4.0	Aroclor 1248	590	µg/kg	J+	Sur>UCL	K2107222
SW8082A	WC-SCPD36-3.0-4.0	Aroclor 1254	270	µg/kg	J+	Sur>UCL	K2107222
SW8082A	WC-SCPD36-3.0-4.0	Aroclor 1260	64	µg/kg	J+	Sur>UCL	K2107222
SW8082A	WC-SCPD36-6.0-7.0	Aroclor 1254	99	µg/kg	J+	Sur>UCL	K2111942
SW8082A	WC-SCPD36-6.0-7.0	Aroclor 1260	110	µg/kg	J+	Sur>UCL	K2111942
SW8082A	WC-SCPD37-1.0-2.0	Aroclor 1016	0.65	µg/kg	UJ	Sur<LCL	K2111942
SW8082A	WC-SCPD37-1.0-2.0	Aroclor 1221	0.65	µg/kg	UJ	Sur<LCL	K2111942
SW8082A	WC-SCPD37-1.0-2.0	Aroclor 1232	0.65	µg/kg	UJ	Sur<LCL	K2111942
SW8082A	WC-SCPD37-1.0-2.0	Aroclor 1248	0.65	µg/kg	UJ	Sur<LCL	K2111942
SW8082A	WC-SCPD37-1.0-2.0	Aroclor 1254	4.9	µg/kg	J-	Sur<LCL	K2111942
SW8082A	WC-SCPD37-1.0-2.0	Aroclor 1260	5.8	µg/kg	J-	Sur<LCL	K2111942
SW8082A	WC-SCPD37-1.0-2.0	Aroclor 1262	0.65	µg/kg	UJ	Sur<LCL	K2111942
SW8082A	WC-SCPD37-1.0-2.0	Aroclor 1268	0.65	µg/kg	UJ	Sur<LCL	K2111942
SW8082A	WC-SCPD37-3.0-4.0	Aroclor 1254	16	µg/kg	J+	Sur>UCL	K2111942
SW8082A	WC-SCPD37-3.0-4.0	Aroclor 1260	8.3	µg/kg	J+	Sur>UCL	K2111942
SW8082A	WC-SCPD39-12.0-13.0	Aroclor 1260	170	µg/kg	J+	Sur>UCL	K2200746
SW8082A	WC-SCPD39-9.0-10.0	Aroclor 1016	0.84	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD39-9.0-10.0	Aroclor 1221	0.84	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD39-9.0-10.0	Aroclor 1232	0.84	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD39-9.0-10.0	Aroclor 1248	0.84	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD39-9.0-10.0	Aroclor 1260	76	µg/kg	J-	Sur<LCL	K2200746
SW8082A	WC-SCPD39-9.0-10.0	Aroclor 1262	0.84	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD39-9.0-10.0	Aroclor 1268	0.84	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1016	1.1	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1221	1.1	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1232	1.1	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1242	1.1	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1248	2.3	µg/kg	J-	Sur<LCL	K2107340
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1254	3.9	µg/kg	J-	Sur<LCL	K2107340
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1260	4.3	µg/kg	J-	Sur<LCL	K2107340
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1262	1.1	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1268	1.1	µg/kg	UJ	Sur<LCL	K2107340
SW8082A	WC-SCPD42-3.0-4.0	Aroclor 1016	7.6	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-3.0-4.0	Aroclor 1221	13	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-3.0-4.0	Aroclor 1232	11	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-3.0-4.0	Aroclor 1242	8.3	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-3.0-4.0	Aroclor 1248	8.4	µg/kg	UJ	Sur<LCL	K2107158

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8082A	WC-SCPD42-3.0-4.0	Aroclor 1254	17	µg/kg	J-	Sur<LCL	K2107158
SW8082A	WC-SCPD42-3.0-4.0	Aroclor 1260	14	µg/kg	J-	Sur<LCL	K2107158
SW8082A	WC-SCPD42-3.0-4.0	Aroclor 1262	0.87	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-3.0-4.0	Aroclor 1268	0.87	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-5.0-6.0	Aroclor 1016	0.66	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-5.0-6.0	Aroclor 1221	0.66	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-5.0-6.0	Aroclor 1232	0.66	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-5.0-6.0	Aroclor 1242	0.66	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-5.0-6.0	Aroclor 1248	0.66	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-5.0-6.0	Aroclor 1254	0.66	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-5.0-6.0	Aroclor 1260	0.66	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-5.0-6.0	Aroclor 1262	0.66	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-5.0-6.0	Aroclor 1268	0.66	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-6.0-7.0	Aroclor 1016	0.63	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-6.0-7.0	Aroclor 1221	0.63	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-6.0-7.0	Aroclor 1232	0.63	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-6.0-7.0	Aroclor 1242	0.63	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-6.0-7.0	Aroclor 1248	0.63	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-6.0-7.0	Aroclor 1254	0.63	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-6.0-7.0	Aroclor 1260	0.63	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-6.0-7.0	Aroclor 1262	0.63	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD42-6.0-7.0	Aroclor 1268	0.63	µg/kg	UJ	Sur<LCL	K2107158
SW8082A	WC-SCPD48-1.0-2.0	Aroclor 1248	530	µg/kg	J+	Sur>UCL	K2107158
SW8082A	WC-SCPD48-1.0-2.0	Aroclor 1254	210	µg/kg	J+	Sur>UCL	K2107158
SW8082A	WC-SCPD48-1.0-2.0	Aroclor 1260	82	µg/kg	J+	Sur>UCL	K2107158
SW8082A	WC-SCPD48-7.0-8.0	Aroclor 1016	0.71	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD48-7.0-8.0	Aroclor 1221	0.71	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD48-7.0-8.0	Aroclor 1232	0.71	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD48-7.0-8.0	Aroclor 1242	20	µg/kg	J-	Sur<LCL	K2200746
SW8082A	WC-SCPD48-7.0-8.0	Aroclor 1248	0.71	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD48-7.0-8.0	Aroclor 1254	15	µg/kg	J-	Sur<LCL	K2200746
SW8082A	WC-SCPD48-7.0-8.0	Aroclor 1260	14	µg/kg	J-	Sur<LCL	K2200746
SW8082A	WC-SCPD48-7.0-8.0	Aroclor 1262	0.71	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SCPD48-7.0-8.0	Aroclor 1268	0.71	µg/kg	UJ	Sur<LCL	K2200746
SW8082A	WC-SGPD32	Aroclor 1242	14	µg/kg	J+	Sur>UCL	K2107846
SW8082A	WC-SGPD32	Aroclor 1254	24	µg/kg	J+	Sur>UCL	K2107846
SW8082A	WC-SGPD32	Aroclor 1260	15	µg/kg	J+	Sur>UCL	K2107846
SW8082A	WC-SCPD07-2.0-3.0	Aroclor 1248	18	µg/kg	J+	Sur>UCL	K2204707
SW8082A	WC-SCPD07-2.0-3.0	Aroclor 1254	34	µg/kg	J+	Sur>UCL	K2204707
SW8082A	WC-SCPD07-2.0-3.0	Aroclor 1260	37	µg/kg	J+	Sur>UCL	K2204707
SW8082A	WC-SCPD12A-4.0-4.8	Aroclor 1260	27	µg/kg	J+	Sur>UCL	K2202475
SW8082A	WC-SCPD16A-1.0-2.0	Aroclor 1260	22	µg/kg	J+	Sur>UCL	K2203345
SW8082A	WC-SCPD16A-2.0-3.0	Aroclor 1260	44	µg/kg	J+	Sur>UCL	K2203345
SW8082A	WC-SCPD20A-3.0-4.0	Aroclor 1260	10	µg/kg	J+	Sur>UCL	K2202475
SW8082A	WC-SCPD26A-1.0-2.0	Aroclor 1254	40	µg/kg	J+	Sur>UCL	K2204432
SW8082A	WC-SCPD26A-1.0-2.0	Aroclor 1260	58	µg/kg	J+	Sur>UCL	K2204432
SW8082A	WC-SCPD26A-3.0-4.0	Aroclor 1254	21	µg/kg	J+	Sur>UCL	K2204432
SW8082A	WC-SCPD26A-3.0-4.0	Aroclor 1260	33	µg/kg	J+	Sur>UCL	K2204432
SW8082A	WC-SCPD37-6.0-7.0	Aroclor 1242	18	µg/kg	J+	Sur>UCL	K2203194
SW8082A	WC-SCPD37-6.0-7.0	Aroclor 1254	17	µg/kg	J+	Sur>UCL	K2203194
SW8082A	WC-SCPD37-6.0-7.0	Aroclor 1260	5.3	µg/kg	J+	Sur>UCL	K2203194
SW8082A	WC-SCPD37-7.0-8.0	Aroclor 1242	27	µg/kg	J+	Sur>UCL	K2203194
SW8082A	WC-SCPD37-7.0-8.0	Aroclor 1254	17	µg/kg	J+	Sur>UCL	K2203194
SW8082A	WC-SCPD37-7.0-8.0	Aroclor 1260	6.8	µg/kg	J+	Sur>UCL	K2203194
SW8082A	WC-SCPD40-4.0-5.0	Aroclor 1242	30	µg/kg	J+	Sur>UCL	K2203194
SW8082A	WC-SCPD40-4.0-5.0	Aroclor 1254	50	µg/kg	J+	Sur>UCL	K2203194
SW8082A	WC-SCPD40-4.0-5.0	Aroclor 1260	39	µg/kg	J+	Sur>UCL	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1016	0.77	µg/kg	UJ	Sur<LCL	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1221	0.77	µg/kg	UJ	Sur<LCL	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1232	0.77	µg/kg	UJ	Sur<LCL	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1242	14	µg/kg	J-	Sur<LCL	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1248	0.77	µg/kg	UJ	Sur<LCL	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1254	25	µg/kg	J-	Sur<LCL	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1260	18	µg/kg	J-	Sur<LCL	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1262	0.77	µg/kg	UJ	Sur<LCL	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1268	0.77	µg/kg	UJ	Sur<LCL	K2203194
SW8082A	WC-SGPD34A	Aroclor 1242	22	µg/kg	J+	Sur>UCL	K2202673
SW8082A	WC-SGPD34A	Aroclor 1254	22	µg/kg	J+	Sur>UCL	K2202673
SW8082A	WC-SGPD34A	Aroclor 1260	12	µg/kg	J+	Sur>UCL	K2202673
SW8270DSIM	WC-SCPD10-4.0-5.0	2-Methylnaphthalene	0.59	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Acenaphthene	0.8	µg/kg	J-	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Acenaphthylene	0.45	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Anthracene	1.4	µg/kg	J-	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Benzo(a)anthracene	0.37	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Benzo(a)pyrene	0.6	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Benzo(b)fluoranthene	1.1	µg/kg	J-	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Benzo(g,h,i)perylene	0.64	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Benzo(k)fluoranthene	0.38	µg/kg	UJ	Sur<LCL	K2111932

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8270DSIM	WC-SCPD10-4.0-5.0	Chrysene	0.49	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Dibenzo(a,h)anthracene	0.37	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Dibenzofuran	0.95	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Fluoranthene	1.1	µg/kg	J-	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Fluorene	1.1	µg/kg	J-	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Indeno(1,2,3-cd)pyrene	0.57	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Naphthalene	0.75	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Phenanthrene	0.94	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD10-4.0-5.0	Pyrene	0.51	µg/kg	UJ	Sur<LCL	K2111932
SW8270DSIM	WC-SCPD32-2.0-3.0	2-Methylnaphthalene	83	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Acenaphthene	130	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Acenaphthylene	70	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Anthracene	1100	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Benzo(a)anthracene	310	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Benzo(a)pyrene	210	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Benzo(b)fluoranthene	240	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Benzo(g,h,i)perylene	150	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Benzo(k)fluoranthene	82	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Chrysene	450	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Dibenzo(a,h)anthracene	30	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Dibenzofuran	95	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Fluoranthene	1000	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Fluorene	440	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Indeno(1,2,3-cd)pyrene	130	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Naphthalene	100	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Phenanthrene	2300	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Pyrene	1100	µg/kg	J+	Sur>UCL	K2107104
SW8270DSIM	WC-SCPD36-8.0-9.0	2-Methylnaphthalene	130	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Acenaphthene	440	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Acenaphthylene	220	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Anthracene	680	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(a)anthracene	860	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(a)pyrene	920	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(b)fluoranthene	860	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(g,h,i)perylene	1000	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(k)fluoranthene	270	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Chrysene	1400	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Dibenzo(a,h)anthracene	140	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Dibenzofuran	110	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Fluoranthene	2500	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Fluorene	650	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Indeno(1,2,3-cd)pyrene	740	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Naphthalene	140	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Phenanthrene	4300	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Pyrene	3200	µg/kg	J+	Sur>UCL	K2200743
SW8270DSIM	WC-SCPD41-1.0-2.0	2-Methylnaphthalene	4.2	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Acenaphthene	9.5	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Acenaphthylene	3	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Anthracene	12	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Benzo(a)anthracene	32	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Benzo(a)pyrene	21	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Benzo(b)fluoranthene	33	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Benzo(g,h,i)perylene	18	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Benzo(k)fluoranthene	12	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Chrysene	66	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Dibenzo(a,h)anthracene	3.1	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Dibenzofuran	7	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Fluoranthene	120	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Fluorene	15	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Indeno(1,2,3-cd)pyrene	15	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Naphthalene	5.7	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Phenanthrene	66	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD41-1.0-2.0	Pyrene	130	µg/kg	J-	Sur<LCL	K2107340
SW8270DSIM	WC-SCPD45-3.0-4.0	2-Methylnaphthalene	18	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Acenaphthene	24	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Acenaphthylene	4.1	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Anthracene	31	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Benzo(a)anthracene	55	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Benzo(a)pyrene	47	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Benzo(b)fluoranthene	53	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Benzo(g,h,i)perylene	21	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Benzo(k)fluoranthene	22	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Chrysene	66	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Dibenzo(a,h)anthracene	4.7	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Dibenzofuran	0.92	µg/kg	UJ	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Fluoranthene	170	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Fluorene	27	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Indeno(1,2,3-cd)pyrene	23	µg/kg	J-	Sur<LCL	K2111955

Table H-12. Surrogate Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8270DSIM	WC-SCPD45-3.0-4.0	Naphthalene	0.72	µg/kg	UJ	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Phenanthrene	160	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD45-3.0-4.0	Pyrene	150	µg/kg	J-	Sur<LCL	K2111955
SW8270DSIM	WC-SCPD52-7.0-8.0	2-Methylnaphthalene	5.3	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Acenaphthene	0.41	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Acenaphthylene	0.38	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Anthracene	32	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Benzo(a)anthracene	22	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Benzo(a)pyrene	13	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Benzo(b)fluoranthene	14	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Benzo(g,h,i)perylene	11	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Benzo(k)fluoranthene	4	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Chrysene	37	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Dibenzo(a,h)anthracene	0.31	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Dibenzofuran	0.81	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Fluoranthene	45	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Fluorene	0.77	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Indeno(1,2,3-cd)pyrene	7.3	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Naphthalene	0.64	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Phenanthrene	210	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-7.0-8.0	Pyrene	74	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	2-Methylnaphthalene	3.2	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Acenaphthene	0.4	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Acenaphthylene	0.37	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Anthracene	21	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Benzo(a)anthracene	13	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Benzo(a)pyrene	7.1	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Benzo(b)fluoranthene	7.3	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Benzo(g,h,i)perylene	6.5	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Benzo(k)fluoranthene	2.1	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Chrysene	21	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Dibenzo(a,h)anthracene	1.6	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Dibenzofuran	0.79	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Fluoranthene	22	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Fluorene	0.75	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Indeno(1,2,3-cd)pyrene	3.7	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Naphthalene	0.62	µg/kg	UJ	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Phenanthrene	140	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SCPD52-8.0-9.0	Pyrene	37	µg/kg	J-	Sur<LCL	K2200746
SW8270DSIM	WC-SGPD12	Benzo(k)fluoranthene	88	µg/kg	J+	Sur>UCL	K2107598
SW8270DSIM	WC-SGPD12	Dibenzo(a,h)anthracene	69	µg/kg	J+	Sur>UCL	K2107598
SW8270DSIM	WC-SGPD26A	2-Methylnaphthalene	460	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Acenaphthene	220	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Acenaphthylene	66	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Anthracene	330	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Benzo(a)anthracene	220	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Benzo(a)pyrene	190	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Benzo(b)fluoranthene	150	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Benzo(g,h,i)perylene	140	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Benzo(k)fluoranthene	44	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Chrysene	400	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Dibenzo(a,h)anthracene	27	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Dibenzofuran	69	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Fluoranthene	510	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Fluorene	430	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Indeno(1,2,3-cd)pyrene	110	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Naphthalene	210	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Phenanthrene	1700	µg/kg	J-	Sur<LCL	K2202673
SW8270DSIM	WC-SGPD26A	Pyrene	680	µg/kg	J-	Sur<LCL	K2202673

Notes:
µg/kg = microgram per kilogram
ID = Identifier
Sur<LCL = Surrogate recovery less than the lower control limit
Sur>UCL = Surrogate recovery greater than the upper control limit

Qualifier Definitions
J+ = Analyte was present but reported value may not be accurate or precise, high bias.
J- = Analyte was present but reported value may not be accurate or precise, low bias.
UJ = The analyte was not detected above the detection limit objective; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table H-13 - Internal Standard Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1699M	WC-SCPD21-1.0-2.0	2,4'-DDD	0.46	µg/kg	UJ	IS>UCL	K2107104
E1699M	WC-SCPD21-1.0-2.0	2,4'-DDE	0.62	µg/kg	J-	IS>UCL	K2107104
E1699M	WC-SCPD21-1.0-2.0	2,4'-DDT	0.68	µg/kg	UJ	IS>UCL	K2107104
E1699M	WC-SCPD21-1.0-2.0	4,4'-DDD	7	µg/kg	J-	IS>UCL	K2107104
E1699M	WC-SCPD21-1.0-2.0	4,4'-DDE	8.8	µg/kg	J-	IS>UCL	K2107104
E1699M	WC-SCPD21-1.0-2.0	4,4'-DDT	0.34	µg/kg	UJ	IS>UCL	K2107104
E1699M	WC-SCPD28-1.0-2.0	2,4'-DDD	1.2	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-1.0-2.0	2,4'-DDE	0.59	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-1.0-2.0	2,4'-DDT	0.66	µg/kg	UJ	IS>UCL	K2107278
E1699M	WC-SCPD28-1.0-2.0	4,4'-DDD	5	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-1.0-2.0	4,4'-DDE	6.9	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-1.0-2.0	4,4'-DDT	0.33	µg/kg	UJ	IS>UCL	K2107278
E1699M	WC-SCPD28-2.0-3.0	2,4'-DDD	1.4	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-2.0-3.0	2,4'-DDE	0.58	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-2.0-3.0	2,4'-DDT	0.66	µg/kg	UJ	IS>UCL	K2107278
E1699M	WC-SCPD28-2.0-3.0	4,4'-DDD	5	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-2.0-3.0	4,4'-DDE	6.5	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-2.0-3.0	4,4'-DDT	0.33	µg/kg	UJ	IS>UCL	K2107278
E1699M	WC-SCPD28-3.0-4.0	2,4'-DDD	2	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-3.0-4.0	2,4'-DDE	0.77	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-3.0-4.0	2,4'-DDT	0.5	µg/kg	UJ	IS>UCL	K2107278
E1699M	WC-SCPD28-3.0-4.0	4,4'-DDD	6.6	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-3.0-4.0	4,4'-DDE	3.2	µg/kg	J-	IS>UCL	K2107278
E1699M	WC-SCPD28-3.0-4.0	4,4'-DDT	0.25	µg/kg	UJ	IS>UCL	K2107278
E1699M	WC-SCPD31-2.0-3.0	2,4'-DDD	0.48	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD31-2.0-3.0	2,4'-DDE	0.61	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD31-2.0-3.0	2,4'-DDT	0.72	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD31-2.0-3.0	4,4'-DDD	4	µg/kg	J-	IS>UCL	K2107158
E1699M	WC-SCPD31-2.0-3.0	4,4'-DDE	7.6	µg/kg	J-	IS>UCL	K2107158
E1699M	WC-SCPD31-2.0-3.0	4,4'-DDT	0.36	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD31-3.0-4.0	2,4'-DDD	0.44	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD31-3.0-4.0	2,4'-DDE	0.93	µg/kg	J-	IS>UCL	K2107158
E1699M	WC-SCPD31-3.0-4.0	2,4'-DDT	0.66	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD31-3.0-4.0	4,4'-DDD	5.9	µg/kg	J-	IS>UCL	K2107158
E1699M	WC-SCPD31-3.0-4.0	4,4'-DDE	15	µg/kg	J-	IS>UCL	K2107158
E1699M	WC-SCPD31-3.0-4.0	4,4'-DDT	0.33	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD31-4.0-5.0	2,4'-DDD	0.52	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD31-4.0-5.0	2,4'-DDE	0.84	µg/kg	J-	IS>UCL	K2107158
E1699M	WC-SCPD31-4.0-5.0	2,4'-DDT	0.78	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD31-4.0-5.0	4,4'-DDD	7.9	µg/kg	J-	IS>UCL	K2107158
E1699M	WC-SCPD31-4.0-5.0	4,4'-DDE	11	µg/kg	J-	IS>UCL	K2107158
E1699M	WC-SCPD31-4.0-5.0	4,4'-DDT	0.39	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD32-1.0-2.0	2,4'-DDD	0.55	µg/kg	UJ	IS>UCL	K2107104
E1699M	WC-SCPD32-1.0-2.0	2,4'-DDE	0.69	µg/kg	UJ	IS>UCL	K2107104
E1699M	WC-SCPD32-1.0-2.0	2,4'-DDT	0.82	µg/kg	UJ	IS>UCL	K2107104
E1699M	WC-SCPD32-1.0-2.0	4,4'-DDD	6.8	µg/kg	J-	IS>UCL	K2107104
E1699M	WC-SCPD32-1.0-2.0	4,4'-DDE	4	µg/kg	J-	IS>UCL	K2107104
E1699M	WC-SCPD32-1.0-2.0	4,4'-DDT	0.41	µg/kg	UJ	IS>UCL	K2107104
E1699M	WC-SCPD36-4.0-5.0	2,4'-DDD	2.6	µg/kg	UJ	IS>UCL	K2107222
E1699M	WC-SCPD36-4.0-5.0	2,4'-DDE	3.3	µg/kg	UJ	IS>UCL	K2107222
E1699M	WC-SCPD36-4.0-5.0	2,4'-DDT	3.9	µg/kg	UJ	IS>UCL	K2107222
E1699M	WC-SCPD36-4.0-5.0	4,4'-DDD	6.6	µg/kg	J-	IS>UCL	K2107222
E1699M	WC-SCPD36-4.0-5.0	4,4'-DDE	4.1	µg/kg	J-	IS>UCL	K2107222
E1699M	WC-SCPD36-4.0-5.0	4,4'-DDT	2	µg/kg	UJ	IS>UCL	K2107222
E1699M	WC-SCPD42-4.0-5.0	2,4'-DDD	0.36	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-4.0-5.0	2,4'-DDE	0.45	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-4.0-5.0	2,4'-DDT	0.53	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-4.0-5.0	4,4'-DDD	0.59	µg/kg	J-	IS>UCL	K2107158
E1699M	WC-SCPD42-4.0-5.0	4,4'-DDE	0.4	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-4.0-5.0	4,4'-DDT	0.27	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-5.0-6.0	2,4'-DDD	0.4	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-5.0-6.0	2,4'-DDE	0.5	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-5.0-6.0	2,4'-DDT	0.6	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-5.0-6.0	4,4'-DDD	0.22	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-5.0-6.0	4,4'-DDE	0.44	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-5.0-6.0	4,4'-DDT	0.3	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-6.0-7.0	2,4'-DDD	0.34	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-6.0-7.0	2,4'-DDE	0.43	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-6.0-7.0	4,4'-DDD	0.19	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-6.0-7.0	4,4'-DDE	0.38	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD42-6.0-7.0	4,4'-DDT	0.26	µg/kg	UJ	IS>UCL	K2107158
E1699M	WC-SCPD50-1.0-2.0	2,4'-DDD	71	µg/kg	J-	IS>UCL	K2107395
E1699M	WC-SCPD50-1.0-2.0	2,4'-DDE	4	µg/kg	J-	IS>UCL	K2107395
E1699M	WC-SCPD50-1.0-2.0	2,4'-DDT	0.59	µg/kg	UJ	IS>UCL	K2107395
E1699M	WC-SCPD50-1.0-2.0	4,4'-DDD	150	µg/kg	J-	IS>UCL	K2107395
E1699M	WC-SCPD50-1.0-2.0	4,4'-DDE	20	µg/kg	J-	IS>UCL	K2107395
E1699M	WC-SCPD50-1.0-2.0	4,4'-DDT	0.3	µg/kg	UJ	IS>UCL	K2107395

Table H-13 - Internal Standard Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1699M	WC-SCPD53A-4.0-5.0	2,4'-DDD	0.76	µg/kg	J-	IS>UCL	K2107598
E1699M	WC-SCPD53A-4.0-5.0	2,4'-DDE	0.61	µg/kg	UJ	IS>UCL	K2107598
E1699M	WC-SCPD53A-4.0-5.0	2,4'-DDT	0.72	µg/kg	UJ	IS>UCL	K2107598
E1699M	WC-SCPD53A-4.0-5.0	4,4'-DDD	3.4	µg/kg	J-	IS>UCL	K2107598
E1699M	WC-SCPD53A-4.0-5.0	4,4'-DDE	4.2	µg/kg	J-	IS>UCL	K2107598
E1699M	WC-SCPD53A-4.0-5.0	4,4'-DDT	1.3	µg/kg	J-	IS>UCL	K2107598
E1699M	WC-SGPD02	2,4'-DDD	0.52	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD02	2,4'-DDE	0.66	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD02	2,4'-DDT	0.78	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD02	4,4'-DDD	0.79	µg/kg	J-	IS>UCL	K2107700
E1699M	WC-SGPD02	4,4'-DDE	1.2	µg/kg	J-	IS>UCL	K2107700
E1699M	WC-SGPD02	4,4'-DDT	0.39	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD03	2,4'-DDD	0.7	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD03	2,4'-DDE	0.87	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD03	2,4'-DDT	1.1	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD03	4,4'-DDD	1.1	µg/kg	J-	IS>UCL	K2107700
E1699M	WC-SGPD03	4,4'-DDE	1.5	µg/kg	J-	IS>UCL	K2107700
E1699M	WC-SGPD03	4,4'-DDT	0.52	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD04	2,4'-DDD	0.68	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD04	2,4'-DDE	0.85	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD04	2,4'-DDT	1.1	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD04	4,4'-DDD	0.73	µg/kg	J-	IS>UCL	K2107700
E1699M	WC-SGPD04	4,4'-DDE	1.4	µg/kg	J-	IS>UCL	K2107700
E1699M	WC-SGPD04	4,4'-DDT	0.51	µg/kg	UJ	IS>UCL	K2107700
E1699M	WC-SGPD13	2,4'-DDD	0.56	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD13	2,4'-DDE	0.7	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD13	2,4'-DDT	0.83	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD13	4,4'-DDD	1.2	µg/kg	J-	IS>UCL	K2107846
E1699M	WC-SGPD13	4,4'-DDE	3	µg/kg	J-	IS>UCL	K2107846
E1699M	WC-SGPD13	4,4'-DDT	0.42	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD14	2,4'-DDD	0.56	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD14	2,4'-DDE	0.71	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD14	2,4'-DDT	0.84	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD14	4,4'-DDD	1.1	µg/kg	J-	IS>UCL	K2107846
E1699M	WC-SGPD14	4,4'-DDE	1.8	µg/kg	J-	IS>UCL	K2107846
E1699M	WC-SGPD14	4,4'-DDT	0.42	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD15	2,4'-DDD	0.78	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD15	2,4'-DDE	0.98	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD15	2,4'-DDT	1.2	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD15	4,4'-DDD	1.1	µg/kg	J-	IS>UCL	K2107846
E1699M	WC-SGPD15	4,4'-DDE	1.7	µg/kg	J-	IS>UCL	K2107846
E1699M	WC-SGPD15	4,4'-DDT	0.59	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD23	2,4'-DDD	0.6	µg/kg	J-	IS>UCL	K2107902
E1699M	WC-SGPD23	2,4'-DDE	0.69	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD23	2,4'-DDT	0.82	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD23	4,4'-DDD	1.9	µg/kg	J-	IS>UCL	K2107902
E1699M	WC-SGPD23	4,4'-DDE	2.7	µg/kg	J-	IS>UCL	K2107902
E1699M	WC-SGPD23	4,4'-DDT	0.41	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD32	2,4'-DDD	1.6	µg/kg	J-	IS>UCL	K2107846
E1699M	WC-SGPD32	2,4'-DDE	0.72	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD32	2,4'-DDT	0.85	µg/kg	UJ	IS>UCL	K2107846
E1699M	WC-SGPD32	4,4'-DDD	4.8	µg/kg	J-	IS>UCL	K2107846
E1699M	WC-SGPD32	4,4'-DDE	3.3	µg/kg	J-	IS>UCL	K2107846
E1699M	WC-SGPD32	4,4'-DDT	0.66	µg/kg	J-	IS>UCL	K2107846
E1699M	WC-SGPD36	2,4'-DDD	0.65	µg/kg	J-	IS>UCL	K2107752
E1699M	WC-SGPD36	2,4'-DDE	0.57	µg/kg	UJ	IS>UCL	K2107752
E1699M	WC-SGPD36	2,4'-DDT	0.68	µg/kg	UJ	IS>UCL	K2107752
E1699M	WC-SGPD36	4,4'-DDD	1.6	µg/kg	J-	IS>UCL	K2107752
E1699M	WC-SGPD36	4,4'-DDE	1.6	µg/kg	J-	IS>UCL	K2107752
E1699M	WC-SGPD36	4,4'-DDT	0.34	µg/kg	UJ	IS>UCL	K2107752
E1699M	WC-SGPD36FD	2,4'-DDD	0.89	µg/kg	J-	IS>UCL	K2107752
E1699M	WC-SGPD36FD	2,4'-DDE	0.52	µg/kg	UJ	IS>UCL	K2107752
E1699M	WC-SGPD36FD	2,4'-DDT	0.62	µg/kg	UJ	IS>UCL	K2107752
E1699M	WC-SGPD36FD	4,4'-DDD	2.2	µg/kg	J-	IS>UCL	K2107752
E1699M	WC-SGPD36FD	4,4'-DDE	1.1	µg/kg	J-	IS>UCL	K2107752
E1699M	WC-SGPD36FD	4,4'-DDT	1.3	µg/kg	J-	IS>UCL	K2107752
E1699M	WC-SGPD41	2,4'-DDD	0.82	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD41	2,4'-DDE	1.1	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD41	2,4'-DDT	1.3	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD41	4,4'-DDD	1.9	µg/kg	J-	IS>UCL	K2107902
E1699M	WC-SGPD41	4,4'-DDE	2.4	µg/kg	J-	IS>UCL	K2107902
E1699M	WC-SGPD41	4,4'-DDT	0.62	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD42	2,4'-DDD	5.5	µg/kg	J-	IS>UCL	K2107902
E1699M	WC-SGPD42	2,4'-DDE	0.9	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD42	2,4'-DDT	1.1	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD42	4,4'-DDD	10	µg/kg	J-	IS>UCL	K2107902
E1699M	WC-SGPD42	4,4'-DDE	3.3	µg/kg	J-	IS>UCL	K2107902

Table H-13 - Internal Standard Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1699M	WC-SGPD42	4,4'-DDT	0.54	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD43	2,4'-DDD	44	µg/kg	J-	IS>UCL	K2107598
E1699M	WC-SGPD43	2,4'-DDE	8.2	µg/kg	J-	IS>UCL	K2107598
E1699M	WC-SGPD43	2,4'-DDT	0.71	µg/kg	UJ	IS>UCL	K2107598
E1699M	WC-SGPD43	4,4'-DDD	180	µg/kg	J-	IS>UCL	K2107598
E1699M	WC-SGPD43	4,4'-DDE	60	µg/kg	J-	IS>UCL	K2107598
E1699M	WC-SGPD43	4,4'-DDT	44	µg/kg	J-	IS>UCL	K2107598
E1699M	WC-SGPD46	2,4'-DDD	0.73	µg/kg	J-	IS>UCL	K2108034
E1699M	WC-SGPD46	2,4'-DDE	0.91	µg/kg	UJ	IS>UCL	K2108034
E1699M	WC-SGPD46	2,4'-DDT	1.1	µg/kg	UJ	IS>UCL	K2108034
E1699M	WC-SGPD46	4,4'-DDD	2.4	µg/kg	J-	IS>UCL	K2108034
E1699M	WC-SGPD46	4,4'-DDE	2.3	µg/kg	J-	IS>UCL	K2108034
E1699M	WC-SGPD46	4,4'-DDT	0.54	µg/kg	UJ	IS>UCL	K2108034
E1699M	WC-SGPD48	2,4'-DDD	0.74	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD48	2,4'-DDE	0.92	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD48	2,4'-DDT	1.1	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD48	4,4'-DDD	2	µg/kg	J-	IS>UCL	K2107902
E1699M	WC-SGPD48	4,4'-DDE	2	µg/kg	J-	IS>UCL	K2107902
E1699M	WC-SGPD48	4,4'-DDT	0.55	µg/kg	UJ	IS>UCL	K2107902
E1699M	WC-SGPD50	2,4'-DDD	24	µg/kg	J-	IS>UCL	K2108034
E1699M	WC-SGPD50	2,4'-DDE	9.9	µg/kg	J-	IS>UCL	K2108034
E1699M	WC-SGPD50	2,4'-DDT	0.71	µg/kg	UJ	IS>UCL	K2108034
E1699M	WC-SGPD50	4,4'-DDD	89	µg/kg	J-	IS>UCL	K2108034
E1699M	WC-SGPD50	4,4'-DDE	14	µg/kg	J-	IS>UCL	K2108034
E1699M	WC-SGPD50	4,4'-DDT	0.36	µg/kg	UJ	IS>UCL	K2108034
E1699M	WC-SGPD52	2,4'-DDD	0.62	µg/kg	UJ	IS>UCL	K2108034
E1699M	WC-SGPD52	2,4'-DDE	0.77	µg/kg	UJ	IS>UCL	K2108034
E1699M	WC-SGPD52	2,4'-DDT	0.92	µg/kg	UJ	IS>UCL	K2108034
E1699M	WC-SGPD52	4,4'-DDD	1.4	µg/kg	J-	IS>UCL	K2108034
E1699M	WC-SGPD52	4,4'-DDE	1.2	µg/kg	J-	IS>UCL	K2108034
E1699M	WC-SGPD52	4,4'-DDT	0.46	µg/kg	UJ	IS>UCL	K2108034
E1699M	WC-SCPD01-1.0-2.0	2,4'-DDD	0.41	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-1.0-2.0	2,4'-DDE	0.52	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-1.0-2.0	2,4'-DDT	0.62	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-1.0-2.0	4,4'-DDD	1	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD01-1.0-2.0	4,4'-DDE	1.6	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD01-1.0-2.0	4,4'-DDT	0.31	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-2.0-3.0	2,4'-DDD	0.55	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-2.0-3.0	2,4'-DDE	0.69	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-2.0-3.0	2,4'-DDT	0.82	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-2.0-3.0	4,4'-DDD	1.1	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD01-2.0-3.0	4,4'-DDE	3.4	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD01-2.0-3.0	4,4'-DDT	0.41	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-3.0-4.0	2,4'-DDD	0.49	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-3.0-4.0	2,4'-DDE	0.62	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-3.0-4.0	2,4'-DDT	0.73	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-3.0-4.0	4,4'-DDD	1.4	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD01-3.0-4.0	4,4'-DDE	3	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD01-3.0-4.0	4,4'-DDT	0.37	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-4.0-5.0	2,4'-DDD	0.4	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-4.0-5.0	2,4'-DDE	0.5	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-4.0-5.0	2,4'-DDT	0.59	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD01-4.0-5.0	4,4'-DDD	0.77	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD01-4.0-5.0	4,4'-DDE	1	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD01-4.0-5.0	4,4'-DDT	0.3	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD03-8.0-9.0	2,4'-DDD	3.1	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD03-8.0-9.0	2,4'-DDE	0.8	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD03-8.0-9.0	2,4'-DDT	0.64	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD03-8.0-9.0	4,4'-DDD	7.7	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD03-8.0-9.0	4,4'-DDE	6.2	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD03-8.0-9.0	4,4'-DDT	0.32	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD03-9.0-9.8	2,4'-DDD	1.6	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD03-9.0-9.8	2,4'-DDE	0.56	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD03-9.0-9.8	2,4'-DDT	0.67	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD03-9.0-9.8	4,4'-DDD	5.1	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD03-9.0-9.8	4,4'-DDE	3	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD03-9.0-9.8	4,4'-DDT	0.34	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD05-2.0-3.0	2,4'-DDD	0.43	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD05-2.0-3.0	2,4'-DDE	0.54	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD05-2.0-3.0	2,4'-DDT	0.64	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD05-2.0-3.0	4,4'-DDD	0.97	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD05-2.0-3.0	4,4'-DDE	1.4	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD05-2.0-3.0	4,4'-DDT	0.32	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD05-3.0-4.0	2,4'-DDD	0.98	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD05-3.0-4.0	2,4'-DDE	0.62	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD05-3.0-4.0	2,4'-DDT	0.73	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD05-3.0-4.0	4,4'-DDD	4.5	µg/kg	J-	IS>UCL	K2203181

Table H-13 - Internal Standard Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1699M	WC-SCPD05-3.0-4.0	4,4'-DDE	4.5	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD05-3.0-4.0	4,4'-DDT	0.37	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-1.0-2.0	2,4'-DDD	0.87	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-1.0-2.0	2,4'-DDE	0.55	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-1.0-2.0	2,4'-DDT	0.65	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-1.0-2.0	4,4'-DDD	4.6	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-1.0-2.0	4,4'-DDE	4.1	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-1.0-2.0	4,4'-DDT	0.33	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-2.0-3.0	2,4'-DDD	0.68	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-2.0-3.0	2,4'-DDE	0.65	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-2.0-3.0	2,4'-DDT	0.78	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-2.0-3.0	4,4'-DDD	3.4	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-2.0-3.0	4,4'-DDE	2.1	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-2.0-3.0	4,4'-DDT	0.39	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-3.0-4.0	2,4'-DDD	0.74	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-3.0-4.0	2,4'-DDE	0.61	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-3.0-4.0	2,4'-DDT	0.73	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-3.0-4.0	4,4'-DDD	3.1	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-3.0-4.0	4,4'-DDE	1.9	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-3.0-4.0	4,4'-DDT	0.37	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-4.0-5.0	2,4'-DDD	0.77	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-4.0-5.0	2,4'-DDE	0.57	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-4.0-5.0	2,4'-DDT	0.67	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD06-4.0-5.0	4,4'-DDD	3.5	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-4.0-5.0	4,4'-DDE	1.9	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD06-4.0-5.0	4,4'-DDT	0.34	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD09-1.0-2.0	2,4'-DDD	1.8	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD09-1.0-2.0	2,4'-DDE	0.86	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD09-1.0-2.0	2,4'-DDT	0.73	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD09-1.0-2.0	4,4'-DDD	5.5	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD09-1.0-2.0	4,4'-DDE	7.4	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SCPD09-1.0-2.0	4,4'-DDT	0.37	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SCPD12A-1.0-2.0	2,4'-DDD	1.3	µg/kg	J-	IS>UCL	K2202475
E1699M	WC-SCPD12A-1.0-2.0	2,4'-DDE	0.78	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD12A-1.0-2.0	2,4'-DDT	0.93	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD12A-1.0-2.0	4,4'-DDD	3.8	µg/kg	J-	IS>UCL	K2202475
E1699M	WC-SCPD12A-1.0-2.0	4,4'-DDE	1.8	µg/kg	J-	IS>UCL	K2202475
E1699M	WC-SCPD12A-1.0-2.0	4,4'-DDT	0.47	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD12A-4.0-4.8	2,4'-DDD	0.46	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD12A-4.0-4.8	2,4'-DDE	0.58	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD12A-4.0-4.8	2,4'-DDT	0.68	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD12A-4.0-4.8	4,4'-DDD	0.26	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD12A-4.0-4.8	4,4'-DDE	0.54	µg/kg	J-	IS>UCL	K2202475
E1699M	WC-SCPD12A-4.0-4.8	4,4'-DDT	0.34	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-2.0-3.0	2,4'-DDD	0.47	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-2.0-3.0	2,4'-DDE	0.58	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-2.0-3.0	2,4'-DDT	0.69	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-2.0-3.0	4,4'-DDD	0.26	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-2.0-3.0	4,4'-DDE	0.52	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-2.0-3.0	4,4'-DDT	0.35	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-3.0-4.0	2,4'-DDD	0.47	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-3.0-4.0	2,4'-DDE	0.59	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-3.0-4.0	2,4'-DDT	0.7	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-3.0-4.0	4,4'-DDD	0.27	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-3.0-4.0	4,4'-DDE	0.53	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD20A-3.0-4.0	4,4'-DDT	0.35	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SCPD34A-1.0-2.0	2,4'-DDD	0.79	µg/kg	J-	IS>UCL	K2202673
E1699M	WC-SCPD34A-1.0-2.0	2,4'-DDE	0.75	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SCPD34A-1.0-2.0	2,4'-DDT	0.89	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SCPD34A-1.0-2.0	4,4'-DDD	3.4	µg/kg	J-	IS>UCL	K2202673
E1699M	WC-SCPD34A-1.0-2.0	4,4'-DDE	5.5	µg/kg	J-	IS>UCL	K2202673
E1699M	WC-SCPD34A-1.0-2.0	4,4'-DDT	0.45	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SCPD34A-2.0-3.0	2,4'-DDD	0.59	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SCPD34A-2.0-3.0	2,4'-DDE	0.74	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SCPD34A-2.0-3.0	2,4'-DDT	0.88	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SCPD34A-2.0-3.0	4,4'-DDD	3.5	µg/kg	J-	IS>UCL	K2202673
E1699M	WC-SCPD34A-2.0-3.0	4,4'-DDE	10	µg/kg	J-	IS>UCL	K2202673
E1699M	WC-SCPD34A-2.0-3.0	4,4'-DDT	2.7	µg/kg	J-	IS>UCL	K2202673
E1699M	WC-SCPD34A-3.0-3.3	2,4'-DDD	1.7	µg/kg	J-	IS>UCL	K2202673
E1699M	WC-SCPD34A-3.0-3.3	2,4'-DDE	0.73	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SCPD34A-3.0-3.3	2,4'-DDT	0.87	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SCPD34A-3.0-3.3	4,4'-DDD	5.9	µg/kg	J-	IS>UCL	K2202673
E1699M	WC-SCPD34A-3.0-3.3	4,4'-DDE	6	µg/kg	J-	IS>UCL	K2202673
E1699M	WC-SCPD34A-3.0-3.3	4,4'-DDT	0.44	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SGPD01	2,4'-DDD	0.42	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD01	2,4'-DDE	0.52	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD01	2,4'-DDT	0.62	µg/kg	UJ	IS>UCL	K2203181

Table H-13 - Internal Standard Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1699M	WC-SGPD01	4,4'-DDD	0.89	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SGPD01	4,4'-DDE	2.1	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SGPD01	4,4'-DDT	0.31	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD06A	2,4'-DDD	0.37	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD06A	2,4'-DDE	0.46	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD06A	2,4'-DDT	0.55	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD06A	4,4'-DDD	0.46	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SGPD06A	4,4'-DDE	0.88	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SGPD06A	4,4'-DDT	0.28	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD09	2,4'-DDD	0.44	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD09	2,4'-DDE	0.56	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD09	2,4'-DDT	0.66	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD09	4,4'-DDD	0.61	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SGPD09	4,4'-DDE	0.56	µg/kg	J-	IS>UCL	K2203181
E1699M	WC-SGPD09	4,4'-DDT	0.33	µg/kg	UJ	IS>UCL	K2203181
E1699M	WC-SGPD16A	2,4'-DDD	0.63	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SGPD16A	2,4'-DDE	0.79	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SGPD16A	2,4'-DDT	0.93	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SGPD16A	4,4'-DDD	1.2	µg/kg	J-	IS>UCL	K2202673
E1699M	WC-SGPD16A	4,4'-DDE	0.7	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SGPD16A	4,4'-DDT	0.47	µg/kg	UJ	IS>UCL	K2202673
E1699M	WC-SGPD20AFD	2,4'-DDD	0.48	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SGPD20AFD	2,4'-DDE	0.6	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SGPD20AFD	2,4'-DDT	0.71	µg/kg	UJ	IS>UCL	K2202475
E1699M	WC-SGPD20AFD	4,4'-DDD	3.3	µg/kg	J-	IS>UCL	K2202475
E1699M	WC-SGPD20AFD	4,4'-DDE	1.8	µg/kg	J-	IS>UCL	K2202475
E1699M	WC-SGPD20AFD	4,4'-DDT	0.36	µg/kg	UJ	IS>UCL	K2202475
SW8270DSIM	WC-SCPD36-8.0-9.0	2-Methylnaphthalene	130	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Acenaphthene	440	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Acenaphthylene	220	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Anthracene	680	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(a)anthracene	860	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(a)pyrene	920	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(b)fluoranthene	860	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(g,h,i)perylene	1000	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Benzo(k)fluoranthene	270	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Chrysene	1400	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Dibenzo(a,h)anthracene	140	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Dibenzofuran	110	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Fluoranthene	2500	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Fluorene	650	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Indeno(1,2,3-cd)pyrene	740	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Naphthalene	140	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Phenanthrene	4300	µg/kg	J+	IS<LCL	K2200743
SW8270DSIM	WC-SCPD36-8.0-9.0	Pyrene	3200	µg/kg	J+	IS<LCL	K2200743

Notes:
µg/kg = microgram per kilogram
ID = Identifier
IS<LCL = Internal standard recovery less than the lower control limit
IS>UCL = Internal standard recovery greater than the upper control limit

Qualifier Definitions
J+ = Analyte was present but reported value may not be accurate or precise, high bias.
J- = Analyte was present but reported value may not be accurate or precise, low bias.
UJ = The analyte was not detected above the detection limit objective; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table H-14 - Matrix Interference Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD38-13.0-14.0	1,2,3,4,7,8-HxCDF	0.0172	µg/kg	J+	Inter	
E1613B	WC-SCPD38-14.0-14.3	1,2,3,4,7,8-HxCDF	0.00526	µg/kg	J+	Inter	K2200746
E1613B	WC-SCPD39-12.0-13.0	1,2,3,4,7,8-HxCDF	0.111	µg/kg	J+	Inter	K2200746
E1613B	WC-SCPD39-13.0-13.9	1,2,3,4,7,8-HxCDF	0.101	µg/kg	J+	Inter	K2200746
E1613B	WC-SCPD25-2.0-3.0	1,2,3,4,7,8-HxCDF	0.000799	µg/kg	J+	Inter	K2205401
E1613B	WC-SCPD06-6.0-7.0	1,2,3,4,7,8-HxCDF	0.00109	ug/kg	J+	Inter	K2208213
E1668	WC-SGPD12	PCB-44/47/65	0.729	µg/kg	J+	Inter	L2675125
E1668	WC-SGPD12	PCB-45/51	0.0332	µg/kg	J+	Inter	L2675125
E1668	WC-SGPD12	PCB-68	0.0517	µg/kg	J+	Inter	L2675125
E1668	WC-SGPD12	Tetrachlorobiphenyl	6.59	µg/kg	J+	Inter	L2675125
E1668	WC-SGPD20	PCB-44/47/65	2.12	µg/kg	J+	Inter	L2675125
E1668	WC-SGPD20	PCB-68	0.0529	µg/kg	J+	Inter	L2675125
E1668	WC-SGPD20	Tetrachlorobiphenyl	18.5	µg/kg	J+	Inter	L2675125
SW8270DSIM	WC-SCPD21-1.0-2.0	Dibenzofuran	10	µg/kg	J+	Inter	K2107104
SW8270DSIM	WC-SCPD21-2.0-3.0	Dibenzofuran	42	µg/kg	J+	Inter	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Acenaphthylene	70	µg/kg	J+	Inter	K2107104
SW8270DSIM	WC-SCPD32-2.0-3.0	Dibenzofuran	95	µg/kg	J+	Inter	K2107104
SW8270DSIM	WC-SCPD32-3.0-4.0	Dibenzofuran	46	µg/kg	J+	Inter	K2107104
SW8270DSIM	WC-SCPD32-4.0-5.0	Dibenzofuran	54	µg/kg	J+	Inter	K2107104
SW8270DSIM	WC-SCPD43A-1.0-2.0	Acenaphthylene	140	µg/kg	J+	Inter	K2203345
SW8270DSIM	WC-SCPD43A-2.0-3.0	Acenaphthylene	100	µg/kg	J+	Inter	K2203345
SW8270DSIM	WC-SCPD43A-3.0-4.0	Acenaphthylene	140	µg/kg	J+	Inter	K2203345
SW8270DSIM	WC-SGPD26A	Acenaphthylene	66	µg/kg	J+	Inter	K2202673
SW8270DSIM	WC-SGPD26A	Dibenzofuran	69	µg/kg	J+	Inter	K2202673
SW8270DSIM	WC-SGPD43A	Acenaphthylene	100	µg/kg	J+	Inter	K2202673
SW8270DSIM	WC-SGPD43A	Dibenzofuran	170	µg/kg	J+	Inter	K2202673

Notes:
µg/kg = microgram per kilogram
ID = Identifier
Inter - Interference present

Qualifier Definitions
J+ = Analyte was present but reported value may not be accurate or precise, high bias.

Table H-15 - Coelution Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SB09-0.0-1.0	2,3,4,6,7,8-HxCDF	0.00039	µg/kg	J	Coelute	L2645768
E1613B	WC-SCPD11-4.0-5.0	2,3,4,6,7,8-HxCDF	0.0047	µg/kg	J	Coelute	L2659646
E1613B	WC-SCPD14-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0036	µg/kg	J	Coelute	L2608826
E1613B	WC-SCPD14-2.0-3.0	2,3,4,6,7,8-HxCDF	0.000056	µg/kg	J	Coelute	L2608826
E1613B	WC-SCPD27-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0025	µg/kg	J	Coelute	L2659632
E1613B	WC-SCPD27-2.0-3.0	2,3,4,6,7,8-HxCDF	0.0041	µg/kg	J	Coelute	L2659632
E1613B	WC-SCPD29-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0088	µg/kg	J	Coelute	L2659632
E1613B	WC-SCPD29-3.0-4.0	2,3,4,6,7,8-HxCDF	0.047	µg/kg	J	Coelute	L2659632
E1613B	WC-SCPD30-2.0-3.0	2,3,4,6,7,8-HxCDF	0.012	µg/kg	J	Coelute	L2659632
E1613B	WC-SCPD30-3.0-4.0	2,3,4,6,7,8-HxCDF	0.015	µg/kg	J	Coelute	L2659632
E1613B	WC-SCPD30-4.0-5.0	2,3,4,6,7,8-HxCDF	0.05	µg/kg	J	Coelute	L2659632
E1613B	WC-SCPD31-5.0-6.0	2,3,4,6,7,8-HxCDF	0.029	µg/kg	J	Coelute	L2659632
E1613B	WC-SCPD31-6.0-7.0	2,3,4,6,7,8-HxCDF	0.052	µg/kg	J	Coelute	L2659632
E1613B	WC-SCPD33-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0055	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD35-2.0-3.0FD	2,3,4,6,7,8-HxCDF	0.0044	µg/kg	J	Coelute	L2611560
E1613B	WC-SCPD37-1.0-2.0	2,3,4,6,7,8-HxCDF	0.00055	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD35-5.0-6.0	2,3,4,6,7,8-HxCDF	0.014	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD36-5.0-6.0	2,3,4,6,7,8-HxCDF	0.022	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD36-6.0-7.0	2,3,4,6,7,8-HxCDF	0.038	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD37-3.0-4.0	2,3,4,6,7,8-HxCDF	0.0033	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD37-4.0-5.0	2,3,4,6,7,8-HxCDF	0.0065	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD38-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0037	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD38-2.0-3.0	2,3,4,6,7,8-HxCDF	0.0083	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD38-3.0-4.0	2,3,4,6,7,8-HxCDF	0.0068	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD39-2.0-3.0	2,3,4,6,7,8-HxCDF	0.017	µg/kg	J	Coelute	L2658841
E1613B	WC-SCPD41-2.0-3.0	2,3,4,6,7,8-HxCDF	0.0043	µg/kg	J	Coelute	L2608826
E1613B	WC-SCPD42-4.0-5.0	2,3,4,6,7,8-HxCDF	0.000057	µg/kg	J	Coelute	L2606306
E1613B	WC-SCPD44-3.0-4.0	2,3,4,6,7,8-HxCDF	0.005	µg/kg	J	Coelute	L2606446
E1613B	WC-SCPD46-3.0-4.0	2,3,4,6,7,8-HxCDF	0.0044	µg/kg	J	Coelute	L2608839
E1613B	WC-SCPD46-6.0-7.0	2,3,4,6,7,8-HxCDF	0.0069	µg/kg	J	Coelute	L2658841
E1613B	WC-SCPD52-4.0-5.0	2,3,4,6,7,8-HxCDF	0.0047	µg/kg	J	Coelute	L2611560
E1613B	WC-SCPD52-5.0-6.0	2,3,4,6,7,8-HxCDF	0.0075	µg/kg	J	Coelute	L2658841
E1613B	WC-SCPD53A-3.0-4.0	2,3,4,6,7,8-HxCDF	0.0037	µg/kg	J	Coelute	L2611545
E1613B	WC-SGPD12	2,3,4,6,7,8-HxCDF	0.012	µg/kg	J	Coelute	L2611545
E1613B	WC-SGPD15	2,3,4,6,7,8-HxCDF	0.00193	µg/kg	J	Coelute	L2612314
E1613B	WC-SGPD38	2,3,4,6,7,8-HxCDF	0.0047	µg/kg	J	Coelute	L2659655
E1613B	WC-SCPD21-8.0-8.8	1,2,3,6,7,8-HxCDF	0.054	µg/kg	J	Coelute	K2200743
E1613B	WC-SCPD30-8.0-9.0	1,2,3,6,7,8-HxCDF	0.00825	µg/kg	J	Coelute	K2200743
E1613B	WC-SCPD30-9.0-9.8	1,2,3,6,7,8-HxCDF	0.0165	µg/kg	J	Coelute	K2200743
E1613B	WC-SCPD35-11.0-12.0	1,2,3,6,7,8-HxCDF	0.0263	µg/kg	J	Coelute	K2200743
E1613B	WC-SCPD36-8.0-9.0	1,2,3,4,7,8-HxCDF	0.0274	µg/kg	J	Coelute	K2200743
E1613B	WC-SB11-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00313	µg/kg	J	Coelute	K2204428
E1613B	WC-SB11-0.0-1.0FD	2,3,4,6,7,8-HxCDF	0.0046	µg/kg	J	Coelute	L2645738
E1613B	WC-SCPD03-8.0-9.0	1,2,3,4,7,8-HxCDF	0.0424	µg/kg	J	Coelute	K2203181
E1613B	WC-SCPD05-2.0-3.0	1,2,3,4,7,8-HxCDF	0.00173	µg/kg	J	Coelute	K2203181
E1613B	WC-SCPD05-3.0-4.0	1,2,3,4,7,8-HxCDF	0.00175	µg/kg	J	Coelute	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.0112	µg/kg	J	Coelute	K2203181
E1613B	WC-SCPD12A-3.0-4.0	2,3,4,6,7,8-HxCDF	0.017	µg/kg	J	Coelute	L2692261
E1613B	WC-SCPD12A-4.0-4.8	2,3,4,6,7,8-HxCDF	0.022	µg/kg	J	Coelute	L2692261
E1613B	WC-SCPD16A-2.0-3.0	1,2,3,4,7,8-HxCDF	0.00555	µg/kg	J	Coelute	K2203345
E1613B	WC-SCPD16A-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.201	µg/kg	J	Coelute	K2203345
E1613B	WC-SCPD16A-4.0-4.3	1,2,3,4,7,8-HxCDF	0.00192	µg/kg	J	Coelute	K2203345
E1613B	WC-SCPD20A-2.0-3.0	2,3,4,6,7,8-HxCDF	0.023	µg/kg	J	Coelute	L2692261
E1613B	WC-SCPD20A-3.0-4.0	2,3,4,6,7,8-HxCDF	0.02	µg/kg	J	Coelute	L2692261
E1613B	WC-SCPD40-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.0302	µg/kg	J	Coelute	K2203194
E1613B	WC-SCPD46-13.0-14.0	1,2,3,4,7,8-HxCDF	0.0876	µg/kg	J	Coelute	K2203194
E1613B	WC-SCPD46-9.0-10.0	1,2,3,4,6,7,8-HpCDF	0.0172	µg/kg	J	Coelute	K2203194
E1613B	WC-SGPD09	1,2,3,4,6,7,8-HpCDF	0.00701	µg/kg	J	Coelute	K2203181
E1613B	WC-SGPD12A	2,3,4,6,7,8-HxCDF	0.0023	µg/kg	J	Coelute	L2692261

Notes:
Coelute = Analyte exhibited coelution with other compounds
µg/kg = microgram per kilogram
ID = Identifier

Qualifier Definitions
J = Analyte was present but reported value may not be accurate or precise.

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SB01-0.0-1.0	1,2,3,4,7,8,9-HpCDF	0.00029	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB01-0.0-1.0	1,2,3,4,7,8-HxCDD	0.000067	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB01-0.0-1.0	1,2,3,4,7,8-HxCDF	0.00018	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB01-0.0-1.0	1,2,3,6,7,8-HxCDF	0.000075	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB01-0.0-1.0	1,2,3,7,8,9-HxCDD	0.00012	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB01-0.0-1.0	1,2,3,7,8-PeCDD	0.000057	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB01-0.0-1.0	2,3,4,6,7,8-HxCDF	0.00024	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB02-0.0-1.0	1,2,3,4,7,8,9-HpCDF	0.00033	µg/kg	J	IonRatio	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,4,7,8-HxCDD	0.00011	µg/kg	J	IonRatio	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,6,7,8-HxCDF	0.0002	µg/kg	J	IonRatio	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,7,8,9-HxCDD	0.00022	µg/kg	J	IonRatio	L2645716
E1613B	WC-SB02-0.0-1.0	1,2,3,7,8-PeCDF	0.00012	µg/kg	J	IonRatio	L2645716
E1613B	WC-SB02-0.0-1.0	2,3,4,6,7,8-HxCDF	0.0015	µg/kg	J	IonRatio	L2645716
E1613B	WC-SB02-0.0-1.0	2,3,4,7,8-PeCDF	0.00017	µg/kg	J	IonRatio	L2645716
E1613B	WC-SB03-0.0-1.0	1,2,3,4,6,7,8-HpCDD	0.0017	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB03-0.0-1.0	1,2,3,4,7,8-HxCDF	0.000048	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB03-0.0-1.0	1,2,3,7,8-PeCDF	0.000048	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB03-0.0-1.0	OCDD	0.017	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB03-0.0-1.0	OCDF	0.0028	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB04-0.0-1.0	1,2,3,4,6,7,8-HpCDF	0.00039	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB04-0.0-1.0	1,2,3,4,7,8-HxCDF	0.000047	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB04-0.0-1.0	1,2,3,7,8,9-HxCDD	0.00014	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,4,7,8-HxCDD	0.00011	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,6,7,8-HxCDF	0.00019	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,7,8,9-HxCDD	0.00023	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB09-0.0-1.0	1,2,3,7,8-PeCDF	0.00013	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB09-0.0-1.0	2,3,7,8-TCDF	0.000064	µg/kg	J	IonRatio	L2645768
E1613B	WC-SB10-0.0-1.0	1,2,3,4,7,8-HxCDD	0.00012	µg/kg	J	IonRatio	L2645716
E1613B	WC-SB10-0.0-1.0	1,2,3,6,7,8-HxCDF	0.000064	µg/kg	J	IonRatio	L2645716
E1613B	WC-SB10-0.0-1.0	2,3,4,7,8-PeCDF	0.000049	µg/kg	J	IonRatio	L2645716
E1613B	WC-SB11-0.0-1.0	1,2,3,4,7,8,9-HpCDF	0.00085	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0	1,2,3,4,7,8-HxCDD	0.00058	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0	1,2,3,6,7,8-HxCDF	0.00068	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0	1,2,3,7,8,9-HxCDF	0.00029	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0	1,2,3,7,8-PeCDD	0.0003	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0	2,3,4,6,7,8-HxCDF	0.0011	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,4,7,8-HxCDD	0.00073	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,4,7,8-HxCDF	0.002	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,6,7,8-HxCDF	0.001	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,7,8,9-HxCDD	0.0014	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,7,8,9-HxCDF	0.00052	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0FD	1,2,3,7,8-PeCDF	0.0003	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB11-0.0-1.0FD	2,3,4,7,8-PeCDF	0.00071	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB12-0.0-1.0	1,2,3,7,8-PeCDF	0.00012	µg/kg	J	IonRatio	L2645738
E1613B	WC-SB12-0.0-1.0	OCDF	0.0025	µg/kg	J	IonRatio	L2645738
E1613B	WC-SCPD03-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0015	µg/kg	J	IonRatio	L2603308
E1613B	WC-SCPD03-1.0-2.0	1,2,3,4,7,8-HxCDF	0.0026	µg/kg	J	IonRatio	L2603308
E1613B	WC-SCPD03-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0021	µg/kg	J	IonRatio	L2603308
E1613B	WC-SCPD03-1.0-2.0	2,3,7,8-TCDD	0.00028	µg/kg	J	IonRatio	L2603308
E1613B	WC-SCPD03-1.0-2.0	2,3,7,8-TCDF	0.00095	µg/kg	J	IonRatio	L2603308
E1613B	WC-SCPD03-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.0012	µg/kg	J	IonRatio	L2603308
E1613B	WC-SCPD03-2.0-3.0	1,2,3,7,8,9-HxCDF	0.00075	µg/kg	J	IonRatio	L2603308
E1613B	WC-SCPD03-2.0-3.0	2,3,4,6,7,8-HxCDF	0.0023	µg/kg	J	IonRatio	L2603308
E1613B	WC-SCPD03-2.0-3.0	2,3,7,8-TCDD	0.00022	µg/kg	J	IonRatio	L2603308
E1613B	WC-SCPD03-3.0-4.0	1,2,3,7,8-PeCDF	0.0021	µg/kg	J	IonRatio	L2603308
E1613B	WC-SCPD05-5.0-6.0	1,2,3,7,8-PeCDD	0.000684	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD05-6.0-7.0	1,2,3,6,7,8-HxCDD	0.00607	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD05-6.0-7.0	2,3,7,8-TCDD	0.00105	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.00264	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,7,8-HxCDD	0.000653	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD06-5.0-6.0	1,2,3,4,7,8-HxCDF	0.00346	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,4,7,8-HxCDF	0.00109	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,7,8,9-HxCDD	0.000625	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,7,8,9-HxCDF	0.000752	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD06-6.0-7.0	1,2,3,7,8-PeCDD	0.000405	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,6,7,8-HpCDF	0.0238	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.00175	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,4,7,8-HxCDD	0.00166	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,6,7,8-HxCDF	0.00288	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8,9-HxCDD	0.002	ug/kg	J	IonRatio	K2208213

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8-PeCDD	0.000889	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD07-5.0-6.0	1,2,3,7,8-PeCDF	0.00116	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD07-5.0-6.0	2,3,4,6,7,8-HxCDF	0.0015	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD08-5.0-6.0	2,3,7,8-TCDD	0.000954	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,7,8,9-HxCDF	0.00178	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD08-6.0-7.0	1,2,3,7,8-PeCDD	0.00126	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD08-6.0-7.0	2,3,7,8-TCDF	0.000656	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,4,7,8,9-HpCDF	0.00259	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,4,7,8-HxCDD	0.00127	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD08-7.0-8.0	1,2,3,7,8,9-HxCDD	0.00271	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD08-7.0-8.0	2,3,7,8-TCDD	0.0005	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,4,7,8-HxCDD	0.000197	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD45-5.0-6.0	1,2,3,7,8-PeCDF	0.000191	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD45-5.0-6.0	OCDF	0.00404	ug/kg	J	IonRatio	K2208213
E1613B	WC-SCPD10-1.0-2.0	1,2,3,4,6,7,8-HpCDD	0.0016	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-1.0-2.0	1,2,3,7,8,9-HxCDD	0.00013	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.000028	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-2.0-3.0	1,2,3,4,7,8-HxCDD	0.000054	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-2.0-3.0	1,2,3,4,7,8-HxCDF	0.000037	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-2.0-3.0	1,2,3,6,7,8-HxCDD	0.000064	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-3.0-4.0	1,2,3,4,7,8-HxCDF	0.000023	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-3.0-4.0	1,2,3,6,7,8-HxCDF	0.000014	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00026	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-3.0-4.0	1,2,3,7,8-PeCDD	0.000042	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-3.0-4.0	2,3,4,6,7,8-HxCDF	0.00002	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-3.0-4.0	2,3,7,8-TCDD	0.000058	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000049	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-4.0-5.0	1,2,3,4,7,8-HxCDF	0.000045	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-4.0-5.0	1,2,3,6,7,8-HxCDF	0.000026	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-4.0-5.0	1,2,3,7,8,9-HxCDD	0.00028	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD10-4.0-5.0	1,2,3,7,8-PeCDD	0.00006	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD11-1.0-2.0	1,2,3,7,8,9-HxCDF	0.00038	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD11-1.0-2.0	1,2,3,7,8-PeCDD	0.00062	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD11-1.0-2.0	2,3,7,8-TCDD	0.0003	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD11-2.0-3.0	2,3,7,8-TCDD	0.00056	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD11-3.0-4.0	2,3,7,8-TCDD	0.00055	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD11-5.0-6.0	1,2,3,6,7,8-HxCDF	0.00219	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-5.0-6.0	1,2,3,7,8-PeCDD	0.00101	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-5.0-6.0	1,2,3,7,8-PeCDF	0.00272	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-5.0-6.0	2,3,7,8-TCDD	0.000333	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-6.0-7.0	1,2,3,4,7,8,9-HpCDF	0.0014	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-6.0-7.0	1,2,3,7,8,9-HxCDF	0.000431	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-6.0-7.0	1,2,3,7,8-PeCDD	0.000653	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-6.0-7.0	1,2,3,7,8-PeCDF	0.000794	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-6.0-7.0	2,3,4,7,8-PeCDF	0.00118	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-6.0-7.0	2,3,7,8-TCDD	0.000286	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-7.0-8.0	1,2,3,6,7,8-HxCDF	0.00155	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-7.0-8.0	1,2,3,7,8,9-HxCDF	0.000599	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-7.0-8.0	1,2,3,7,8-PeCDD	0.00059	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-7.0-8.0	2,3,4,7,8-PeCDF	0.00146	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD11-7.0-8.0	2,3,7,8-TCDD	0.000246	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD14-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0019	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-1.0-2.0	1,2,3,7,8,9-HxCDD	0.0055	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0036	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-2.0-3.0	1,2,3,4,7,8-HxCDD	0.0001	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-2.0-3.0	1,2,3,4,7,8-HxCDF	0.000056	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-2.0-3.0	1,2,3,6,7,8-HxCDD	0.00016	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-2.0-3.0	1,2,3,7,8-PeCDF	0.000041	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-3.0-4.0	1,2,3,4,7,8-HxCDD	0.00011	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-3.0-4.0	1,2,3,4,7,8-HxCDF	0.00011	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-3.0-4.0	1,2,3,6,7,8-HxCDD	0.00014	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00034	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD14-4.0-5.0	1,2,3,6,7,8-HxCDD	0.000083	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD18-4.0-5.0	1,2,3,4,6,7,8-HpCDD	0.00041	µg/kg	J	IonRatio	L2611619
E1613B	WC-SCPD18-4.0-5.0	1,2,3,7,8,9-HxCDD	0.000062	µg/kg	J	IonRatio	L2611619
E1613B	WC-SCPD19-1.0-2.0	1,2,3,4,7,8-HxCDD	0.000072	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-1.0-2.0	1,2,3,7,8,9-HxCDD	0.00023	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000051	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-2.0-3.0	1,2,3,4,6,7,8-HpCDD	0.0022	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.00014	µg/kg	J	IonRatio	L2606435

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD19-2.0-3.0	1,2,3,6,7,8-HxCDD	0.00017	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-2.0-3.0	1,2,3,7,8,9-HxCDF	0.00017	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-2.0-3.0	1,2,3,7,8-PeCDF	0.00011	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-2.0-3.0	2,3,4,6,7,8-HxCDF	0.000067	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-2.0-3.0	2,3,4,7,8-PeCDF	0.00012	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-2.0-3.0	OCDD	0.018	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-3.0-4.0	1,2,3,4,7,8-HxCDF	0.00005	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00018	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-3.0-4.0	1,2,3,7,8-PeCDD	0.00012	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-3.0-4.0	2,3,4,7,8-PeCDF	0.000054	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000051	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD19-4.0-5.0	1,2,3,7,8,9-HxCDD	0.00023	µg/kg	J	IonRatio	L2606435
E1613B	WC-SCPD21-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0053	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0015	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-1.0-2.0	1,2,3,6,7,8-HxCDD	0.0076	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-1.0-2.0	1,2,3,7,8-PeCDD	0.00094	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-1.0-2.0	2,3,4,7,8-PeCDF	0.0038	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-1.0-2.0	2,3,7,8-TCDD	0.00029	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.045	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-2.0-3.0	2,3,7,8-TCDD	0.0033	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.027	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-3.0-4.0	2,3,7,8-TCDD	0.0019	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-4.0-5.0	1,2,3,7,8-PeCDD	0.0021	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD21-6.0-7.0	1,2,3,4,7,8-HxCDD	0.0013	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD21-7.0-8.0	1,2,3,4,7,8-HxCDD	0.000377	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD21-7.0-8.0	2,3,4,6,7,8-HxCDF	0.00146	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD21-7.0-8.0	2,3,7,8-TCDF	0.000446	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,4,7,8-HxCDD	0.000697	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD21-8.0-8.8	1,2,3,7,8,9-HxCDD	0.00237	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD21-8.0-8.8	2,3,7,8-TCDD	0.000513	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD22-4.0-5.0	1,2,3,4,7,8-HxCDD	0.009	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD22-8.0-8.7	1,2,3,7,8,9-HxCDF	0.000974	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD22-8.0-8.7	2,3,7,8-TCDF	0.00124	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD23-1.0-2.0	1,2,3,4,7,8-HxCDD	0.00021	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-1.0-2.0	1,2,3,6,7,8-HxCDD	0.0017	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-1.0-2.0	1,2,3,6,7,8-HxCDF	0.0011	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-1.0-2.0	1,2,3,7,8-PeCDD	0.00027	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-1.0-2.0	2,3,4,6,7,8-HxCDF	0.00073	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-1.0-2.0	2,3,7,8-TCDD	0.00012	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-2.0-3.0	1,2,3,4,7,8-HxCDF	0.000025	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-2.0-3.0	1,2,3,6,7,8-HxCDD	0.0001	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-3.0-4.0	1,2,3,4,7,8-HxCDD	0.000049	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-3.0-4.0	1,2,3,6,7,8-HxCDD	0.00007	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-3.0-4.0	1,2,3,7,8-PeCDD	0.000044	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-3.0-4.0	1,2,3,7,8-PeCDF	0.000028	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000056	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-4.0-5.0	1,2,3,4,7,8-HxCDF	0.000034	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-4.0-5.0	1,2,3,6,7,8-HxCDD	0.00012	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-4.0-5.0	1,2,3,6,7,8-HxCDF	0.000028	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-4.0-5.0	1,2,3,7,8-PeCDD	0.000043	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-4.0-5.0	1,2,3,7,8-PeCDF	0.00003	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-4.0-5.0	2,3,4,6,7,8-HxCDF	0.000024	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-4.0-5.0	2,3,4,7,8-PeCDF	0.000025	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD23-4.0-5.0	2,3,7,8-TCDF	0.00004	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD24-1.0-2.0	1,2,3,4,7,8-HxCDD	0.000077	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00045	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000098	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-1.0-2.0	1,2,3,7,8-PeCDD	0.000081	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-1.0-2.0	1,2,3,7,8-PeCDF	0.00025	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-1.0-2.0	2,3,4,7,8-PeCDF	0.00019	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-1.0-2.0	2,3,7,8-TCDD	0.000056	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-1.0-2.0	2,3,7,8-TCDF	0.00016	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-2.0-3.0	1,2,3,4,7,8-HxCDF	0.000042	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-2.0-3.0	1,2,3,6,7,8-HxCDD	0.00005	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-2.0-3.0	1,2,3,6,7,8-HxCDF	0.000037	µg/kg	J	IonRatio	L2659646
E1613B	WC-SCPD24-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.000099	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD24-3.0-4.0	1,2,3,6,7,8-HxCDD	0.00015	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD24-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00027	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD24-3.0-4.0	1,2,3,7,8-PeCDF	0.000057	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD24-4.0-5.0	1,2,3,6,7,8-HxCDD	0.000087	µg/kg	J	IonRatio	L2659632

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD24-4.0-5.0	1,2,3,7,8,9-HxCDD	0.00016	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0022	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0016	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-1.0-2.0	1,2,3,7,8,9-HxCDF	0.00096	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-1.0-2.0	1,2,3,7,8-PeCDD	0.00085	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-1.0-2.0	2,3,7,8-TCDD	0.00022	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-1.0-2.0	2,3,7,8-TCDF	0.0017	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-2.0-3.0	1,2,3,7,8,9-HxCDD	0.0053	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-2.0-3.0	1,2,3,7,8,9-HxCDF	0.0019	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-2.0-3.0	1,2,3,7,8-PeCDD	0.0011	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-3.0-4.0	1,2,3,4,7,8-HxCDD	0.000054	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-3.0-4.0	1,2,3,6,7,8-HxCDF	0.000051	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00034	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-3.0-4.0	1,2,3,7,8-PeCDD	0.00005	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-3.0-4.0	1,2,3,7,8-PeCDF	0.00008	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-3.0-4.0	2,3,4,6,7,8-HxCDF	0.000083	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-3.0-4.0	2,3,4,7,8-PeCDF	0.000033	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-4.0-5.0	1,2,3,4,6,7,8-HpCDD	0.0043	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-4.0-5.0	1,2,3,4,7,8-HxCDF	0.000037	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-4.0-5.0	1,2,3,6,7,8-HxCDD	0.0002	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-4.0-5.0	1,2,3,7,8,9-HxCDD	0.00047	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-4.0-5.0	1,2,3,7,8-PeCDD	0.000073	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD27-4.0-5.0	2,3,4,6,7,8-HxCDF	0.000036	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD28-2.0-3.0	1,2,3,7,8,9-HxCDF	0.00098	µg/kg	J	IonRatio	L2608823
E1613B	WC-SCPD28-2.0-3.0	1,2,3,7,8-PeCDD	0.00074	µg/kg	J	IonRatio	L2608823
E1613B	WC-SCPD28-2.0-3.0	2,3,7,8-TCDD	0.00031	µg/kg	J	IonRatio	L2608823
E1613B	WC-SCPD28-4.0-5.0	1,2,3,7,8,9-HxCDD	0.0002	µg/kg	J	IonRatio	L2608823
E1613B	WC-SCPD28-4.0-5.0FD	1,2,3,6,7,8-HxCDD	0.000064	µg/kg	J	IonRatio	L2608823
E1613B	WC-SCPD28-4.0-5.0FD	2,3,4,7,8-PeCDF	0.000029	µg/kg	J	IonRatio	L2608823
E1613B	WC-SCPD29-1.0-2.0	2,3,4,7,8-PeCDF	0.0032	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD29-2.0-3.0	2,3,7,8-TCDD	0.0016	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD29-5.0-6.0	1,2,3,7,8,9-HxCDF	0.000633	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD29-5.0-6.0	2,3,7,8-TCDD	0.000357	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD29-6.0-7.0	1,2,3,7,8,9-HxCDF	0.000868	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD29-6.0-7.0	1,2,3,7,8-PeCDD	0.00044	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD29-6.0-7.0	2,3,7,8-TCDD	0.000206	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD29-7.0-8.0	1,2,3,6,7,8-HxCDF	0.000327	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD29-7.0-8.0	1,2,3,7,8-PeCDF	0.000103	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD29-7.0-8.0	2,3,7,8-TCDF	0.000083	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD30-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0059	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD30-1.0-2.0	1,2,3,7,8,9-HxCDF	0.0019	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD30-8.0-9.0	1,2,3,7,8,9-HxCDF	0.0014	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD30-8.0-9.0	2,3,7,8-TCDF	0.000346	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD30-9.0-9.8	1,2,3,4,7,8-HxCDD	0.000474	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD30-9.0-9.8	2,3,7,8-TCDF	0.000278	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD31-1.0-2.0	1,2,3,7,8-PeCDD	0.00066	µg/kg	J	IonRatio	L2606306
E1613B	WC-SCPD31-10.0-11.0	1,2,3,4,7,8,9-HpCDF	0.000411	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD31-10.0-11.0	1,2,3,4,7,8-HxCDF	0.000622	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD31-10.0-11.0	1,2,3,7,8,9-HxCDF	0.000301	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD31-10.0-11.0	1,2,3,7,8-PeCDD	0.000136	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD31-10.0-11.0	1,2,3,7,8-PeCDF	0.000257	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD31-10.0-11.0	2,3,7,8-TCDF	0.000104	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD31-11.0-12.0	1,2,3,6,7,8-HxCDD	0.000133	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD31-3.0-4.0	1,2,3,7,8-PeCDD	0.0027	µg/kg	J	IonRatio	L2606306
E1613B	WC-SCPD31-4.0-5.0	1,2,3,4,7,8-HxCDD	0.00047	µg/kg	J	IonRatio	L2606306
E1613B	WC-SCPD31-5.0-6.0	1,2,3,4,7,8-HxCDD	0.0018	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD31-5.0-6.0	2,3,7,8-TCDD	0.0006	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD31-5.0-6.0	2,3,7,8-TCDF	0.0026	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD31-8.0-9.0	1,2,3,6,7,8-HxCDF	0.00819	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD32-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0017	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD32-3.0-4.0	2,3,4,6,7,8-HxCDF	0.024	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD32-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.0092	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD32-4.0-5.0	1,2,3,4,7,8-HxCDD	0.0018	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD32-4.0-5.0	1,2,3,7,8,9-HxCDF	0.0049	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD32-4.0-5.0	2,3,7,8-TCDD	0.001	µg/kg	J	IonRatio	L2606300
E1613B	WC-SCPD32-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.006	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD32-5.0-6.0	1,2,3,4,7,8-HxCDF	0.0098	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD32-5.0-6.0	1,2,3,7,8,9-HxCDD	0.0039	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD32-5.0-6.0	1,2,3,7,8-PeCDD	0.0016	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD32-5.0-6.0	1,2,3,7,8-PeCDF	0.0043	µg/kg	J	IonRatio	L2659632

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD32-5.0-6.0	2,3,7,8-TCDD	0.00067	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD32-5.0-6.0	2,3,7,8-TCDF	0.003	µg/kg	J	IonRatio	L2659632
E1613B	WC-SCPD32-6.0-7.0	1,2,3,4,7,8-HxCDD	0.00057	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD32-6.0-7.0	1,2,3,7,8-PeCDF	0.0021	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD33-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0017	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD33-1.0-2.0	1,2,3,7,8-PeCDF	0.00065	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD33-2.0-3.0	1,2,3,7,8,9-HxCDD	0.00011	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD33-2.0-3.0	2,3,4,7,8-PeCDF	0.000033	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD33-3.0-4.0	1,2,3,4,7,8-HxCDD	0.000037	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD33-3.0-4.0	1,2,3,4,7,8-HxCDF	0.000025	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD33-3.0-4.0	1,2,3,6,7,8-HxCDD	0.000086	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD33-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000099	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD35-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0023	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-1.0-2.0	2,3,7,8-TCDD	0.00027	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-1.0-2.0	2,3,7,8-TCDF	0.002	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-10.0-11.0	1,2,3,4,7,8-HxCDD	0.000918	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD35-10.0-11.0	2,3,4,7,8-PeCDF	0.00349	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD35-10.0-11.0	2,3,7,8-TCDF	0.00111	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD35-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.0016	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-2.0-3.0	1,2,3,4,7,8-HxCDD	0.00048	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-2.0-3.0	1,2,3,7,8-PeCDD	0.00059	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-2.0-3.0	2,3,4,7,8-PeCDF	0.0029	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-2.0-3.0	2,3,7,8-TCDD	0.00026	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-2.0-3.0FD	1,2,3,4,7,8,9-HpCDF	0.0038	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-2.0-3.0FD	2,3,7,8-TCDD	0.00068	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.0068	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-3.0-4.0	1,2,3,6,7,8-HxCDF	0.013	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD35-3.0-4.0	2,3,7,8-TCDD	0.0011	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD36-1.0-2.0	2,3,7,8-TCDF	0.00099	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD36-11.0-12.0	1,2,3,4,7,8,9-HpCDF	0.000882	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,4,7,8-HxCDD	0.000191	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,6,7,8-HxCDD	0.00164	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,7,8,9-HxCDF	0.000371	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD36-11.0-12.0	1,2,3,7,8-PeCDF	0.000289	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD36-11.0-12.0	2,3,4,7,8-PeCDF	0.002	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD36-12.0-12.9	2,3,7,8-TCDD	0.000318	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD36-2.0-3.0	1,2,3,4,7,8-HxCDF	0.0035	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD36-2.0-3.0	1,2,3,7,8,9-HxCDF	0.0015	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD36-2.0-3.0	2,3,7,8-TCDF	0.00064	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD36-6.0-7.0	2,3,7,8-TCDD	0.0054	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD36-8.0-9.0	1,2,3,4,7,8-HxCDD	0.000923	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD36-8.0-9.0	2,3,7,8-TCDD	0.000489	µg/kg	J	IonRatio	K2200743
E1613B	WC-SCPD37-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00042	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD37-1.0-2.0	1,2,3,4,7,8-HxCDD	0.00018	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD37-1.0-2.0	1,2,3,6,7,8-HxCDF	0.00054	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD37-1.0-2.0	1,2,3,7,8,9-HxCDF	0.0002	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD37-1.0-2.0	2,3,4,6,7,8-HxCDF	0.00055	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD37-2.0-3.0	2,3,7,8-TCDD	0.00021	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD37-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.0012	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD38-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0014	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD38-10.0-11.0	1,2,3,7,8-PeCDD	0.000842	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD38-10.0-11.0	2,3,7,8-TCDD	0.000767	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD38-10.0-11.0	2,3,7,8-TCDF	0.000438	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD38-14.0-14.3	1,2,3,4,7,8,9-HpCDF	0.00447	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD38-14.0-14.3	1,2,3,7,8-PeCDF	0.00198	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD38-2.0-3.0	2,3,7,8-TCDD	0.00071	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD38-3.0-4.0	1,2,3,7,8-PeCDD	0.0023	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD38-3.0-4.0	2,3,7,8-TCDD	0.00072	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD38-4.0-5.0	2,3,7,8-TCDD	0.00092	µg/kg	J	IonRatio	L2659655
E1613B	WC-SCPD39-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0019	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD39-3.0-4.0	1,2,3,4,7,8-HxCDD	0.0039	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD39-3.0-4.0	2,3,7,8-TCDD	0.00093	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD39-8.0-9.0	1,2,3,4,7,8,9-HpCDF	0.00164	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,4,7,8-HxCDD	0.000806	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,6,7,8-HxCDF	0.00267	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,7,8,9-HxCDF	0.00068	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD39-8.0-9.0	1,2,3,7,8-PeCDF	0.00151	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD39-8.0-9.0	2,3,7,8-TCDF	0.000787	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD39-9.0-10.0	1,2,3,4,7,8,9-HpCDF	0.00278	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD39-9.0-10.0	1,2,3,7,8-PeCDD	0.000683	µg/kg	J	IonRatio	K2200746

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD39-9.0-10.0	2,3,7,8-TCDF	0.00268	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD41-1.0-2.0	1,2,3,7,8-PeCDD	0.00046	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD41-1.0-2.0	2,3,7,8-TCDD	0.00022	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD41-2.0-3.0	2,3,7,8-TCDD	0.0003	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD41-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.0068	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD41-3.0-4.0	1,2,3,7,8,9-HxCDD	0.0045	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD41-4.0-5.0	2,3,7,8-TCDD	0.00063	µg/kg	J	IonRatio	L2608826
E1613B	WC-SCPD42-3.0-4.0	1,2,3,7,8-PeCDD	0.002	µg/kg	J	IonRatio	L2606306
E1613B	WC-SCPD42-4.0-5.0	2,3,4,6,7,8-HxCDF	0.000057	µg/kg	J	IonRatio	L2606306
E1613B	WC-SCPD44-1.0-2.0	1,2,3,7,8-PeCDF	0.0021	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD44-1.0-2.0	2,3,7,8-TCDD	0.00031	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD44-1.0-2.0	2,3,7,8-TCDF	0.0019	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD44-2.0-3.0	1,2,3,7,8,9-HxCDD	0.0046	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD44-2.0-3.0	2,3,7,8-TCDD	0.00039	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD44-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.0011	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD44-4.0-5.0	1,2,3,6,7,8-HxCDF	0.0013	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD44-4.0-5.0	1,2,3,7,8,9-HxCDF	0.00052	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD44-4.0-5.0	2,3,4,6,7,8-HxCDF	0.00082	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD44-4.0-5.0	2,3,7,8-TCDD	0.00013	µg/kg	J	IonRatio	L2606446
E1613B	WC-SCPD45-1.0-2.0	1,2,3,7,8,9-HxCDF	0.0013	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD45-1.0-2.0	2,3,7,8-TCDD	0.00018	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD45-4.0-5.0	1,2,3,4,6,7,8-HpCDD	0.0017	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD45-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000036	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD45-4.0-5.0	1,2,3,6,7,8-HxCDD	0.00006	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD45-4.0-5.0	1,2,3,7,8,9-HxCDD	0.00014	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD45-4.0-5.0	2,3,4,6,7,8-HxCDF	0.000022	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD46-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0043	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD46-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0018	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD46-1.0-2.0	2,3,7,8-TCDD	0.00046	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD46-2.0-3.0	1,2,3,7,8-PeCDD	0.001	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD46-2.0-3.0	2,3,7,8-TCDD	0.00038	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD46-3.0-4.0	1,2,3,7,8-PeCDD	0.0011	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD46-4.0-5.0	2,3,7,8-TCDD	0.00045	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD46-5.0-6.0	2,3,7,8-TCDD	0.00099	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD46-6.0-7.0	2,3,7,8-TCDD	0.001	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD47-1.0-2.0	2,3,7,8-TCDD	0.00009	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-2.0-3.0	1,2,3,4,6,7,8-HpCDF	0.0029	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-2.0-3.0	1,2,3,4,7,8-HxCDD	0.00014	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-2.0-3.0	1,2,3,6,7,8-HxCDD	0.00061	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-2.0-3.0	1,2,3,7,8,9-HxCDD	0.0004	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-2.0-3.0	1,2,3,7,8-PeCDD	0.00013	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.000044	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-3.0-4.0	1,2,3,4,7,8-HxCDF	0.00011	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-4.0-5.0	1,2,3,4,6,7,8-HpCDF	0.00019	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000035	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-4.0-5.0	1,2,3,4,7,8-HxCDF	0.00007	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-4.0-5.0	1,2,3,6,7,8-HxCDD	0.00012	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-4.0-5.0	1,2,3,6,7,8-HxCDF	0.000018	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-4.0-5.0	1,2,3,7,8,9-HxCDD	0.00024	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-4.0-5.0	1,2,3,7,8-PeCDD	0.000041	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-4.0-5.0	2,3,4,6,7,8-HxCDF	0.000021	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD47-4.0-5.0	2,3,4,7,8-PeCDF	0.000019	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD48-3.0-4.0	1,2,3,6,7,8-HxCDD	0.012	µg/kg	J	IonRatio	L2606306
E1613B	WC-SCPD48-8.0-9.0	1,2,3,4,7,8,9-HpCDF	0.000922	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD48-8.0-9.0	1,2,3,4,7,8-HxCDD	0.000375	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD48-8.0-9.0	1,2,3,4,7,8-HxCDF	0.0017	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD48-8.0-9.0	1,2,3,7,8,9-HxCDF	0.000292	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD48-8.0-9.0	1,2,3,7,8-PeCDD	0.000176	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD48-8.0-9.0	2,3,7,8-TCDF	0.000717	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD48-9.0-9.5	1,2,3,4,6,7,8-HpCDF	0.000164	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD48-9.0-9.5	1,2,3,4,7,8-HxCDD	0.0000762	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD48-9.0-9.5	1,2,3,7,8,9-HxCDD	0.000197	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD50-1.0-2.0	1,2,3,6,7,8-HxCDD	0.0021	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-1.0-2.0	1,2,3,6,7,8-HxCDF	0.0041	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-1.0-2.0	1,2,3,7,8-PeCDD	0.00059	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0039	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-1.0-2.0	2,3,7,8-TCDD	0.00018	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.00043	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-2.0-3.0	1,2,3,4,7,8-HxCDF	0.00065	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-2.0-3.0	1,2,3,6,7,8-HxCDD	0.00041	µg/kg	J	IonRatio	L2608839

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
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Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD50-2.0-3.0	1,2,3,7,8,9-HxCDD	0.0003	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-2.0-3.0	1,2,3,7,8,9-HxCDF	0.00025	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-2.0-3.0	1,2,3,7,8-PeCDD	0.0001	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-2.0-3.0	2,3,7,8-TCDF	0.00026	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.00072	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-3.0-4.0	1,2,3,4,7,8-HxCDD	0.000081	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00027	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-3.0-4.0	1,2,3,7,8-PeCDF	0.00023	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-3.0-4.0	2,3,4,6,7,8-HxCDF	0.00007	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-4.0-5.0	1,2,3,7,8,9-HxCDD	0.0003	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD50-4.0-5.0	OCDF	0.00032	µg/kg	J	IonRatio	L2608839
E1613B	WC-SCPD52-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0014	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD52-1.0-2.0	1,2,3,7,8,9-HxCDF	0.0013	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD52-1.0-2.0	2,3,7,8-TCDF	0.0041	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD52-2.0-3.0	1,2,3,6,7,8-HxCDD	0.0065	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD52-2.0-3.0	1,2,3,6,7,8-HxCDF	0.0025	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD52-2.0-3.0	2,3,4,7,8-PeCDF	0.0023	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD52-2.0-3.0	2,3,7,8-TCDF	0.002	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD52-3.0-4.0	1,2,3,4,7,8-HxCDD	0.0016	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD52-3.0-4.0	1,2,3,7,8-PeCDD	0.00091	µg/kg	J	IonRatio	L2611560
E1613B	WC-SCPD52-5.0-6.0	1,2,3,4,7,8,9-HpCDF	0.0041	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD52-6.0-7.0	1,2,3,7,8,9-HxCDF	0.00055	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD52-6.0-7.0	1,2,3,7,8-PeCDD	0.0003	µg/kg	J	IonRatio	L2658841
E1613B	WC-SCPD52-7.0-8.0	1,2,3,7,8-PeCDD	0.000613	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-7.0-8.0	2,3,4,7,8-PeCDF	0.00246	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-7.0-8.0	2,3,7,8-TCDD	0.000441	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-8.0-9.0	1,2,3,6,7,8-HxCDF	0.00181	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-8.0-9.0	2,3,4,6,7,8-HxCDF	0.00132	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-9.0-9.2	1,2,3,4,7,8,9-HpCDF	0.000222	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-9.0-9.2	1,2,3,4,7,8-HxCDD	0.000183	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-9.0-9.2	1,2,3,6,7,8-HxCDF	0.000255	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-9.0-9.2	1,2,3,7,8-PeCDD	0.000161	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-9.0-9.2	1,2,3,7,8-PeCDF	0.0002	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-9.0-9.2	2,3,4,6,7,8-HxCDF	0.00028	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-9.0-9.2	2,3,4,7,8-PeCDF	0.000281	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD52-9.0-9.2	OCDF	0.00555	µg/kg	J	IonRatio	K2200746
E1613B	WC-SCPD53A-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0013	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD53A-1.0-2.0	1,2,3,7,8-PeCDD	0.00083	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD53A-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.00043	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD53A-2.0-3.0	1,2,3,4,7,8-HxCDD	0.0002	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD53A-2.0-3.0	1,2,3,7,8,9-HxCDD	0.00066	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD53A-2.0-3.0	1,2,3,7,8,9-HxCDF	0.00047	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD53A-2.0-3.0	2,3,4,6,7,8-HxCDF	0.00047	µg/kg	J	IonRatio	L2611545
E1613B	WC-SCPD53A-4.0-5.0	2,3,7,8-TCDD	0.00059	µg/kg	J	IonRatio	L2611545
E1613B	WC-SGPD11	1,2,3,4,7,8,9-HpCDF	0.0013	µg/kg	J	IonRatio	L2659646
E1613B	WC-SGPD11	1,2,3,7,8,9-HxCDD	0.0028	µg/kg	J	IonRatio	L2659646
E1613B	WC-SGPD11	1,2,3,7,8,9-HxCDF	0.00052	µg/kg	J	IonRatio	L2659646
E1613B	WC-SGPD11	1,2,3,7,8-PeCDD	0.00068	µg/kg	J	IonRatio	L2659646
E1613B	WC-SGPD11	2,3,7,8-TCDD	0.00022	µg/kg	J	IonRatio	L2659646
E1613B	WC-SGPD12	1,2,3,4,7,8,9-HpCDF	0.0092	µg/kg	J	IonRatio	L2611545
E1613B	WC-SGPD12	1,2,3,7,8,9-HxCDD	0.0028	µg/kg	J	IonRatio	L2611545
E1613B	WC-SGPD12	1,2,3,7,8-PeCDD	0.0015	µg/kg	J	IonRatio	L2611545
E1613B	WC-SGPD16	1,2,3,4,7,8-HxCDD	0.0013	µg/kg	J	IonRatio	L2611545
E1613B	WC-SGPD17	1,2,3,4,7,8-HxCDD	0.0011	µg/kg	J	IonRatio	L2615164
E1613B	WC-SGPD17	2,3,7,8-TCDD	0.00017	µg/kg	J	IonRatio	L2615164
E1613B	WC-SGPD17	2,3,7,8-TCDF	0.0019	µg/kg	J	IonRatio	L2615164
E1613B	WC-SGPD18	1,2,3,4,7,8-HxCDD	0.00089	µg/kg	J	IonRatio	L2615164
E1613B	WC-SGPD18	2,3,7,8-TCDD	0.00029	µg/kg	J	IonRatio	L2615164
E1613B	WC-SGPD20	1,2,3,4,7,8-HxCDD	0.0029	µg/kg	J	IonRatio	L2611545
E1613B	WC-SGPD20	1,2,3,7,8,9-HxCDD	0.0064	µg/kg	J	IonRatio	L2611545
E1613B	WC-SGPD21	1,2,3,4,7,8,9-HpCDF	0.0018	µg/kg	J	IonRatio	L2611619
E1613B	WC-SGPD21	2,3,4,7,8-PeCDF	0.0017	µg/kg	J	IonRatio	L2611619
E1613B	WC-SGPD22	1,2,3,7,8,9-HxCDF	0.0017	µg/kg	J	IonRatio	L2659646
E1613B	WC-SGPD26	1,2,3,4,7,8,9-HpCDF	0.0071	µg/kg	J	IonRatio	L2611545
E1613B	WC-SGPD26	1,2,3,6,7,8-HxCDF	0.022	µg/kg	J	IonRatio	L2611545
E1613B	WC-SGPD26	1,2,3,7,8-PeCDD	0.0019	µg/kg	J	IonRatio	L2611545
E1613B	WC-SGPD27	1,2,3,4,7,8,9-HpCDF	0.0018	µg/kg	J	IonRatio	L2659632
E1613B	WC-SGPD27	1,2,3,6,7,8-HxCDF	0.0021	µg/kg	J	IonRatio	L2659632
E1613B	WC-SGPD27	1,2,3,7,8,9-HxCDF	0.0012	µg/kg	J	IonRatio	L2659632
E1613B	WC-SGPD27	1,2,3,7,8-PeCDD	0.00055	µg/kg	J	IonRatio	L2659632

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SGPD28	1,2,3,7,8,9-HxCDF	0.0011	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD28	1,2,3,7,8-PeCDF	0.0051	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD29	2,3,7,8-TCDD	0.00021	µg/kg	J	IonRatio	L2659632
E1613B	WC-SGPD30	1,2,3,4,7,8-HxCDF	0.0042	µg/kg	J	IonRatio	L2659632
E1613B	WC-SGPD30	1,2,3,7,8-PeCDD	0.0011	µg/kg	J	IonRatio	L2659632
E1613B	WC-SGPD31	1,2,3,4,7,8,9-HpCDF	0.0021	µg/kg	J	IonRatio	L2611619
E1613B	WC-SGPD31	1,2,3,4,7,8-HxCDD	0.0012	µg/kg	J	IonRatio	L2611619
E1613B	WC-SGPD31	1,2,3,7,8,9-HxCDF	0.00089	µg/kg	J	IonRatio	L2611619
E1613B	WC-SGPD33	1,2,3,4,7,8,9-HpCDF	0.00036	µg/kg	J	IonRatio	L2659655
E1613B	WC-SGPD33	1,2,3,7,8-PeCDD	0.00016	µg/kg	J	IonRatio	L2659655
E1613B	WC-SGPD33	2,3,7,8-TCDF	0.00054	µg/kg	J	IonRatio	L2659655
E1613B	WC-SGPD35	1,2,3,6,7,8-HxCDD	0.0067	µg/kg	J	IonRatio	L2611619
E1613B	WC-SGPD35	1,2,3,6,7,8-HxCDF	0.0034	µg/kg	J	IonRatio	L2611619
E1613B	WC-SGPD35	1,2,3,7,8,9-HxCDD	0.0037	µg/kg	J	IonRatio	L2611619
E1613B	WC-SGPD35	2,3,4,7,8-PeCDF	0.0022	µg/kg	J	IonRatio	L2611619
E1613B	WC-SGPD35	OCDF	0.091	µg/kg	J	IonRatio	L2611619
E1613B	WC-SGPD37	1,2,3,4,7,8-HxCDD	0.00041	µg/kg	J	IonRatio	L2659655
E1613B	WC-SGPD37	1,2,3,7,8-PeCDD	0.00029	µg/kg	J	IonRatio	L2659655
E1613B	WC-SGPD37	2,3,7,8-TCDD	0.00012	µg/kg	J	IonRatio	L2659655
E1613B	WC-SGPD37	2,3,7,8-TCDF	0.0022	µg/kg	J	IonRatio	L2659655
E1613B	WC-SGPD38	1,2,3,4,7,8,9-HpCDF	0.0018	µg/kg	J	IonRatio	L2659655
E1613B	WC-SGPD38	1,2,3,7,8,9-HxCDD	0.0031	µg/kg	J	IonRatio	L2659655
E1613B	WC-SGPD39	1,2,3,4,7,8-HxCDD	0.001	µg/kg	J	IonRatio	L2658841
E1613B	WC-SGPD39	1,2,3,7,8,9-HxCDF	0.00083	µg/kg	J	IonRatio	L2658841
E1613B	WC-SGPD39	2,3,4,6,7,8-HxCDF	0.0022	µg/kg	J	IonRatio	L2658841
E1613B	WC-SGPD39	2,3,7,8-TCDD	0.00021	µg/kg	J	IonRatio	L2658841
E1613B	WC-SGPD44	1,2,3,4,7,8,9-HpCDF	0.0015	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD45	1,2,3,4,7,8-HxCDD	0.0012	µg/kg	J	IonRatio	L2658841
E1613B	WC-SGPD45	1,2,3,7,8,9-HxCDF	0.0012	µg/kg	J	IonRatio	L2658841
E1613B	WC-SGPD48	1,2,3,4,7,8,9-HpCDF	0.00059	µg/kg	J	IonRatio	L2614662
E1613B	WC-SGPD49	1,2,3,7,8,9-HxCDF	0.005	µg/kg	J	IonRatio	L2658841
E1613B	WC-SGPD49	2,3,7,8-TCDD	0.0004	µg/kg	J	IonRatio	L2658841
E1613B	WC-SGPD50	1,2,3,4,7,8,9-HpCDF	0.0026	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD50	1,2,3,4,7,8-HxCDD	0.0011	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD50	1,2,3,6,7,8-HxCDF	0.0028	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD50	2,3,4,6,7,8-HxCDF	0.0022	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD50	2,3,7,8-TCDD	0.00028	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD52	1,2,3,4,7,8,9-HpCDF	0.0033	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD52	2,3,4,7,8-PeCDF	0.0021	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD52	2,3,7,8-TCDD	0.00014	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD53	1,2,3,7,8-PeCDD	0.00094	µg/kg	J	IonRatio	L2615160
E1613B	WC-SGPD53	2,3,7,8-TCDD	0.00018	µg/kg	J	IonRatio	L2615160
E1613B	WC-SB11-1.0-2.0	1,2,3,4,7,8-HxCDD	0.000767	µg/kg	J	IonRatio	K2204428
E1613B	WC-SB11-1.0-2.0	1,2,3,7,8,9-HxCDD	0.00172	µg/kg	J	IonRatio	K2204428
E1613B	WC-SB11-3.0-4.0	1,2,3,4,7,8-HxCDF	0.000188	µg/kg	J	IonRatio	K2204428
E1613B	WC-SB11-3.0-4.0	1,2,3,6,7,8-HxCDD	0.000178	µg/kg	J	IonRatio	K2204428
E1613B	WC-SB11-3.0-4.0	OCDF	0.00221	µg/kg	J	IonRatio	K2204428
E1613B	WC-SB11-4.0-5.0	1,2,3,4,7,8-HxCDF	0.000184	µg/kg	J	IonRatio	K2204428
E1613B	WC-SB11-4.0-5.0	OCDF	0.00289	µg/kg	J	IonRatio	K2204428
E1613B	WC-SCPD01-1.0-2.0	1,2,3,6,7,8-HxCDF	0.00205	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-1.0-2.0	1,2,3,7,8-PeCDF	0.00138	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-1.0-2.0	2,3,4,6,7,8-HxCDF	0.00252	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-1.0-2.0	2,3,7,8-TCDF	0.0015	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-2.0-3.0	2,3,4,6,7,8-HxCDF	0.000677	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-2.0-3.0	OCDF	0.0149	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.000801	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,4,7,8-HxCDF	0.0011	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,6,7,8-HxCDD	0.00273	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00117	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000496	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,6,7,8-HxCDD	0.00334	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,7,8-PeCDD	0.000332	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-4.0-5.0	1,2,3,7,8-PeCDF	0.000454	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-4.0-5.0	2,3,4,6,7,8-HxCDF	0.000704	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-4.0-5.0	2,3,4,7,8-PeCDF	0.000474	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD01-4.0-5.0	2,3,7,8-TCDF	0.00115	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD03-8.0-9.0	1,2,3,6,7,8-HxCDF	0.0116	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD03-8.0-9.0	1,2,3,7,8-PeCDD	0.000988	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,4,7,8,9-HpCDF	0.00871	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,4,7,8-HxCDD	0.00372	µg/kg	J	IonRatio	K2203181

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD03-9.0-9.8	1,2,3,6,7,8-HxCDD	0.00261	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,7,8,9-HxCDD	0.00349	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,7,8,9-HxCDF	0.00224	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD03-9.0-9.8	1,2,3,7,8-PeCDD	0.000661	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD03-9.0-9.8	2,3,4,6,7,8-HxCDF	0.00139	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD03-9.0-9.8	2,3,4,7,8-PeCDF	0.00245	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,4,6,7,8-HpCDF	0.0323	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.0041	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0467	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00176	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-1.0-2.0	1,2,3,6,7,8-HxCDF	0.00445	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-1.0-2.0	2,3,7,8-TCDD	0.00236	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-2.0-3.0	1,2,3,7,8,9-HxCDD	0.00136	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-2.0-3.0	1,2,3,7,8,9-HxCDF	0.000498	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-2.0-3.0	1,2,3,7,8-PeCDD	0.000472	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-2.0-3.0	1,2,3,7,8-PeCDF	0.000576	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-2.0-3.0	2,3,4,7,8-PeCDF	0.0019	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-3.0-4.0	1,2,3,4,7,8-HxCDF	0.00175	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-3.0-4.0	1,2,3,7,8,9-HxCDF	0.000605	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-3.0-4.0	1,2,3,7,8-PeCDD	0.000877	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-3.0-4.0	2,3,4,7,8-PeCDF	0.00206	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-4.0-5.0	1,2,3,7,8-PeCDD	0.00222	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-4.0-5.0	1,2,3,7,8-PeCDF	0.0109	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD05-4.0-5.0	2,3,7,8-TCDD	0.00101	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00082	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-1.0-2.0	1,2,3,7,8-PeCDD	0.00027	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-1.0-2.0	2,3,4,6,7,8-HxCDF	0.000542	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-2.0-3.0	1,2,3,4,7,8-HxCDD	0.000488	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-2.0-3.0	1,2,3,4,7,8-HxCDF	0.00162	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-2.0-3.0	1,2,3,7,8,9-HxCDD	0.00107	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-2.0-3.0	1,2,3,7,8-PeCDD	0.000419	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-2.0-3.0	1,2,3,7,8-PeCDF	0.00122	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-2.0-3.0	2,3,7,8-TCDF	0.000239	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.00198	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,7,8,9-HxCDF	0.000502	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-3.0-4.0	1,2,3,7,8-PeCDD	0.00174	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-3.0-4.0	2,3,4,7,8-PeCDF	0.00189	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000298	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-4.0-5.0	1,2,3,6,7,8-HxCDD	0.00136	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD06-4.0-5.0	1,2,3,7,8,9-HxCDD	0.000642	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD07-1.0-2.0	1,2,3,4,7,8-HxCDD	0.00042	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-1.0-2.0	1,2,3,6,7,8-HxCDD	0.000865	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-1.0-2.0	1,2,3,6,7,8-HxCDF	0.000368	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-1.0-2.0	1,2,3,7,8,9-HxCDD	0.000199	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-1.0-2.0	1,2,3,7,8-PeCDD	0.000345	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-1.0-2.0	1,2,3,7,8-PeCDF	0.000368	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-1.0-2.0	2,3,4,7,8-PeCDF	0.000358	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-2.0-3.0	1,2,3,6,7,8-HxCDD	0.0115	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-3.0-4.0	1,2,3,4,7,8-HxCDF	0.000963	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00086	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-3.0-4.0	2,3,4,6,7,8-HxCDF	0.00103	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-4.0-5.0	1,2,3,4,7,8,9-HpCDF	0.00127	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-4.0-5.0	1,2,3,6,7,8-HxCDF	0.00232	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-4.0-5.0	1,2,3,7,8,9-HxCDD	0.000702	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-4.0-5.0	1,2,3,7,8-PeCDD	0.000311	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD07-4.0-5.0	2,3,4,6,7,8-HxCDF	0.00105	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-1.0-2.0	1,2,3,7,8,9-HxCDD	0.00124	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-1.0-2.0	1,2,3,7,8-PeCDD	0.000267	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-1.0-2.0	1,2,3,7,8-PeCDF	0.000427	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-2.0-3.0	1,2,3,7,8,9-HxCDD	0.000596	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-2.0-3.0	1,2,3,7,8-PeCDD	0.000314	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-2.0-3.0	1,2,3,7,8-PeCDF	0.000328	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-3.0-4.0	1,2,3,4,7,8-HxCDF	0.000804	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.00115	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-3.0-4.0	1,2,3,7,8-PeCDF	0.000325	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000272	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-4.0-5.0	1,2,3,4,7,8-HxCDF	0.000833	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD08-4.0-5.0	1,2,3,7,8-PeCDD	0.000335	µg/kg	J	IonRatio	K2204707
E1613B	WC-SCPD09-1.0-2.0	1,2,3,7,8,9-HxCDD	0.00609	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD09-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.00063	µg/kg	J	IonRatio	K2203181

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD09-2.0-3.0	1,2,3,6,7,8-HxCDF	0.000542	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD09-2.0-3.0	1,2,3,7,8,9-HxCDF	0.00023	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD09-2.0-3.0	1,2,3,7,8-PeCDF	0.000629	µg/kg	J	IonRatio	K2203181
E1613B	WC-SCPD09-3.0-4.0	1,2,3,4,6,7,8-HpCDF	0.000262	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD09-3.0-4.0	1,2,3,6,7,8-HxCDD	0.000122	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD09-3.0-4.0	1,2,3,6,7,8-HxCDF	0.000136	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD09-4.0-5.0	1,2,3,4,7,8-HxCDF	0.000124	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,4,7,8-HxCDD	0.00075	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,7,8,9-HxCDD	0.0026	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,7,8,9-HxCDF	0.0013	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-1.0-2.0	1,2,3,7,8-PeCDD	0.00064	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0025	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.022	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-2.0-3.0	1,2,3,7,8-PeCDD	0.00084	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-3.0-4.0	1,2,3,4,7,8,9-HpCDF	0.0083	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-3.0-4.0	1,2,3,4,7,8-HxCDD	0.00084	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-3.0-4.0	1,2,3,7,8-PeCDD	0.0029	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-4.0-4.8	1,2,3,4,7,8-HxCDD	0.001	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-4.0-4.8	1,2,3,4,7,8-HxCDF	0.0091	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-4.0-4.8	1,2,3,7,8,9-HxCDD	0.0033	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD12A-4.0-4.8	2,3,7,8-TCDF	0.0011	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00165	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,4,7,8-HxCDD	0.0004	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,4,7,8-HxCDF	0.00198	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,6,7,8-HxCDD	0.00264	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,7,8,9-HxCDD	0.00115	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000835	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,7,8-PeCDD	0.000674	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-1.0-2.0	1,2,3,7,8-PeCDF	0.00056	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-1.0-2.0	2,3,4,6,7,8-HxCDF	0.0039	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-2.0-3.0	1,2,3,4,7,8-HxCDD	0.000638	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-2.0-3.0	1,2,3,7,8-PeCDF	0.00164	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-2.0-3.0	2,3,7,8-TCDD	0.000471	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-3.0-4.0	1,2,3,4,7,8-HxCDD	0.000283	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-3.0-4.0	1,2,3,7,8,9-HxCDF	0.000868	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-3.0-4.0	1,2,3,7,8-PeCDD	0.000335	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-3.0-4.0	1,2,3,7,8-PeCDF	0.00051	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-3.0-4.0	2,3,4,7,8-PeCDF	0.00282	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-3.0-4.0	2,3,7,8-TCDF	0.000526	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-4.0-4.3	1,2,3,7,8,9-HxCDF	0.000682	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-4.0-4.3	1,2,3,7,8-PeCDF	0.000338	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD16A-4.0-4.3	2,3,4,6,7,8-HxCDF	0.00254	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD20A-1.0-2.0	1,2,3,4,7,8-HxCDF	0.0066	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD20A-1.0-2.0	1,2,3,7,8,9-HxCDD	0.0027	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD20A-1.0-2.0	2,3,7,8-TCDF	0.001	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD20A-2.0-3.0	1,2,3,4,7,8-HxCDD	0.0011	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD20A-2.0-3.0	1,2,3,4,7,8-HxCDF	0.0081	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD20A-2.0-3.0	1,2,3,7,8-PeCDD	0.0017	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD20A-2.0-3.0	1,2,3,7,8-PeCDF	0.0022	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD20A-3.0-4.0	1,2,3,4,7,8-HxCDF	0.0075	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD20A-3.0-4.0	1,2,3,7,8-PeCDD	0.0018	µg/kg	J	IonRatio	L2692261
E1613B	WC-SCPD25-1.0-2.0	1,2,3,6,7,8-HxCDD	0.00209	µg/kg	J	IonRatio	K2205401
E1613B	WC-SCPD25-1.0-2.0	2,3,7,8-TCDF	0.000632	µg/kg	J	IonRatio	K2205401
E1613B	WC-SCPD25-2.0-3.0	1,2,3,7,8,9-HxCDD	0.000844	µg/kg	J	IonRatio	K2205401
E1613B	WC-SCPD25-3.0-4.0	1,2,3,4,6,7,8-HpCDD	0.00373	µg/kg	J	IonRatio	K2205401
E1613B	WC-SCPD26A-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00279	µg/kg	J	IonRatio	K2204432
E1613B	WC-SCPD26A-1.0-2.0	1,2,3,4,7,8-HxCDD	0.000195	µg/kg	J	IonRatio	K2204432
E1613B	WC-SCPD26A-1.0-2.0	1,2,3,6,7,8-HxCDD	0.00154	µg/kg	J	IonRatio	K2204432
E1613B	WC-SCPD26A-1.0-2.0	1,2,3,7,8-PeCDD	0.000341	µg/kg	J	IonRatio	K2204432
E1613B	WC-SCPD26A-3.0-4.0	1,2,3,4,7,8-HxCDD	0.000192	µg/kg	J	IonRatio	K2204432
E1613B	WC-SCPD26A-3.0-4.0	1,2,3,7,8,9-HxCDD	0.000538	µg/kg	J	IonRatio	K2204432
E1613B	WC-SCPD26A-3.0-4.0	1,2,3,7,8-PeCDF	0.000522	µg/kg	J	IonRatio	K2204432
E1613B	WC-SCPD32-10.0-11.0	1,2,3,4,6,7,8-HpCDF	0.000421	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD32-10.0-11.0	1,2,3,4,7,8-HxCDF	0.00017	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD32-10.0-11.0	1,2,3,6,7,8-HxCDD	0.000134	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD32-10.0-11.0	1,2,3,6,7,8-HxCDF	0.000102	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD32-13.0-14.0	1,2,3,6,7,8-HxCDD	0.0000951	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD32-13.0-14.0	OCDF	0.00236	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD32-14.0-14.8	1,2,3,4,7,8-HxCDF	0.000056	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD32-14.0-14.8	1,2,3,7,8,9-HxCDD	0.000259	µg/kg	J	IonRatio	K2203194

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Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD32-9.0-10.0	1,2,3,4,7,8-HxCDD	0.000201	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD32-9.0-10.0	1,2,3,6,7,8-HxCDD	0.00169	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD32-9.0-10.0	1,2,3,7,8,9-HxCDF	0.000419	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD34A-1.0-2.0	1,2,3,4,7,8-HxCDD	0.000228	µg/kg	J	IonRatio	K2202673
E1613B	WC-SCPD34A-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.000654	µg/kg	J	IonRatio	K2202673
E1613B	WC-SCPD34A-1.0-2.0	1,2,3,6,7,8-HxCDD	0.0013	µg/kg	J	IonRatio	K2202673
E1613B	WC-SCPD34A-1.0-2.0	1,2,3,6,7,8-HxCDF	0.000847	µg/kg	J	IonRatio	K2202673
E1613B	WC-SCPD34A-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000385	µg/kg	J	IonRatio	K2202673
E1613B	WC-SCPD34A-1.0-2.0	2,3,4,6,7,8-HxCDF	0.000456	µg/kg	J	IonRatio	K2202673
E1613B	WC-SCPD34A-3.0-3.3	1,2,3,4,7,8-HxCDD	0.0224	µg/kg	J	IonRatio	K2202673
E1613B	WC-SCPD34A-3.0-3.3	1,2,3,7,8,9-HxCDD	0.00569	µg/kg	J	IonRatio	K2202673
E1613B	WC-SCPD34A-3.0-3.3	1,2,3,7,8-PeCDF	0.000731	µg/kg	J	IonRatio	K2202673
E1613B	WC-SCPD37-6.0-7.0	1,2,3,4,7,8-HxCDF	0.000342	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD37-6.0-7.0	1,2,3,6,7,8-HxCDD	0.000409	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD37-6.0-7.0	1,2,3,6,7,8-HxCDF	0.0002	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD37-6.0-7.0	1,2,3,7,8,9-HxCDD	0.000255	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD37-6.0-7.0	1,2,3,7,8-PeCDF	0.000277	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD37-6.0-7.0	2,3,4,6,7,8-HxCDF	0.00015	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD37-6.0-7.0	2,3,4,7,8-PeCDF	0.000115	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD37-7.0-8.0	2,3,4,6,7,8-HxCDF	0.00199	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD37-9.0-10.0	1,2,3,4,7,8-HxCDD	0.00057	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD37-9.0-10.0	2,3,4,7,8-PeCDF	0.00277	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,4,7,8,9-HpCDF	0.00047	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,6,7,8-HxCDD	0.00068	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,7,8,9-HxCDD	0.000341	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,7,8,9-HxCDF	0.000343	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-1.0-2.0	1,2,3,7,8-PeCDF	0.00116	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-1.0-2.0	2,3,4,6,7,8-HxCDF	0.000358	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,4,7,8,9-HpCDF	0.00087	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,4,7,8-HxCDD	0.000235	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,7,8,9-HxCDD	0.000757	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,7,8,9-HxCDF	0.000422	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,7,8-PeCDD	0.000256	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-2.0-3.0	1,2,3,7,8-PeCDF	0.00123	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-2.0-3.0	2,3,4,6,7,8-HxCDF	0.000667	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-2.0-3.0	2,3,4,7,8-PeCDF	0.000901	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-3.0-4.0	1,2,3,6,7,8-HxCDD	0.00337	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-3.0-4.0	1,2,3,6,7,8-HxCDF	0.00376	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-3.0-4.0	1,2,3,7,8,9-HxCDD	0.00141	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-3.0-4.0	1,2,3,7,8-PeCDD	0.000751	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,4,7,8-HxCDD	0.000277	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,4,7,8-HxCDF	0.00372	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,7,8,9-HxCDD	0.000679	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-4.0-5.0	1,2,3,7,8,9-HxCDF	0.000628	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD40-8.0-9.0	1,2,3,7,8-PeCDF	0.000176	µg/kg	J	IonRatio	K2205401
E1613B	WC-SCPD41-7.0-8.0	1,2,3,6,7,8-HxCDD	0.000433	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD41-7.0-8.0	1,2,3,7,8,9-HxCDD	0.000186	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD41-7.0-8.0	OCDD	0.0518	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD41-8.0-8.8	1,2,3,7,8,9-HxCDD	0.000439	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD41-8.0-8.8	1,2,3,7,8,9-HxCDF	0.000243	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD41-8.0-8.8	1,2,3,7,8-PeCDD	0.000163	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD41-8.0-8.8	2,3,7,8-TCDF	0.000693	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD43A-2.0-3.0	2,3,7,8-TCDD	0.000833	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD43A-3.0-4.0	2,3,7,8-TCDD	0.000614	µg/kg	J	IonRatio	K2203345
E1613B	WC-SCPD44-7.0-8.0	1,2,3,4,6,7,8-HpCDD	0.000444	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD44-7.0-8.0	1,2,3,4,7,8,9-HpCDF	0.0000609	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD44-7.0-8.0	2,3,4,7,8-PeCDF	0.000213	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD44-7.0-8.0	OCDD	0.00331	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD44-8.0-8.9	1,2,3,4,6,7,8-HpCDF	0.00132	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD44-8.0-8.9	1,2,3,4,7,8,9-HpCDF	0.000208	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD44-8.0-8.9	1,2,3,4,7,8-HxCDD	0.0000992	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD44-8.0-8.9	1,2,3,4,7,8-HxCDF	0.000338	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD44-8.0-8.9	1,2,3,6,7,8-HxCDD	0.000438	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD44-8.0-8.9	1,2,3,7,8-PeCDF	0.000178	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,4,7,8,9-HpCDF	0.00252	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,4,7,8-HxCDD	0.000859	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,6,7,8-HxCDF	0.00318	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,7,8,9-HxCDF	0.00141	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-12.0-13.0	1,2,3,7,8-PeCDD	0.000865	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-12.0-13.0	2,3,7,8-TCDF	0.00246	µg/kg	J	IonRatio	K2203194

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SCPD46-13.0-14.0	1,2,3,4,7,8-HxCDD	0.0258	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-13.0-14.0	1,2,3,6,7,8-HxCDD	0.00928	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-13.0-14.0	1,2,3,7,8,9-HxCDD	0.0255	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-13.0-14.0	2,3,7,8-TCDF	0.00355	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-8.0-9.0	1,2,3,4,7,8-HxCDD	0.000211	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-8.0-9.0	1,2,3,6,7,8-HxCDD	0.00121	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-8.0-9.0	1,2,3,6,7,8-HxCDF	0.000277	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-9.0-10.0	1,2,3,4,7,8-HxCDD	0.00031	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD46-9.0-10.0	1,2,3,7,8,9-HxCDD	0.000839	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD53A-8.0-9.0	1,2,3,7,8,9-HxCDF	0.000912	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD53A-8.0-9.0	2,3,4,6,7,8-HxCDF	0.00156	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD53A-9.0-9.4	1,2,3,4,7,8-HxCDD	0.00117	µg/kg	J	IonRatio	K2203194
E1613B	WC-SCPD53A-9.0-9.4	1,2,3,7,8,9-HxCDF	0.00098	µg/kg	J	IonRatio	K2203194
E1613B	WC-SGPD01	1,2,3,4,7,8,9-HpCDF	0.00109	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD01	1,2,3,4,7,8-HxCDD	0.00155	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD01	1,2,3,4,7,8-HxCDF	0.000872	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD01	1,2,3,7,8-PeCDD	0.000751	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD01	2,3,4,6,7,8-HxCDF	0.000348	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD05	1,2,3,4,7,8,9-HpCDF	0.00137	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD05	1,2,3,4,7,8-HxCDF	0.00161	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD05	1,2,3,6,7,8-HxCDF	0.000362	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD05	1,2,3,7,8-PeCDD	0.000143	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD05	1,2,3,7,8-PeCDF	0.000826	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD07A	1,2,3,4,7,8-HxCDD	0.0003	µg/kg	J	IonRatio	K2204707
E1613B	WC-SGPD07A	1,2,3,4,7,8-HxCDF	0.00107	µg/kg	J	IonRatio	K2204707
E1613B	WC-SGPD07A	1,2,3,6,7,8-HxCDD	0.00111	µg/kg	J	IonRatio	K2204707
E1613B	WC-SGPD08	1,2,3,4,7,8-HxCDD	0.000115	µg/kg	J	IonRatio	K2204707
E1613B	WC-SGPD08	1,2,3,6,7,8-HxCDD	0.000746	µg/kg	J	IonRatio	K2204707
E1613B	WC-SGPD08	1,2,3,6,7,8-HxCDF	0.000238	µg/kg	J	IonRatio	K2204707
E1613B	WC-SGPD08	1,2,3,7,8,9-HxCDD	0.0004	µg/kg	J	IonRatio	K2204707
E1613B	WC-SGPD08	1,2,3,7,8-PeCDF	0.000233	µg/kg	J	IonRatio	K2204707
E1613B	WC-SGPD08	2,3,4,7,8-PeCDF	0.000201	µg/kg	J	IonRatio	K2204707
E1613B	WC-SGPD09	1,2,3,4,7,8,9-HpCDF	0.000358	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD09	1,2,3,4,7,8-HxCDD	0.000344	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD09	1,2,3,4,7,8-HxCDF	0.00114	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD09	1,2,3,6,7,8-HxCDD	0.000712	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD09	1,2,3,6,7,8-HxCDF	0.000382	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD09	1,2,3,7,8-PeCDD	0.000447	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD09	2,3,4,7,8-PeCDF	0.000543	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD09	2,3,7,8-TCDF	0.000549	µg/kg	J	IonRatio	K2203181
E1613B	WC-SGPD12A	1,2,3,4,7,8,9-HpCDF	0.0026	µg/kg	J	IonRatio	L2692261
E1613B	WC-SGPD12A	1,2,3,6,7,8-HxCDD	0.0037	µg/kg	J	IonRatio	L2692261
E1613B	WC-SGPD12A	1,2,3,6,7,8-HxCDF	0.0021	µg/kg	J	IonRatio	L2692261
E1613B	WC-SGPD12A	1,2,3,7,8,9-HxCDF	0.0013	µg/kg	J	IonRatio	L2692261
E1613B	WC-SGPD12A	1,2,3,7,8-PeCDF	0.0056	µg/kg	J	IonRatio	L2692261
E1613B	WC-SGPD16A	1,2,3,4,7,8-HxCDD	0.00017	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD16A	1,2,3,4,7,8,9-HpCDF	0.00127	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD16A	1,2,3,4,7,8-HxCDF	0.00111	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD16A	1,2,3,6,7,8-HxCDD	0.00149	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD16A	1,2,3,7,8,9-HxCDD	0.000578	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD16A	1,2,3,7,8-PeCDD	0.000293	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD16A	1,2,3,7,8-PeCDF	0.000338	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD16A	2,3,4,6,7,8-HxCDF	0.00196	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD20A	1,2,3,4,7,8,9-HpCDF	0.0062	µg/kg	J	IonRatio	L2692261
E1613B	WC-SGPD20A	2,3,7,8-TCDF	0.001	µg/kg	J	IonRatio	L2692261
E1613B	WC-SGPD20AFD	1,2,3,4,7,8,9-HpCDF	0.0058	µg/kg	J	IonRatio	L2692261
E1613B	WC-SGPD20AFD	1,2,3,7,8-PeCDD	0.0017	µg/kg	J	IonRatio	L2692261
E1613B	WC-SGPD25	1,2,3,7,8-PeCDD	0.000358	µg/kg	J	IonRatio	K2205401
E1613B	WC-SGPD25	1,2,3,7,8-PeCDF	0.00108	µg/kg	J	IonRatio	K2205401
E1613B	WC-SGPD26A	1,2,3,4,7,8-HxCDD	0.000331	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD26A	1,2,3,7,8-PeCDD	0.000588	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD26A	2,3,4,6,7,8-HxCDF	0.00368	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD34A	1,2,3,4,7,8,9-HpCDF	0.0027	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD34A	1,2,3,4,7,8-HxCDD	0.00143	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD34A	1,2,3,7,8,9-HxCDD	0.00298	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD34A	1,2,3,7,8,9-HxCDF	0.00148	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD34A	1,2,3,7,8-PeCDD	0.000776	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD34A	2,3,4,6,7,8-HxCDF	0.00257	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD34A	2,3,4,7,8-PeCDF	0.00235	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD40	1,2,3,4,7,8,9-HpCDF	0.00153	µg/kg	J	IonRatio	K2203194

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SGPD40	1,2,3,4,7,8-HxCDD	0.000962	µg/kg	J	IonRatio	K2203194
E1613B	WC-SGPD40	1,2,3,7,8,9-HxCDD	0.00148	µg/kg	J	IonRatio	K2203194
E1613B	WC-SGPD40	1,2,3,7,8,9-HxCDF	0.000502	µg/kg	J	IonRatio	K2203194
E1613B	WC-SGPD40	1,2,3,7,8-PeCDD	0.000678	µg/kg	J	IonRatio	K2203194
E1613B	WC-SGPD40	2,3,4,6,7,8-HxCDF	0.000858	µg/kg	J	IonRatio	K2203194
E1613B	WC-SGPD43A	1,2,3,4,7,8-HxCDD	0.000867	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD43A	1,2,3,4,7,8,9-HpCDF	0.00333	µg/kg	J	IonRatio	K2202673
E1613B	WC-SGPD43A	1,2,3,7,8,9-HxCDD	0.0019	µg/kg	J	IonRatio	K2202673
E1668	WC-SB01-0.0-1.0	PCB-1	0.00072	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-107	0.00049	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-108/124	0.0003	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-122	0.00017	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-123	0.00015	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-126	0.00017	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-133	0.00049	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-134/143	0.00095	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-136	0.0018	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-139/140	0.0004	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-144	0.00094	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-154	0.0004	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-17	0.00034	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-175	0.00031	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-176	0.0009	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-189	0.00022	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-190	0.0012	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-195	0.0014	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-196	0.0024	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-2	0.00068	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-201	0.00073	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-202	0.0012	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-203	0.004	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-205	0.0002	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-207	0.0006	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-208	0.0016	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-21/33	0.00047	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-32	0.0003	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-42	0.00034	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-44/47/65	0.0018	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-48	0.00025	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-49/69	0.00073	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-61/70/74/76	0.0025	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-64	0.00062	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-77	0.00029	µg/kg	J	IonRatio	L2645768
E1668	WC-SB01-0.0-1.0	PCB-82	0.00072	µg/kg	J	IonRatio	L2645768
E1668	WC-SB02-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.007	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	Decachlorobiphenyl	0.0068	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-107	0.0026	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-108/124	0.0023	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-123	0.0015	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-134/143	0.0026	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-144	0.0024	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-146	0.007	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-158	0.0072	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-176	0.0017	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-178	0.0019	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-180/193	0.024	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-187	0.015	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-195	0.0016	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-196	0.0032	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-20/28	0.0026	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-203	0.0036	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-206	0.0036	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-31	0.0021	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-44/47/65	0.0065	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-45/51	0.0019	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-56	0.0017	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-59/62/75	0.001	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-82	0.0056	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-88/91	0.0066	µg/kg	J	IonRatio	L2645716
E1668	WC-SB02-0.0-1.0	PCB-90/101/113	0.036	µg/kg	J	IonRatio	L2645716

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB03-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.00033	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-085/110/115/116/117	0.0024	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-129/138/163	0.0021	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-135/151	0.001	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-146	0.00035	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-147/149	0.0019	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-158	0.00023	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-170	0.00048	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-174	0.00059	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-179	0.00025	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-180/193	0.0011	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-187	0.0008	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-21/33	0.00049	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-31	0.0006	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-49/69	0.00057	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-64	0.00032	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-84	0.00047	µg/kg	J	IonRatio	L2645768
E1668	WC-SB03-0.0-1.0	PCB-92	0.00044	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	Decachlorobiphenyl	0.0014	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-085/110/115/116/117	0.0013	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-105	0.00028	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-129/138/163	0.00099	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-147/149	0.00077	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-15	0.00049	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-153/168	0.00051	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-18/30	0.00043	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-187	0.00031	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-194	0.00037	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-31	0.00065	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-37	0.00028	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-44/47/65	0.00084	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-83/99	0.00064	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-86/87/97/108/119/125	0.00054	µg/kg	J	IonRatio	L2645768
E1668	WC-SB04-0.0-1.0	PCB-90/101/113	0.00065	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.0084	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-11	0.0035	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-118	0.0016	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-128/166	0.0054	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-130	0.002	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-135/151	0.0042	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-136	0.0029	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-141	0.0012	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-158	0.0021	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-171/173	0.0037	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-174	0.011	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-176	0.0015	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-178	0.0025	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-179	0.0041	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-18/30	0.00083	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-195	0.0026	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-201	0.0011	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-203	0.003	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-44/47/65	0.0013	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-52	0.0018	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-84	0.0014	µg/kg	J	IonRatio	L2645768
E1668	WC-SB09-0.0-1.0	PCB-88/91	0.0014	µg/kg	J	IonRatio	L2645768
E1668	WC-SB10-0.0-1.0	PCB-085/110/115/116/117	0.0026	µg/kg	J	IonRatio	L2645716
E1668	WC-SB10-0.0-1.0	PCB-129/138/163	0.0046	µg/kg	J	IonRatio	L2645716
E1668	WC-SB10-0.0-1.0	PCB-132	0.0026	µg/kg	J	IonRatio	L2645716
E1668	WC-SB10-0.0-1.0	PCB-153/168	0.0036	µg/kg	J	IonRatio	L2645716
E1668	WC-SB10-0.0-1.0	PCB-170	0.0031	µg/kg	J	IonRatio	L2645716
E1668	WC-SB10-0.0-1.0	PCB-187	0.0032	µg/kg	J	IonRatio	L2645716
E1668	WC-SB10-0.0-1.0	PCB-196	0.0012	µg/kg	J	IonRatio	L2645716
E1668	WC-SB10-0.0-1.0	PCB-203	0.0019	µg/kg	J	IonRatio	L2645716
E1668	WC-SB10-0.0-1.0	PCB-95	0.0034	µg/kg	J	IonRatio	L2645716
E1668	WC-SB11-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.0027	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-128/166	0.0012	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-132	0.0022	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-135/151	0.0024	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-137/164	0.00082	µg/kg	J	IonRatio	L2645738

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB11-0.0-1.0	PCB-141	0.00086	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-146	0.0018	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-156/157	0.0012	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-158	0.00088	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-171/173	0.00071	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-174	0.0018	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-176	0.00036	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-177	0.0014	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-178	0.00059	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-179	0.00061	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-196	0.0017	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-20/28	0.008	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-203	0.0028	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-208	0.0028	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-21/33	0.0048	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-22	0.0051	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-31	0.0065	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-56	0.0038	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-61/70/74/76	0.0068	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-83/99	0.0025	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-90/101/113	0.0038	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0	PCB-92	0.00098	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.0051	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-11	0.013	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-128/166	0.0049	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-156/157	0.0025	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-167	0.00087	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-170	0.012	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-171/173	0.0026	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-179	0.0035	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-190	0.0013	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-196	0.0035	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-198/199	0.01	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-2	0.0023	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-207	0.0028	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-66	0.0014	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-90/101/113	0.0045	µg/kg	J	IonRatio	L2645738
E1668	WC-SB11-0.0-1.0FD	PCB-95	0.0043	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.00062	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-105	0.0013	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-118	0.0015	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-128/166	0.00059	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-129/138/163	0.0036	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-132	0.0011	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-137/164	0.00035	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-147/149	0.0026	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-15	0.0033	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-153/168	0.0024	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-156/157	0.00045	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-17	0.001	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-177	0.00081	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-179	0.00066	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-18/30	0.002	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-180/193	0.0029	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-187	0.0016	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-202	0.00026	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-31	0.0055	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-35	0.0015	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-40/41/71	0.0018	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-44/47/65	0.0034	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-56	0.0016	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-59/62/75	0.00043	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-60	0.0014	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-64	0.0015	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-77	0.00067	µg/kg	J	IonRatio	L2645738
E1668	WC-SB12-0.0-1.0	PCB-86/87/97/108/119/125	0.0016	µg/kg	J	IonRatio	L2645738
E1668	WC-SGPD12	PCB-111	0.0055	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD12	PCB-121	0.00093	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD12	PCB-186	0.00057	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD12	PCB-188	0.003	µg/kg	J	IonRatio	L2675125

Table H-16 - Estimated Maximum Possible Concentrations Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SGPD12	PCB-204	0.00081	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD12	PCB-27	0.0036	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD12	PCB-34	0.0022	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD12	PCB-39	0.0035	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD20	PCB-10	0.0039	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD20	PCB-111	0.0094	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD20	PCB-112	0.0045	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD20	PCB-14	0.0015	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD20	PCB-152	0.0032	µg/kg	J	IonRatio	L2675125
E1668	WC-SGPD20	PCB-5	0.0043	µg/kg	J	IonRatio	L2675125
E1699M	WC-SB01-0.0-1.0	4,4'-DDD	0.063	µg/kg	J	IonRatio	L2645768
E1699M	WC-SB10-0.0-1.0	4,4'-DDD	0.042	µg/kg	J	IonRatio	L2645716

Notes:
IonRatio = Ion abundance ratio criteria not met
µg/kg = microgram per kilogram
ID = Identifier

Qualifier Definitions
UJ = The analyte was not detected above the detection limit objective; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table H-17 - Confirmation Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8082A	WC-SCPD03-2.0-3.0	Aroclor 1254	15	µg/kg	J	CF>RPD	K2106883
SW8082A	WC-SCPD11-1.0-2.0	Aroclor 1242	3.6	µg/kg	J	CF>RPD	K2111932
SW8082A	WC-SCPD11-7.0-8.0	Aroclor 1254	29	µg/kg	J	CF>RPD	K2200743
SW8082A	WC-SCPD21-1.0-2.0	Aroclor 1254	31	µg/kg	J	CF>RPD	K2107104
SW8082A	WC-SCPD21-2.0-3.0	Aroclor 1254	83	µg/kg	J	CF>RPD	K2107104
SW8082A	WC-SCPD21-3.0-4.0	Aroclor 1254	46	µg/kg	J	CF>RPD	K2107104
SW8082A	WC-SCPD23-1.0-2.0	Aroclor 1248	4.9	µg/kg	J	CF>RPD	K2107340
SW8082A	WC-SCPD28-3.0-4.0	Aroclor 1254	7.9	µg/kg	J	CF>RPD	K2107278
SW8082A	WC-SCPD30-1.0-2.0	Aroclor 1242	23	µg/kg	J	CF>RPD	K2111941
SW8082A	WC-SCPD32-2.0-3.0	Aroclor 1254	190	µg/kg	J	CF>RPD	K2107104
SW8082A	WC-SCPD32-3.0-4.0	Aroclor 1260	76	µg/kg	J	CF>RPD	K2107104
SW8082A	WC-SCPD32-5.0-6.0	Aroclor 1254	9.1	µg/kg	J	CF>RPD	K2111941
SW8082A	WC-SCPD32-6.0-7.0	Aroclor 1254	5.9	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SCPD33-1.0-2.0	Aroclor 1254	7.2	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SCPD35-10.0-11.0	Aroclor 1254	64	µg/kg	J	CF>RPD	K2200743
SW8082A	WC-SCPD35-11.0-12.0	Aroclor 1254	120	µg/kg	J	CF>RPD	K2200743
SW8082A	WC-SCPD36-3.0-4.0	Aroclor 1254	270	µg/kg	J	CF>RPD	K2107222
SW8082A	WC-SCPD36-4.0-5.0	Aroclor 1242	17	µg/kg	J	CF>RPD	K2107222
SW8082A	WC-SCPD36-6.0-7.0	Aroclor 1254	99	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SCPD36-8.0-9.0	Aroclor 1260	29	µg/kg	J	CF>RPD	K2200743
SW8082A	WC-SCPD37-1.0-2.0	Aroclor 1242	2.6	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SCPD37-2.0-3.0	Aroclor 1254	7.7	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SCPD37-3.0-4.0	Aroclor 1254	16	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SCPD37-4.0-5.0	Aroclor 1242	9.7	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SCPD38-1.0-2.0	Aroclor 1242	6.1	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SCPD38-13.0-14.0	Aroclor 1254	150	µg/kg	J	CF>RPD	K2200746
SW8082A	WC-SCPD38-14.0-14.3	Aroclor 1254	30	µg/kg	J	CF>RPD	K2200746
SW8082A	WC-SCPD38-4.0-5.0	Aroclor 1242	16	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SCPD38-9.0-10.0	Aroclor 1254	580	µg/kg	J	CF>RPD	K2200746
SW8082A	WC-SCPD39-12.0-13.0	Aroclor 1254	300	µg/kg	J	CF>RPD	K2200746
SW8082A	WC-SCPD39-13.0-13.9	Aroclor 1242	42	µg/kg	J	CF>RPD	K2200746
SW8082A	WC-SCPD39-2.0-3.0	Aroclor 1242	6.3	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD39-3.0-4.0	Aroclor 1242	12	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD39-9.0-10.0	Aroclor 1254	370	µg/kg	J	CF>RPD	K2200746
SW8082A	WC-SCPD41-1.0-2.0	Aroclor 1248	2.3	µg/kg	J	CF>RPD	K2107340
SW8082A	WC-SCPD44-1.0-2.0	Aroclor 1242	9.7	µg/kg	J	CF>RPD	K2107222
SW8082A	WC-SCPD44-2.0-3.0	Aroclor 1242	10	µg/kg	J	CF>RPD	K2107222
SW8082A	WC-SCPD45-1.0-2.0	Aroclor 1242	3.5	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD45-1.0-2.0	Aroclor 1254	10	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD45-3.0-4.0	Aroclor 1242	15	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD45-3.0-4.0	Aroclor 1254	11	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD46-2.0-3.0	Aroclor 1254	16	µg/kg	J	CF>RPD	K2107395
SW8082A	WC-SCPD46-5.0-6.0	Aroclor 1242	13	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD46-6.0-7.0	Aroclor 1242	9.6	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD46-6.0-7.0	Aroclor 1254	22	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD48-3.0-4.0FD	Aroclor 1254	130	µg/kg	J	CF>RPD	K2107158
SW8082A	WC-SCPD48-5.0-6.0	Aroclor 1254	42	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD48-6.0-7.0	Aroclor 1254	40	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD48-7.0-8.0	Aroclor 1254	15	µg/kg	J	CF>RPD	K2200746
SW8082A	WC-SCPD50-1.0-2.0	Aroclor 1254	12	µg/kg	J	CF>RPD	K2107395
SW8082A	WC-SCPD50-2.0-3.0	Aroclor 1254	1.7	µg/kg	J	CF>RPD	K2107395
SW8082A	WC-SCPD52-1.0-2.0	Aroclor 1242	11	µg/kg	J	CF>RPD	K2107489
SW8082A	WC-SCPD52-6.0-7.0	Aroclor 1254	44	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SCPD52-7.0-8.0	Aroclor 1254	59	µg/kg	J	CF>RPD	K2200746
SW8082A	WC-SCPD52-8.0-9.0	Aroclor 1254	32	µg/kg	J	CF>RPD	K2200746
SW8082A	WC-SCPD52-9.0-9.2	Aroclor 1254	3.1	µg/kg	J	CF>RPD	K2200746
SW8082A	WC-SCPD53A-2.0-3.0	Aroclor 1254	13	µg/kg	J	CF>RPD	K2107598
SW8082A	WC-SGPD02	Aroclor 1242	4.6	µg/kg	J	CF>RPD	K2107700
SW8082A	WC-SGPD03	Aroclor 1242	6.3	µg/kg	J	CF>RPD	K2107700
SW8082A	WC-SGPD03	Aroclor 1260	5.5	µg/kg	J	CF>RPD	K2107700
SW8082A	WC-SGPD14	Aroclor 1242	4.2	µg/kg	J	CF>RPD	K2107846
SW8082A	WC-SGPD15	Aroclor 1242	3.9	µg/kg	J	CF>RPD	K2107846
SW8082A	WC-SGPD24	Aroclor 1242	2.2	µg/kg	J	CF>RPD	K2111932
SW8082A	WC-SGPD34	Aroclor 1254	35	µg/kg	J	CF>RPD	K2107598
SW8082A	WC-SGPD37	Aroclor 1254	6	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SGPD38	Aroclor 1242	4.4	µg/kg	J	CF>RPD	K2111942
SW8082A	WC-SGPD39	Aroclor 1242	7.2	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SGPD43	Aroclor 1242	140	µg/kg	J	CF>RPD	K2107598
SW8082A	WC-SGPD43	Aroclor 1254	120	µg/kg	J	CF>RPD	K2107598
SW8082A	WC-SGPD44	Aroclor 1254	6	µg/kg	J	CF>RPD	K2108034
SW8082A	WC-SGPD45	Aroclor 1242	5.9	µg/kg	J	CF>RPD	K2111955
SW8082A	WC-SGPD46	Aroclor 1242	8.4	µg/kg	J	CF>RPD	K2108034

Table H-17 - Confirmation Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8082A	WC-SGPD46	Aroclor 1254	7.8	µg/kg	J	CF>RPD	K2108034
SW8082A	WC-SGPD47	Aroclor 1260	4.8	µg/kg	J	CF>RPD	K2107902
SW8082A	WC-SGPD50	Aroclor 1254	12	µg/kg	J	CF>RPD	K2108034
SW8082A	WC-SGPD52	Aroclor 1254	4.6	µg/kg	J	CF>RPD	K2108034
SW8082A	WC-SCPD01-1.0-2.0	Aroclor 1242	8.4	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD01-1.0-2.0	Aroclor 1260	10	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD01-2.0-3.0	Aroclor 1254	26	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD01-2.0-3.0	Aroclor 1260	24	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD01-3.0-4.0	Aroclor 1254	21	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD01-3.0-4.0	Aroclor 1260	20	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD01-4.0-5.0	Aroclor 1254	12	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD01-4.0-5.0	Aroclor 1260	11	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD03-8.0-9.0	Aroclor 1254	21	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD03-8.0-9.0	Aroclor 1260	31	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD03-9.0-9.8	Aroclor 1254	14	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD03-9.0-9.8	Aroclor 1260	11	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-1.0-2.0	Aroclor 1242	6.6	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-1.0-2.0	Aroclor 1254	13	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-1.0-2.0	Aroclor 1260	9.5	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-2.0-3.0	Aroclor 1242	7.1	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-2.0-3.0	Aroclor 1254	16	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-2.0-3.0	Aroclor 1260	13	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-3.0-4.0	Aroclor 1254	22	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-3.0-4.0	Aroclor 1260	22	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-4.0-5.0	Aroclor 1242	41	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-4.0-5.0	Aroclor 1254	51	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD05-4.0-5.0	Aroclor 1260	45	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD06-1.0-2.0	Aroclor 1254	44	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD06-1.0-2.0	Aroclor 1260	27	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD06-2.0-3.0	Aroclor 1260	25	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD06-3.0-4.0	Aroclor 1254	23	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD06-3.0-4.0	Aroclor 1260	26	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD06-4.0-5.0	Aroclor 1254	19	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD06-4.0-5.0	Aroclor 1260	33	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD08-1.0-2.0	Aroclor 1254	39	µg/kg	J	CF>RPD	K2204707
SW8082A	WC-SCPD08-3.0-4.0	Aroclor 1248	23	µg/kg	J	CF>RPD	K2204707
SW8082A	WC-SCPD08-3.0-4.0	Aroclor 1254	28	µg/kg	J	CF>RPD	K2204707
SW8082A	WC-SCPD08-4.0-5.0	Aroclor 1254	31	µg/kg	J	CF>RPD	K2204707
SW8082A	WC-SCPD09-1.0-2.0	Aroclor 1254	48	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD09-1.0-2.0	Aroclor 1260	45	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD09-2.0-3.0	Aroclor 1254	8.2	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD09-2.0-3.0	Aroclor 1260	6.7	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SCPD25-1.0-2.0	Aroclor 1248	27	µg/kg	J	CF>RPD	K2205401
SW8082A	WC-SCPD25-2.0-3.0	Aroclor 1248	1.2	µg/kg	J	CF>RPD	K2205401
SW8082A	WC-SCPD26A-2.0-3.0	Aroclor 1254	26	µg/kg	J	CF>RPD	K2204432
SW8082A	WC-SCPD34A-1.0-2.0	Aroclor 1260	24	µg/kg	J	CF>RPD	K2202673
SW8082A	WC-SCPD37-10.0-10.9	Aroclor 1242	460	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD37-10.0-10.9	Aroclor 1254	530	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD37-6.0-7.0	Aroclor 1242	18	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD37-6.0-7.0	Aroclor 1254	17	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD37-6.0-7.0	Aroclor 1260	5.3	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD37-7.0-8.0	Aroclor 1242	27	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD37-7.0-8.0	Aroclor 1254	17	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD37-7.0-8.0	Aroclor 1260	6.8	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD37-9.0-10.0	Aroclor 1242	35	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD37-9.0-10.0	Aroclor 1260	35	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD40-1.0-2.0	Aroclor 1260	5.7	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD40-2.0-3.0	Aroclor 1242	27	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD40-2.0-3.0	Aroclor 1254	32	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD40-2.0-3.0	Aroclor 1260	17	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD40-3.0-4.0	Aroclor 1260	39	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD40-4.0-5.0	Aroclor 1242	30	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD40-4.0-5.0	Aroclor 1254	50	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD40-4.0-5.0	Aroclor 1260	39	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD41-7.0-8.0	Aroclor 1242	1.7	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD41-7.0-8.0	Aroclor 1254	2.5	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD41-7.0-8.0	Aroclor 1260	1	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD41-8.0-8.8	Aroclor 1254	6	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD41-8.0-8.8	Aroclor 1260	4.6	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD46-12.0-13.0	Aroclor 1242	80	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD46-12.0-13.0	Aroclor 1254	69	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD46-12.0-13.0	Aroclor 1260	65	µg/kg	J	CF>RPD	K2203194

Table H-17 - Confirmation Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
SW8082A	WC-SCPD46-13.0-14.0	Aroclor 1254	23	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD46-13.0-14.0	Aroclor 1260	37	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD46-8.0-9.0	Aroclor 1242	68	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD46-8.0-9.0	Aroclor 1260	48	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD46-9.0-10.0	Aroclor 1242	370	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD46-9.0-10.0	Aroclor 1254	220	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD46-9.0-10.0	Aroclor 1260	58	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD53A-8.0-9.0	Aroclor 1242	14	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD53A-8.0-9.0	Aroclor 1254	26	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD53A-8.0-9.0	Aroclor 1260	18	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1242	14	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1254	25	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SCPD53A-9.0-9.4	Aroclor 1260	18	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SGPD01	Aroclor 1260	6.4	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SGPD05	Aroclor 1254	3.8	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SGPD05	Aroclor 1260	3.4	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SGPD06A	Aroclor 1242	15	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SGPD06A	Aroclor 1254	15	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SGPD06A	Aroclor 1260	13	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SGPD09	Aroclor 1254	12	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SGPD09	Aroclor 1260	5.7	µg/kg	J	CF>RPD	K2203181
SW8082A	WC-SGPD25	Aroclor 1254	4.3	µg/kg	J	CF>RPD	K2205401
SW8082A	WC-SGPD26A	Aroclor 1254	23	µg/kg	J	CF>RPD	K2202673
SW8082A	WC-SGPD34A	Aroclor 1242	22	µg/kg	J	CF>RPD	K2202673
SW8082A	WC-SGPD40	Aroclor 1254	12	µg/kg	J	CF>RPD	K2203194
SW8082A	WC-SGPD43A	Aroclor 1254	210	µg/kg	J	CF>RPD	K2202673
SW8082A	WC-SCPD05-6.0-7.0	Aroclor 1242	4.5	ug/kg	J	CF>RPD	K2208213
SW8082A	WC-SCPD06-5.0-6.0	Aroclor 1254	20	ug/kg	J	CF>RPD	K2208213
SW8082A	WC-SCPD08-6.0-7.0	Aroclor 1260	71	ug/kg	J	CF>RPD	K2208213

Notes:
CF>RPD = Confirmation relative percent difference criterion exceeded
µg/kg = microgram per kilogram
ID = Identifier

Qualifier Definitions
J = Analyte was present but reported value may not be accurate or precise.

Table H-18- Sample Receipt Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SB01-0.0-1.0	1,2,3,7,8,9-HxCDF	0.000054	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB01-0.0-1.0	2,3,7,8-TCDD	0.00006	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB01-0.0-1.0	2,3,7,8-TCDF	0.000069	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB01-0.0-1.0	Total PeCDD	0.000025	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB01-0.0-1.0	Total TCDD	0.00006	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB01-0.0-1.0	Total TCDF	0.000069	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB03-0.0-1.0	1,2,3,4,7,8-HxCDD	0.000059	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB03-0.0-1.0	1,2,3,6,7,8-HxCDF	0.00003	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB03-0.0-1.0	1,2,3,7,8,9-HxCDF	0.000041	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB03-0.0-1.0	1,2,3,7,8-PeCDD	0.00004	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB03-0.0-1.0	2,3,4,6,7,8-HxCDF	0.000032	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB03-0.0-1.0	2,3,4,7,8-PeCDF	0.000037	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB03-0.0-1.0	2,3,7,8-TCDD	0.000064	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB03-0.0-1.0	2,3,7,8-TCDF	0.000048	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB03-0.0-1.0	Total HxCDF	0.000041	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB03-0.0-1.0	Total PeCDF	0.000044	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	1,2,3,4,7,8,9-HpCDF	0.000035	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	1,2,3,4,7,8-HxCDD	0.000069	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	1,2,3,6,7,8-HxCDD	0.00007	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	1,2,3,6,7,8-HxCDF	0.000027	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	1,2,3,7,8,9-HxCDF	0.000038	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	1,2,3,7,8-PeCDD	0.000045	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	1,2,3,7,8-PeCDF	0.00003	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	2,3,4,6,7,8-HxCDF	0.000028	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	2,3,4,7,8-PeCDF	0.000025	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	2,3,7,8-TCDD	0.00006	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	2,3,7,8-TCDF	0.000042	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	Total HpCDF	0.000035	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	Total HxCDD	0.00007	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	Total HxCDF	0.000038	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	Total PeCDD	0.000045	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	Total PeCDF	0.00003	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	Total TCDD	0.00006	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB04-0.0-1.0	Total TCDF	0.000042	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB09-0.0-1.0	2,3,7,8-TCDD	0.000049	µg/kg	UJ	TEMP	L2645768
E1613B	WC-SB09-0.0-1.0	Total TCDF	0.000059	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-10	0.00046	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-103	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-104	0.000092	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-106	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-111	0.0001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-112	0.0001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-12/13	0.0018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-120	0.0001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-121	0.0001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-127	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-131	0.00026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-14	0.0019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-142	0.00026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-145	0.000058	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-148	0.000079	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-15	0.0013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-150	0.000055	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-152	0.000056	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-155	0.000083	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-16	0.00028	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-160	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-161	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-165	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-169	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-181	0.00011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-182	0.0001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-184	0.000071	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-186	0.000077	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-188	0.000087	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-19	0.00057	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-192	0.000089	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-200	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-204	0.00013	µg/kg	UJ	TEMP	L2645768

Table H-18- Sample Receipt Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB01-0.0-1.0	PCB-22	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-23	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-24	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-25	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-26/29	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-27	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-34	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-35	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-36	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-38	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-39	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-4	0.0017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-43	0.00027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-46	0.00025	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-5	0.00046	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-54	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-55	0.0003	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-57	0.00029	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-58	0.00028	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-59/62/75	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-6	0.00046	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-60	0.00029	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-63	0.0003	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-67	0.00025	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-68	0.00026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-7	0.00043	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-72	0.00029	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-73	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-78	0.00032	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-79	0.00027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-8	0.00045	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-80	0.00025	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-81	0.00024	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-89	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-9	0.00045	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-93/98/100/102	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-94	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB01-0.0-1.0	PCB-96	0.000057	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	Dichlorobiphenyl	0.0026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	Monochlorobiphenyl	0.00038	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	Nonachlorobiphenyl	0.00036	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-1	0.00056	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-10	0.0027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-103	0.00023	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-104	0.00024	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-106	0.0002	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-107	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-108/124	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-11	0.0042	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-111	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-112	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-114	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-12/13	0.0039	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-120	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-121	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-122	0.0002	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-123	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-126	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-127	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-130	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-131	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-133	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-134/143	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-137/164	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-139/140	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-14	0.004	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-142	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-144	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-145	0.00014	µg/kg	UJ	TEMP	L2645768

Table H-18- Sample Receipt Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB03-0.0-1.0	PCB-148	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-15	0.0032	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-150	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-152	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-154	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-155	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-159	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-16	0.00058	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-160	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-161	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-162	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-165	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-167	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-169	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-17	0.00045	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-171/173	0.00023	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-172	0.00023	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-175	0.00022	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-176	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-177	0.00024	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-178	0.00023	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-18/30	0.00039	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-181	0.00022	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-182	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-184	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-185	0.0002	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-186	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-188	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-189	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-19	0.0014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-190	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-191	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-192	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-195	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-196	0.00027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-197	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-198/199	0.00026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-2	0.00051	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-200	0.0002	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-201	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-202	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-203	0.00024	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-204	0.0002	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-205	0.00011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-206	0.0006	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-207	0.00036	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-208	0.00036	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-22	0.00047	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-23	0.00046	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-24	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-25	0.00044	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-26/29	0.00044	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-27	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-3	0.00038	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-32	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-34	0.00047	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-35	0.00051	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-36	0.00043	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-37	0.00042	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-38	0.00047	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-39	0.00044	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-4	0.0076	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-40/41/71	0.00028	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-42	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-43	0.00035	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-45/51	0.00029	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-46	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-48	0.00028	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-5	0.0027	µg/kg	UJ	TEMP	L2645768

Table H-18- Sample Receipt Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB03-0.0-1.0	PCB-50/53	0.00027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-54	0.00054	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-55	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-56	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-57	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-58	0.00031	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-59/62/75	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-6	0.0027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-60	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-63	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-67	0.00028	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-68	0.0003	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-7	0.0026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-72	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-73	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-77	0.00026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-78	0.00036	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-79	0.0003	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-8	0.0027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-80	0.00028	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-81	0.00028	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-82	0.00031	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-88/91	0.00026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-89	0.00029	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-9	0.0027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-93/98/100/102	0.00025	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-94	0.00027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB03-0.0-1.0	PCB-96	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	Nonachlorobiphenyl	0.00038	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-1	0.002	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-10	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-103	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-104	0.000077	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-106	0.0003	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-107	0.00026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-108/124	0.00026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-111	0.00012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-112	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-114	0.00024	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-12/13	0.0003	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-120	0.00012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-121	0.00012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-122	0.0003	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-123	0.00029	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-126	0.00024	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-127	0.00028	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-128/166	0.00011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-130	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-131	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-132	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-133	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-134/143	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-136	0.000096	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-137/164	0.00011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-139/140	0.00012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-14	0.00031	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-141	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-142	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-144	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-145	0.000094	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-146	0.00012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-148	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-150	0.000089	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-152	0.000091	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-154	0.0001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-155	0.00011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-156/157	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-158	0.000085	µg/kg	UJ	TEMP	L2645768

Table H-18- Sample Receipt Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB04-0.0-1.0	PCB-159	0.000094	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-16	0.00027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-160	0.0001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-161	0.000094	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-162	0.000097	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-165	0.0001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-167	0.0001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-169	0.0001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-170	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-171/173	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-172	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-174	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-175	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-176	0.00011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-177	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-178	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-179	0.00011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-181	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-182	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-184	0.000098	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-185	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-186	0.00011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-188	0.00012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-189	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-19	0.00041	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-190	0.00011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-191	0.00012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-192	0.00012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-195	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-196	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-197	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-198/199	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-200	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-201	0.00012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-202	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-203	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-204	0.00013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-205	0.00012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-206	0.00062	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-207	0.00038	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-208	0.00038	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-23	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-24	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-25	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-26/29	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-27	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-3	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-32	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-34	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-35	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-36	0.00016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-38	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-39	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-4	0.00092	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-42	0.00022	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-43	0.00023	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-45/51	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-46	0.00022	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-48	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-5	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-50/53	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-54	0.00023	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-55	0.00035	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-56	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-57	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-58	0.00032	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-59/62/75	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-6	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-60	0.00034	µg/kg	UJ	TEMP	L2645768

Table H-18- Sample Receipt Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB04-0.0-1.0	PCB-63	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-64	0.00015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-66	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-67	0.00029	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-68	0.00031	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-7	0.00032	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-72	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-73	0.00014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-77	0.0003	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-78	0.00037	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-79	0.00031	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-8	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-80	0.00028	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-81	0.0003	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-82	0.00021	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-84	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-88/91	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-89	0.00019	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-9	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-92	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-93/98/100/102	0.00017	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-94	0.00018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB04-0.0-1.0	PCB-96	0.000055	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	Monochlorobiphenyl	0.00027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-1	0.00035	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-10	0.0012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-103	0.00069	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-104	0.00026	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-105	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-106	0.00036	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-107	0.00031	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-108/124	0.00032	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-111	0.00053	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-112	0.00055	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-114	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-12/13	0.0012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-120	0.00055	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-121	0.00053	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-122	0.00035	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-123	0.00036	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-126	0.00032	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-127	0.00033	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-131	0.00066	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-133	0.00059	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-134/143	0.00066	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-139/140	0.00052	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-14	0.0013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-142	0.00067	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-144	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-145	0.00025	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-148	0.00034	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-15	0.0011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-150	0.00024	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-152	0.00024	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-154	0.00027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-155	0.00041	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-156/157	0.00051	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-159	0.00041	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-16	0.00092	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-160	0.00044	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-161	0.00041	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-162	0.00043	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-165	0.00044	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-167	0.00041	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-169	0.00042	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-17	0.00071	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-175	0.0015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-181	0.0015	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-182	0.0014	µg/kg	UJ	TEMP	L2645768

Table H-18- Sample Receipt Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB09-0.0-1.0	PCB-184	0.001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-185	0.0014	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-186	0.0011	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-188	0.0013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-189	0.00038	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-19	0.0013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-191	0.0012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-192	0.0013	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-197	0.00037	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-2	0.00035	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-20/28	0.00063	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-200	0.00037	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-204	0.00038	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-205	0.00048	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-207	0.0016	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-208	0.0018	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-21/33	0.00069	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-22	0.00071	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-23	0.00068	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-24	0.00054	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-25	0.00065	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-26/29	0.00066	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-27	0.00053	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-3	0.00027	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-31	0.00065	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-32	0.00052	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-34	0.0007	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-35	0.00077	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-36	0.00065	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-37	0.00072	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-38	0.00071	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-39	0.00066	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-4	0.0025	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-40/41/71	0.00072	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-42	0.00085	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-43	0.00089	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-45/51	0.00074	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-46	0.00083	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-48	0.0007	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-49/69	0.00065	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-5	0.0012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-50/53	0.00069	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-54	0.00066	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-55	0.00097	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-56	0.00095	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-57	0.00095	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-58	0.0009	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-59/62/75	0.00054	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-6	0.0012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-60	0.00094	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-61/70/74/76	0.00089	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-63	0.00095	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-64	0.00056	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-66	0.00092	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-67	0.00081	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-68	0.00085	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-7	0.0012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-72	0.00095	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-73	0.00053	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-77	0.00089	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-78	0.001	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-79	0.00085	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-8	0.0012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-80	0.00079	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-81	0.00084	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-82	0.00092	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-89	0.00084	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-9	0.0012	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-92	0.0008	µg/kg	UJ	TEMP	L2645768

Table H-18- Sample Receipt Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1668	WC-SB09-0.0-1.0	PCB-93/98/100/102	0.00074	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-94	0.0008	µg/kg	UJ	TEMP	L2645768
E1668	WC-SB09-0.0-1.0	PCB-96	0.00023	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	2,4'-DDD	0.023	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	2,4'-DDE	0.018	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	2,4'-DDT	0.032	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	4,4'-DDE	0.025	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	Aldrin	0.018	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	alpha-Chlordane	0.032	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	cis-Nonachlor	0.024	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	Dieldrin	0.022	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	gamma-BHC (Lindane)	0.039	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	Oxychlordane	0.013	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	trans-Chlordane	0.034	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB01-0.0-1.0	trans-Nonachlor	0.03	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	2,4'-DDD	0.041	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	2,4'-DDE	0.021	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	2,4'-DDT	0.036	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	4,4'-DDD	0.029	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	4,4'-DDE	0.025	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	4,4'-DDT	0.084	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	Aldrin	0.026	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	alpha-Chlordane	0.046	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	cis-Nonachlor	0.061	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	Dieldrin	0.025	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	gamma-BHC (Lindane)	0.054	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	Oxychlordane	0.017	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	trans-Chlordane	0.048	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB03-0.0-1.0	trans-Nonachlor	0.042	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	2,4'-DDD	0.025	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	2,4'-DDE	0.013	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	2,4'-DDT	0.025	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	4,4'-DDD	0.02	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	4,4'-DDE	0.019	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	4,4'-DDT	0.057	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	Aldrin	0.017	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	alpha-Chlordane	0.025	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	cis-Nonachlor	0.029	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	Dieldrin	0.013	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	gamma-BHC (Lindane)	0.045	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	Oxychlordane	0.012	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	trans-Chlordane	0.026	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB04-0.0-1.0	trans-Nonachlor	0.023	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	2,4'-DDD	0.016	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	2,4'-DDE	0.0098	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	2,4'-DDT	0.02	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	4,4'-DDD	0.016	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	4,4'-DDE	0.023	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	Aldrin	0.012	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	alpha-Chlordane	0.036	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	cis-Nonachlor	0.021	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	Dieldrin	0.01	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	gamma-BHC (Lindane)	0.02	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	Oxychlordane	0.01	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	trans-Chlordane	0.037	µg/kg	UJ	TEMP	L2645768
E1699M	WC-SB09-0.0-1.0	trans-Nonachlor	0.033	ug/kg	UJ	TEMP	L2645768
E1613B	WC-SCPD34A-1.0-2.0	1,2,3,7,8-PeCDD	0.000142	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SCPD34A-1.0-2.0	2,3,7,8-TCDD	0.000321	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SCPD34A-1.0-2.0	Total TCDD	0.000321	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SCPD34A-3.0-3.3	1,2,3,7,8-PeCDD	0.00224	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SCPD34A-3.0-3.3	2,3,7,8-TCDD	0.000718	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SCPD34A-3.0-3.3	Total PeCDD	0.00224	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SCPD34A-3.0-3.3	Total TCDD	0.000718	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SGPD16A	2,3,7,8-TCDD	0.000403	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SGPD16A	2,3,7,8-TCDF	0.000413	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SGPD16A	Total TCDD	0.000403	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SGPD26A	2,3,7,8-TCDD	0.000383	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SGPD26A	Total TCDD	0.000383	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SGPD34A	2,3,7,8-TCDD	0.000835	µg/kg	UJ	TEMP	K2202673

Table H-18- Sample Receipt Validation Findings
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Sample ID	Analyte	Result	Units	Validation Flag	Reason Codes	SDG
E1613B	WC-SGPD34A	Total TCDD	0.000835	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SGPD43A	2,3,7,8-TCDD	0.000446	µg/kg	UJ	TEMP	K2202673
E1613B	WC-SGPD43A	Total TCDD	0.000446	µg/kg	UJ	TEMP	K2202673

Notes:
Temp = Sample received at a temperater greater than the acceptance criterion of 6 degrees
µg/kg = microgram per kilogram
ID = Identifier

Qualifier Definitions
J- = Analyte was present but reported value may not be accurate or precise, low bias.
UJ = The analyte was not detected above the detection limit objective; however, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Table H-19 - Samples/Analytical Results Recalculated during Stage 4a Validation
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

SDG	Sample ID	Sample Type	Method	Analyte Recalculated
K2106883	WC-SCPD03-2.0-3.0	N	SW8082A	Aroclor 1260
K2106883	WC-SCPD03-2.0-3.0	N	E1699M	4,4-DDE
L2603308	WC-SCPD03-3.0-4.0	N	E1613B	2,3,7,8-TCDD
L2603308	WC-SCPD03-3.0-4.0	N	E1613B	2,3,4,7,8-PeCDF
L2603308	WC-SCPD03-3.0-4.0	N	E1613B	1,2,3,6,7,8-HxCDF
K2106883	WC-SCPD03-2.0-3.0	N	SW8270DSIM	Naphthalene
K2106883	WC-SCPD03-2.0-3.0	N	SW8270DSIM	Acenaphthene
K2106883	WC-SCPD03-2.0-3.0	N	SW8270DSIM	Fluoranthene
K2106883	WC-SCPD03-2.0-3.0	N	SW8270DSIM	Benz[a]anthracene
K2106883	WC-SCPD03-2.0-3.0	N	SW8270DSIM	Benzo(a)pyrene
K2107598	WC-SCPD47-1.0-2.0	N	SW8082A	Aroclor 1260
K2107598	WC-SCPD47-2.0-3.0	N	SW8082A	Aroclor 1260
K2107598	WC-SCPD53A-4.0-5.0	N	E1699M	4,4'-DDT
K2107598	WC-SGPD12	N	E1699M	4,4'-DDT
L2611545	WC-SCPD47-1.0-2.0	N	E1613B	2,3,7,8-TCDF
L2611545	WC-SCPD47-1.0-2.0	N	E1613B	1,2,3,7,8-PeCDD
L2611545	WC-SCPD47-1.0-2.0	N	E1613B	1,2,3,4,7,8-HxCDF
L2611545	WC-SCPD53A-3.0-4.0	N	E1613B	2,3,7,8-TCDF
L2611545	WC-SCPD53A-3.0-4.0	N	E1613B	1,2,3,7,8-PeCDD
L2611545	WC-SCPD53A-3.0-4.0	N	E1613B	1,2,3,4,7,8-HxCDF
K2107598	WC-SCPD12	N	SW8270DSIM	Naphthalene
K2107598	WC-SCPD12	N	SW8270DSIM	Acenaphthene
K2107598	WC-SCPD12	N	SW8270DSIM	Fluoranthene
K2107598	WC-SCPD12	N	SW8270DSIM	Benz[a]anthracene
K2107598	WC-SCPD12	N	SW8270DSIM	Benzo(a)pyrene
K2108076	WC-SGPD18	N	SW8082A	Aroclor 1260
K2108076	WC-SGPD18	N	E1699M	4,4'-DDD
L2615164	WC-SGPD19	N	E1613B	2,3,7,8-TCDD
L2615164	WC-SGPD19	N	E1613B	2,3,4,7,8-PeCDF
L2615164	WC-SGPD19	N	E1613B	1,2,3,6,7,8-HxCDF
K2108076	WC-SGPD18	N	SW8270DSIM	Naphthalene
K2108076	WC-SGPD18	N	SW8270DSIM	Acenaphthene
K2108076	WC-SGPD18	N	SW8270DSIM	Fluoranthene
K2108076	WC-SGPD18	N	SW8270DSIM	Benz[a]anthracene
K2108076	WC-SGPD18	N	SW8270DSIM	Benzo(a)pyrene
L2645716	WC-SB02-0.0-1.0	N	E1613B	2,3,7,8-TCDF
L2645716	WC-SB02-0.0-1.0	N	E1613B	1,2,3,7,8-PeCDD
L2645716	WC-SB02-0.0-1.0	N	E1613B	1,2,3,4,7,8-HxCDF
L2645716	WC-SB02-0.0-1.0	N	E1668	PCB-003
L2645716	WC-SB02-0.0-1.0	N	E1668	PCB-118
L2645716	WC-SB02-0.0-1.0	N	E1699M	4,4'-DDE
K2111070	WC-SB02-0.0-1.0	N	SW8270DSIM	Naphthalene
K2111070	WC-SB02-0.0-1.0	N	SW8270DSIM	Acenaphthene
K2111070	WC-SB02-0.0-1.0	N	SW8270DSIM	Fluoranthene
K2111070	WC-SB02-0.0-1.0	N	SW8270DSIM	Benz[a]anthracene
K2111070	WC-SB02-0.0-1.0	N	SW8270DSIM	Benzo(a)pyrene
K2111955	WC-SCPD45-2.0-3.0	N	SW8082A	Aroclor 1260
K2111955	WC-SGPD49	N	SW8082A	Aroclor 1260
K2111955	WC-SCPD48-5.0-6.0	N	E1699M	4,4-DDE
K2111955	WC-SCPD52-6.0-7.0	N	E1699M	4,4-DDE
L2658841	WC-SCPD39-4.0-5.0	N	E1613B	2,3,7,8-TCDF
L2658841	WC-SCPD39-4.0-5.0	N	E1613B	1,2,3,7,8-PeCDD

Table H-19 - Samples/Analytical Results Recalculated during Stage 4a Validation
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

SDG	Sample ID	Sample Type	Method	Analyte Recalculated
L2658841	WC-SCPD39-4.0-5.0	N	E1613B	1,2,3,4,7,8-HxCDF
L2658841	WC-SCPD52-5.0-6.0	N	E1613B	2,3,7,8-TCDF
L2658841	WC-SCPD52-5.0-6.0	N	E1613B	1,2,3,7,8-PeCDD
L2658841	WC-SCPD52-5.0-6.0	N	E1613B	1,2,3,4,7,8-HxCDF
K2111955	WC-SCPD45-2.0-3.0	N	SW8270DSIM	Naphthalene
K2111955	WC-SCPD45-2.0-3.0	N	SW8270DSIM	Acenaphthene
K2111955	WC-SCPD45-2.0-3.0	N	SW8270DSIM	Fluoranthene
K2111955	WC-SCPD45-2.0-3.0	N	SW8270DSIM	Benz[a]anthracene
K2111955	WC-SCPD45-2.0-3.0	N	SW8270DSIM	Benzo(a)pyrene
K2200743	WC-SCPD22-8.0-8.7	N	SW8082A	Aroclor 1260
K2200743	WC-SCPD36-7.0-8.0	N	SW8082A	Aroclor 1260
K2200743	WC-SCPD22-8.0-8.7	N	E1613B	2,3,7,8-TCDD
K2200743	WC-SCPD22-8.0-8.7	N	E1613B	2,3,4,7,8-PeCDF
K2200743	WC-SCPD22-8.0-8.7	N	E1613B	1,2,3,6,7,8-HxCDF
K2200743	WC-SCPD22-8.0-8.7	N	E1699M	4,4'-DDD
K2200743	WC-SCPD36-7.0-8.0	N	E1699M	4,4'-DDD
K2200743	WC-SCPD22-8.0-8.7	N	SW8270DSIM	Naphthalene
K2200743	WC-SCPD22-8.0-8.7	N	SW8270DSIM	Acenaphthene
K2200743	WC-SCPD22-8.0-8.7	N	SW8270DSIM	Fluoranthene
K2200743	WC-SCPD22-8.0-8.7	N	SW8270DSIM	Benz[a]anthracene
K2200743	WC-SCPD22-8.0-8.7	N	SW8270DSIM	Benzo(a)pyrene

Notes:
FD = field duplicate
ID = Identifier
N = normal sample

Table H-20 - Number of Samples by Method Within Each SDG Chosen for Stage 4 Validation
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

SDGs Selected for Stage 4	Samples per method per SDG					
	E1613B	E1668	E1699M - DDX only	E1699M - Full List	SW8082A	SW8270DSIM
L2603308	4					
L2611545	14					
L2615164	6					
L2645716	4	4		4		
L2658841	17					
K2106883	4		4		4	4
K2107598			16		16	16
K2108076			6		6	6
K2111070						4
K2111955			19		19	19
K2200743	20		20		20	20
SUM	69	4	65	4	65	69

Notes:
DDX = dichlorodiphenyldichloroethane + dichlorodiphenyldichloroethene +dichlorodiphenyltrichloroethane
SDG = sample delivery group

Table H-21 - Overall Percent of Analytical Results Covered by Stage 4 Validation for Samples Collected June 14, 2021 through March 30, 2022
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Method	Total Count all Sample Types (N, FD, EB, MS, MSD)	Ten Percent of Samples in Database	Total Number of samples in all SDGs Selected for Stage 4 Validation	Number of Analytes per Method	Number of Sample Results in the 10 Percent of Samples from Column C	Number of Sample Results in the SDGs Selected for Stage 4 Validation from Column D
E1613B	372	37	69	17	632	1173
E1668	15	2	4	172	258	688
E1699M - DDX only	397	40	65	6	238	390
E1699M - Full List	13	1	4	14	18	56
SW8082A	398	40	65	39	1552	2535
SW8270DSIM	429	43	69	9	386	621

Notes:
DDX = dichlorodiphenyldichloroethane + dichlorodiphenyldichloroethene +dichlorodiphenyltrichloroethane
EB = equipment blank
FD = field duplicate
MS = matrix splike
MSD = matrix spike duplicate
N = normal sample
SDG = sample delivery group

Table H-22 - Equipment Blank Associations
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Equipment Blank	Associated Project Samples	Sample Date
EB-061721-01	WC-SCPD01-1.0-2.0	6/14/2021
EB-061721-02	WC-SCPD01-2.0-3.0	6/14/2021
	WC-SCPD01-3.0-4.0	6/14/2021
	WC-SCPD01-4.0-5.0	6/14/2021
	WC-SCPD03-1.0-2.0	6/14/2021
	WC-SCPD03-2.0-3.0	6/14/2021
	WC-SCPD03-3.0-4.0	6/14/2021
	WC-SCPD03-4.0-5.0	6/14/2021
	WC-SCPD03-8.0-9.0	6/14/2021
	WC-SCPD03-9.0-9.8	6/14/2021
	WC-SCPD05-1.0-2.0	6/14/2021
	WC-SCPD05-2.0-3.0	6/14/2021
	WC-SCPD05-3.0-4.0	6/14/2021
	WC-SCPD05-4.0-5.0	6/14/2021
	WC-SCPD05-5.0-6.0	6/14/2021
	WC-SCPD05-6.0-7.0	6/14/2021
	WC-SCPD06-1.0-2.0	6/15/2021
	WC-SCPD06-2.0-3.0	6/15/2021
	WC-SCPD06-3.0-4.0	6/15/2021
	WC-SCPD06-4.0-5.0	6/15/2021
	WC-SCPD06-5.0-6.0	6/15/2021
	WC-SCPD06-6.0-7.0	6/15/2021
	WC-SCPD07-1.0-2.0	6/15/2021
	WC-SCPD07-2.0-3.0	6/15/2021
	WC-SCPD07-3.0-4.0	6/15/2021
	WC-SCPD07-4.0-5.0	6/15/2021
	WC-SCPD07-5.0-6.0	6/15/2021
	WC-SCPD08-1.0-2.0	6/15/2021
	WC-SCPD08-2.0-3.0	6/15/2021
	WC-SCPD08-3.0-4.0	6/15/2021
	WC-SCPD08-4.0-5.0	6/15/2021
	WC-SCPD08-5.0-6.0	6/15/2021
	WC-SCPD08-6.0-7.0	6/15/2021
	WC-SCPD08-7.0-8.0	6/15/2021
	WC-SCPD30-1.0-2.0	6/15/2021
	WC-SCPD30-2.0-3.0	6/15/2021
	WC-SCPD30-3.0-4.0	6/15/2021
	WC-SCPD30-4.0-5.0	6/15/2021
	WC-SCPD30-8.0-9.0	6/15/2021
	WC-SCPD30-9.0-9.8	6/15/2021
	WC-SCPD30-7.0-8.0	6/15/2021
	WC-SCPD29-1.0-2.0	6/15/2021
	WC-SCPD29-2.0-3.0	6/15/2021
	WC-SCPD29-3.0-4.0	6/15/2021
	WC-SCPD29-4.0-5.0	6/15/2021
	WC-SCPD29-5.0-6.0	6/15/2021
	WC-SCPD29-6.0-7.0	6/15/2021
	WC-SCPD29-7.0-8.0	6/15/2021
	WC-SCPD22-1.0-2.0	6/16/2021
	WC-SCPD22-2.0-3.0	6/16/2021
	WC-SCPD22-3.0-4.0	6/16/2021
	WC-SCPD22-4.0-5.0	6/16/2021

Table H-22 - Equipment Blank Associations
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Equipment Blank	Associated Project Samples	Sample Date
	WC-SCPD22-7.0-8.0	6/16/2021
	WC-SCPD22-8.0-8.7	6/16/2021
	WC-SCPD33-1.0-2.0	6/16/2021
	WC-SCPD33-2.0-3.0	6/16/2021
	WC-SCPD33-3.0-4.0	6/16/2021
	WC-SCPD33-4.0-5.0	6/16/2021
	WC-SCPD11-1.0-2.0	6/16/2021
	WC-SCPD11-2.0-3.0	6/16/2021
	WC-SCPD11-3.0-4.0	6/16/2021
	WC-SCPD11-4.0-5.0	6/16/2021
	WC-SCPD11-5.0-6.0	6/16/2021
	WC-SCPD11-6.0-7.0	6/16/2021
	WC-SCPD11-7.0-8.0	6/16/2021
	WC-SCPD19-1.0-2.0	6/16/2021
	WC-SCPD19-2.0-3.0	6/16/2021
	WC-SCPD19-3.0-4.0	6/16/2021
	WC-SCPD19-4.0-5.0	6/16/2021
	WC-SCPD32-1.0-2.0	6/17/2021
	WC-SCPD32-2.0-3.0	6/17/2021
	WC-SCPD32-3.0-4.0	6/17/2021
	WC-SCPD32-4.0-5.0	6/17/2021
	WC-SCPD32-5.0-6.0	6/17/2021
	WC-SCPD32-6.0-7.0	6/17/2021
	WC-SCPD32-10.0-11.0	6/17/2021
	WC-SCPD32-13.0-14.0	6/17/2021
	WC-SCPD32-14.0-14.8	6/17/2021
	WC-SCPD32-9.0-10.0	6/17/2021
	WC-SCPD21-1.0-2.0	6/17/2021
	WC-SCPD21-2.0-3.0	6/17/2021
	WC-SCPD21-3.0-4.0	6/17/2021
	WC-SCPD21-4.0-5.0	6/17/2021
	WC-SCPD21-5.0-6.0	6/17/2021
	WC-SCPD21-6.0-7.0	6/17/2021
	WC-SCPD21-7.0-8.0	6/17/2021
	WC-SCPD21-8.0-8.8	6/17/2021
	WC-SCPD10-1.0-2.0	6/18/2021
	WC-SCPD10-2.0-3.0	6/18/2021
	WC-SCPD10-3.0-4.0	6/18/2021
	WC-SCPD10-4.0-5.0	6/18/2021
	WC-SCPD48-1.0-2.0	6/18/2021
	WC-SCPD48-2.0-3.0	6/18/2021
	WC-SCPD48-3.0-4.0	6/18/2021
	WC-SCPD48-3.0-4.0FD	6/18/2021
	WC-SCPD48-4.0-5.0	6/18/2021
	WC-SCPD48-5.0-6.0	6/18/2021
	WC-SCPD48-6.0-7.0	6/18/2021
	WC-SCPD48-7.0-8.0	6/18/2021
	WC-SCPD48-8.0-9.0	6/18/2021
	WC-SCPD48-9.0-9.5	6/18/2021
	WC-SCPD42-3.0-4.0	6/18/2021
	WC-SCPD42-4.0-5.0	6/18/2021
	WC-SCPD42-5.0-6.0	6/18/2021

Table H-22 - Equipment Blank Associations
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Equipment Blank	Associated Project Samples	Sample Date
	WC-SCPD42-6.0-7.0	6/18/2021
	WC-SCPD31-1.0-2.0	6/18/2021
	WC-SCPD31-2.0-3.0	6/18/2021
	WC-SCPD31-3.0-4.0	6/18/2021
	WC-SCPD31-4.0-5.0	6/18/2021
	WC-SCPD31-5.0-6.0	6/18/2021
	WC-SCPD31-6.0-7.0	6/18/2021
	WC-SCPD31-8.0-9.0	6/18/2021
	WC-SCPD31-10.0-11.0	6/18/2021
	WC-SCPD31-11.0-12.0	6/18/2021
EB-062421-01	WC-SCPD36-1.0-2.0	6/21/2021
	WC-SCPD36-2.0-3.0	6/21/2021
	WC-SCPD36-3.0-4.0	6/21/2021
	WC-SCPD36-4.0-5.0	6/21/2021
	WC-SCPD36-5.0-6.0	6/21/2021
	WC-SCPD36-6.0-7.0	6/21/2021
	WC-SCPD36-7.0-8.0	6/21/2021
	WC-SCPD36-8.0-9.0	6/21/2021
	WC-SCPD36-11.0-12.0	6/21/2021
	WC-SCPD36-12.0-12.9	6/21/2021
	WC-SCPD44-1.0-2.0	6/21/2021
	WC-SCPD44-2.0-3.0	6/21/2021
	WC-SCPD44-3.0-4.0	6/21/2021
	WC-SCPD44-4.0-5.0	6/21/2021
	WC-SCPD44-7.0-8.0	6/21/2021
	WC-SCPD44-8.0-8.9	6/21/2021
	WC-SCPD28-1.0-2.0	6/22/2021
	WC-SCPD28-2.0-3.0	6/22/2021
	WC-SCPD28-3.0-4.0	6/22/2021
	WC-SCPD28-4.0-5.0	6/22/2021
	WC-SCPD28-4.0-5.0FD	6/22/2021
	WC-SCPD45-1.0-2.0	6/22/2021
	WC-SCPD45-2.0-3.0	6/22/2021
	WC-SCPD45-3.0-4.0	6/22/2021
	WC-SCPD45-4.0-5.0	6/22/2021
	WC-SCPD45-5.0-6.0	6/22/2021
	WC-SCPD37-1.0-2.0	6/22/2021
	WC-SCPD37-2.0-3.0	6/22/2021
	WC-SCPD37-3.0-4.0	6/22/2021
	WC-SCPD37-4.0-5.0	6/22/2021
	WC-SCPD37-10.0-10.9	6/22/2021
	WC-SCPD37-6.0-7.0	6/22/2021
	WC-SCPD37-7.0-8.0	6/22/2021
	WC-SCPD37-9.0-10.0	6/22/2021
	WC-SCPD24-1.0-2.0	6/22/2021
	WC-SCPD24-2.0-3.0	6/22/2021
	WC-SCPD24-3.0-4.0	6/22/2021
	WC-SCPD24-4.0-5.0	6/22/2021
	WC-SCPD14-1.0-2.0	6/23/2021
	WC-SCPD14-2.0-3.0	6/23/2021
	WC-SCPD14-3.0-4.0	6/23/2021
	WC-SCPD14-4.0-5.0	6/23/2021

Table H-22 - Equipment Blank Associations
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Equipment Blank	Associated Project Samples	Sample Date
	WC-SCPD23-1.0-2.0	6/23/2021
	WC-SCPD23-2.0-3.0	6/23/2021
	WC-SCPD23-3.0-4.0	6/23/2021
	WC-SCPD23-4.0-5.0	6/23/2021
	WC-SCPD40-1.0-2.0	6/23/2021
	WC-SCPD40-2.0-3.0	6/23/2021
	WC-SCPD40-3.0-4.0	6/23/2021
	WC-SCPD40-4.0-5.0	6/23/2021
	WC-SCPD40-8.0-9.0	6/23/2021
	WC-SCPD40-9.0-9.5	6/23/2021
	WC-SCPD41-7.0-8.0	6/23/2021
	WC-SCPD41-8.0-8.8	6/23/2021
	WC-SCPD41-1.0-2.0	6/23/2021
	WC-SCPD41-2.0-3.0	6/23/2021
	WC-SCPD41-3.0-4.0	6/23/2021
	WC-SCPD41-4.0-5.0	6/23/2021
	WC-SCPD25-1.0-2.0	6/23/2021
	WC-SCPD25-2.0-3.0	6/23/2021
	WC-SCPD25-3.0-4.0	6/23/2021
	WC-SCPD25-4.0-5.0	6/23/2021
	WC-SCPD27-1.0-2.0	6/24/2021
	WC-SCPD27-2.0-3.0	6/24/2021
	WC-SCPD27-3.0-4.0	6/24/2021
	WC-SCPD27-4.0-5.0	6/24/2021
	WC-SCPD39-1.0-2.0	6/24/2021
	WC-SCPD39-2.0-3.0	6/24/2021
	WC-SCPD39-3.0-4.0	6/24/2021
	WC-SCPD39-4.0-5.0	6/24/2021
	WC-SCPD39-8.0-9.0	6/24/2021
	WC-SCPD39-9.0-10.0	6/24/2021
	WC-SCPD39-12.0-13.0	6/24/2021
	WC-SCPD39-13.0-13.9	6/24/2021
	WC-SCPD50-1.0-2.0	6/24/2021
	WC-SCPD50-2.0-3.0	6/24/2021
	WC-SCPD50-3.0-4.0	6/24/2021
	WC-SCPD50-4.0-5.0	6/24/2021
	WC-SCPD46-1.0-2.0	6/24/2021
	WC-SCPD46-2.0-3.0	6/24/2021
	WC-SCPD46-3.0-4.0	6/24/2021
	WC-SCPD46-4.0-5.0	6/24/2021
	WC-SCPD46-5.0-6.0	6/24/2021
	WC-SCPD46-6.0-7.0	6/24/2021
	WC-SCPD46-12.0-13.0	6/24/2021
	WC-SCPD46-13.0-14.0	6/24/2021
	WC-SCPD46-8.0-9.0	6/24/2021
	WC-SCPD46-9.0-10.0	6/24/2021
	WC-SCPD52-1.0-2.0	6/25/2021
	WC-SCPD52-2.0-3.0	6/25/2021
	WC-SCPD52-3.0-4.0	6/25/2021
	WC-SCPD52-4.0-5.0	6/25/2021
	WC-SCPD52-5.0-6.0	6/25/2021
	WC-SCPD52-6.0-7.0	6/25/2021

Table H-22 - Equipment Blank Associations
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Equipment Blank	Associated Project Samples	Sample Date
	WC-SCPD52-7.0-8.0	6/25/2021
	WC-SCPD52-8.0-9.0	6/25/2021
	WC-SCPD52-9.0-9.2	6/25/2021
	WC-SCPD38-1.0-2.0	6/25/2021
	WC-SCPD38-2.0-3.0	6/25/2021
	WC-SCPD38-3.0-4.0	6/25/2021
	WC-SCPD38-4.0-5.0	6/25/2021
	WC-SCPD38-9.0-10.0	6/25/2021
	WC-SCPD38-10.0-11.0	6/25/2021
	WC-SCPD38-13.0-14.0	6/25/2021
	WC-SCPD38-14.0-14.3	6/25/2021
	WC-SCPD35-1.0-2.0	6/25/2021
	WC-SCPD35-2.0-3.0	6/25/2021
	WC-SCPD35-2.0-3.0FD	6/25/2021
	WC-SCPD35-3.0-4.0	6/25/2021
	WC-SCPD35-4.0-5.0	6/25/2021
	WC-SCPD35-5.0-6.0	6/25/2021
	WC-SCPD35-6.0-7.0	6/25/2021
	WC-SCPD35-10.0-11.0	6/25/2021
	WC-SCPD35-11.0-12.0	6/25/2021
EB-063021-01	WC-SGPD12	6/29/2021
	WC-SGPD20	6/29/2021
	WC-SCPD47-1.0-2.0	6/29/2021
	WC-SCPD47-2.0-3.0	6/29/2021
	WC-SCPD47-3.0-4.0	6/29/2021
	WC-SGPD34	6/29/2021
	WC-SCPD47-4.0-5.0	6/29/2021
	WC-SGPD16	6/29/2021
	WC-SGPD43	6/29/2021
	WC-SGPD26	6/29/2021
	WC-SCPD53A-1.0-2.0	6/29/2021
	WC-SCPD53A-2.0-3.0	6/29/2021
	WC-SCPD53A-3.0-4.0	6/29/2021
	WC-SCPD53A-4.0-5.0	6/29/2021
	WC-SCPD53A-8.0-9.0	6/29/2021
	WC-SCPD53A-9.0-9.4	6/29/2021
	WC-SCPD09-1.0-2.0	6/30/2021
	WC-SCPD09-2.0-3.0	6/30/2021
	WC-SCPD09-3.0-4.0	6/30/2021
	WC-SCPD09-4.0-5.0	6/30/2021
	WC-SGPD38	6/30/2021
	WC-SGPD35	6/30/2021
	WC-SGPD31	6/30/2021
	WC-SGPD29	6/30/2021
	WC-SGPD21	6/30/2021
	WC-SCPD18-1.0-2.0	6/30/2021
	WC-SCPD18-1.0-2.0FD	6/30/2021
	WC-SCPD18-2.0-3.0	6/30/2021
	WC-SCPD18-3.0-4.0	6/30/2021
	WC-SCPD18-4.0-5.0	6/30/2021
	WC-SGPD11	6/30/2021
	WC-SGPD22	6/30/2021

Table H-22 - Equipment Blank Associations
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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Equipment Blank	Associated Project Samples	Sample Date
	WC-SGPD30	6/30/2021
EB-070121-01	WC-SGPD02	7/1/2021
EB-070121-02	WC-SGPD03	7/1/2021
	WC-SGPD04	7/1/2021
	WC-SGPD01	7/1/2021
	WC-SGPD05	7/1/2021
	WC-SGPD08	7/1/2021
	WC-SGPD06A	7/2/2021
	WC-SGPD07A	7/2/2021
	WC-SGPD33	7/2/2021
	WC-SGPD37	7/2/2021
	WC-SGPD39	7/2/2021
	WC-SGPD36	7/2/2021
	WC-SGPD36FD	7/2/2021
EB-070921-01	WC-SGPD32	7/6/2021
EB-070921-02	WC-SGPD13	7/6/2021
	WC-SGPD14	7/6/2021
	WC-SGPD15	7/6/2021
	WC-SGPD23	7/7/2021
	WC-SGPD25	7/7/2021
	WC-SGPD40	7/7/2021
	WC-SGPD09	7/9/2021
	WC-SGPD27	7/7/2021
	WC-SGPD41	7/7/2021
	WC-SGPD42	7/7/2021
	WC-SGPD47	7/7/2021
	WC-SGPD48	7/7/2021
	WC-SGPD44	7/8/2021
	WC-SGPD46	7/8/2021
	WC-SGPD53	7/8/2021
	WC-SGPD52	7/8/2021
	WC-SGPD50	7/8/2021
	WC-SGPD49	7/8/2021
	WC-SGPD45	7/8/2021
	WC-SGPD28	7/8/2021
	WC-SGPD24	7/8/2021
	WC-SGPD10	7/9/2021
	WC-SGPD17	7/9/2021
	WC-SGPD17FD	7/9/2021
	WC-SGPD18	7/9/2021
	WC-SGPD19	7/9/2021
EB-092221-01	WC-SB11-0.0-1.0	9/20/2021
	WC-SB11-0.0-1.0FD	9/20/2021
	WC-SB11-1.0-2.0	9/20/2021
	WC-SB11-2.0-3.0	9/20/2021
	WC-SB11-3.0-4.0	9/20/2021
	WC-SB11-4.0-5.0	9/20/2021
	WC-SB12-0.0-1.0	9/20/2021
	WC-SB10-0.0-1.0	9/21/2021
	WC-SB02-0.0-1.0	9/21/2021
EB-092321-01	WC-SB09-0.0-1.0	9/22/2021
	WC-SB03-0.0-1.0	9/22/2021

Table H-22 - Equipment Blank Associations
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Equipment Blank	Associated Project Samples	Sample Date
	WC-SB04-0.0-1.0	9/22/2021
	WC-SB01-0.0-1.0	9/23/2021
WC-EB01-030922	WC-SCPD12A-1.0-2.0	3/8/2022
	WC-SCPD12A-2.0-3.0	3/8/2022
	WC-SCPD12A-3.0-4.0	3/8/2022
	WC-SCPD12A-4.0-4.8	3/8/2022
	WC-SCPD20A-1.0-2.0	3/8/2022
	WC-SCPD20A-2.0-3.0	3/8/2022
	WC-SCPD20A-3.0-4.0	3/8/2022
	WC-SGPD12A	3/8/2022
	WC-SGPD20A	3/8/2022
	WC-SGPD20AFD	3/8/2022
	WC-SCPD34A-1.0-2.0	3/9/2022
	WC-SCPD34A-2.0-3.0	3/9/2022
	WC-SCPD34A-3.0-3.3	3/9/2022
	WC-SGPD16A	3/9/2022
	WC-SGPD26A	3/9/2022
	WC-SGPD34A	3/9/2022
	WC-SGPD43A	3/9/2022
WC-EB01-03302022	WC-SCPD16A-1.0-2.0	3/30/2022
	WC-SCPD16A-2.0-3.0	3/30/2022
	WC-SCPD16A-3.0-4.0	3/30/2022
	WC-SCPD16A-4.0-4.3	3/30/2022
	WC-SCPD26A-1.0-2.0	3/30/2022
	WC-SCPD26A-2.0-3.0	3/30/2022
	WC-SCPD26A-3.0-4.0	3/30/2022
	WC-SCPD43A-1.0-2.0	3/30/2022
	WC-SCPD43A-2.0-3.0	3/30/2022
	WC-SCPD43A-3.0-4.0	3/30/2022

EB = equipment blank

Table H-23 - Equipment Blank Detections
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

SDG	Equipment Blank ID	Method	Analyte	Result	Flag	Units
K2107395	EB-062421-01	SW8270DSIM	Naphthalene	0.005	J	µg/l
K2107637	EB-063021-01	SW8270DSIM	Benzo(a)anthracene	0.0028	J	µg/l
K2107637	EB-063021-01	SW8270DSIM	Phenanthrene	0.0018	J	µg/l
K2107700	EB-070121-01	SW8270DSIM	Benzo(a)anthracene	0.0022	J	µg/l
K2107700	EB-070121-01	SW8270DSIM	Fluoranthene	0.001	J	µg/l
K2107700	EB-070121-01	SW8270DSIM	Phenanthrene	0.0015	J	µg/l
K2107700	EB-070121-01	SW8270DSIM	Pyrene	0.0013	J	µg/l
K2107700	EB-070121-02	SW8270DSIM	Benzo(a)anthracene	0.0026	J	µg/l
K2107700	EB-070121-02	SW8270DSIM	Phenanthrene	0.0037	J	µg/l
K2107700	EB-070121-02	SW8270DSIM	Pyrene	0.0014	J	µg/l
K2108143	EB-070921-01	SW8270DSIM	2-Methylnaphthalene	0.0061	J	µg/l
K2108143	EB-070921-01	SW8270DSIM	Dibenzofuran	0.0014	J	µg/l
K2108143	EB-070921-01	SW8270DSIM	Naphthalene	0.017	J	µg/l
K2108143	EB-070921-01	SW8270DSIM	Phenanthrene	0.0032	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	2-Methylnaphthalene	0.0018	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	Acenaphthene	0.002	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	Benzo(a)anthracene	0.0042	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	Benzo(g,h,i)perylene	0.0012	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	Chrysene	0.003	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	Dibenzofuran	0.0019	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	Fluoranthene	0.0089	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	Fluorene	0.002	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	Naphthalene	0.0026	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	Phenanthrene	0.012	J	µg/l
K2108143	EB-070921-02	SW8270DSIM	Pyrene	0.011	J	µg/l
K2108143	EB-071221-01	SW8270DSIM	Naphthalene	0.0017	J	µg/l
K2108143	EB-071221-01	SW8270DSIM	Phenanthrene	0.0016	J	µg/l
K2108143	EB-071221-02	SW8270DSIM	Naphthalene	0.0018	J	µg/l
K2108143	EB-071221-02	SW8270DSIM	Phenanthrene	0.0028	J	µg/l
K2111196	EB-092221-01	NWTPH-Dx	Diesel Range Organics	54	J	µg/l
K2111196	EB-092221-01	NWTPH-Dx	Residual Range Organics (C25-C36)	140	J	µg/l
K2111196	EB-092221-01	SW8270D-LL	Bis (2-ethylhexyl) phthalate	0.24	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	2-Methylnaphthalene	0.0079	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Acenaphthylene	0.0023	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Anthracene	0.0016	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Benzo(a)anthracene	0.005	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Benzo(a)pyrene	0.002	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Benzo(b)fluoranthene	0.012	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Benzo(g,h,i)perylene	0.0097	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Benzo(k)fluoranthene	0.01	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Chrysene	0.0088	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Dibenzo(a,h)anthracene	0.0094	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Dibenzofuran	0.0025	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Fluorene	0.0017	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.014	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Naphthalene	0.016	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Phenanthrene	0.0034	J	µg/l
K2111196	EB-092221-01	SW8270DSIM	Pyrene	0.0012	J	µg/l
K2111196	EB-092321-01	NWTPH-Dx	Diesel Range Organics	57	J	µg/l
K2111196	EB-092321-01	NWTPH-Dx	Residual Range Organics (C25-C36)	140	J	µg/l
K2111196	EB-092321-01	SW6020B	Lead	0.033		µg/l
K2111196	EB-092321-01	SW6020B	Zinc	0.6	J	µg/l
K2111196	EB-092321-01	SW8270D-LL	Bis (2-ethylhexyl) phthalate	0.5	J	µg/l
K2111196	EB-092321-01	SW8270DSIM	2-Methylnaphthalene	0.0044	J	µg/l
K2111196	EB-092321-01	SW8270DSIM	Acenaphthene	0.026		µg/l
K2111196	EB-092321-01	SW8270DSIM	Benzo(a)anthracene	0.0021	J	µg/l
K2111196	EB-092321-01	SW8270DSIM	Benzo(g,h,i)perylene	0.001	J	µg/l
K2111196	EB-092321-01	SW8270DSIM	Dibenzofuran	0.0012	J	µg/l
K2111196	EB-092321-01	SW8270DSIM	Naphthalene	0.013	J	µg/l
K2111196	EB-092321-01	SW8270DSIM	Phenanthrene	0.0038	J	µg/l
L2606300	EB-061721-01	E1613B	1,2,3,4,6,7,8-HpCDD	0.0000015	J	µg/l
L2606300	EB-061721-01	E1613B	1,2,3,7,8,9-HxCDF	0.00000083	J	µg/l
L2606300	EB-061721-01	E1613B	OCDD	0.00000873	J	µg/l
L2606300	EB-061721-02	E1613B	1,2,3,4,6,7,8-HpCDD	0.0000022	J	µg/l
L2606300	EB-061721-02	E1613B	OCDD	0.0000092	J	µg/l
L2611619	EB-063021-01	E1613B	1,2,3,4,6,7,8-HpCDD	0.00000062	J	µg/l
L2611632	EB-070121-01	E1613B	1,2,3,4,6,7,8-HpCDF	0.00000018	J	µg/l
L2611632	EB-070121-01	E1613B	1,2,3,7,8,9-HxCDF	0.00000032	J	µg/l

Table H-23 - Equipment Blank Detections
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
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SDG	Equipment Blank ID	Method	Analyte	Result	Flag	Units
L2611632	EB-070121-01	E1613B	1,2,3,7,8-PeCDF	0.00000025	J	µg/l
L2611632	EB-070121-01	E1613B	OCDD	0.00000357	J	µg/l
L2611632	EB-070121-02	E1613B	1,2,3,7,8,9-HxCDF	0.000000481	J	µg/l
L2611632	EB-070121-02	E1613B	OCDD	0.00000407	J	µg/l
L2611632	EB-070121-02	E1613B	OCDF	0.00000072	J	µg/l
L2611632	EB-070121-02	E1613B	Total HxCDF	0.000000481		µg/l
L2615154	EB-071321-01	E1613B	1,2,3,6,7,8-HxCDD	0.000000518	J	µg/l
L2615154	EB-071321-01	E1613B	1,2,3,7,8-PeCDF	0.000000474	J	µg/l
L2615154	EB-071321-01	E1613B	Total HxCDD	0.000000518		µg/l
L2615154	EB-071321-01	E1613B	Total PeCDF	0.000000474		µg/l
L2615154	EB-071321-02	E1613B	OCDD	0.0000175	J	µg/l
L2615157	EB-070921-01	E1613B	1,2,3,4,6,7,8-HpCDD	0.0000017	J	µg/l
L2615157	EB-070921-01	E1613B	1,2,3,4,6,7,8-HpCDF	0.000000634	J	µg/l
L2615157	EB-070921-01	E1613B	1,2,3,4,7,8-HxCDF	0.00000026	J	µg/l
L2615157	EB-070921-01	E1613B	1,2,3,7,8,9-HxCDD	0.000000271	J	µg/l
L2615157	EB-070921-01	E1613B	1,2,3,7,8,9-HxCDF	0.00000058	J	µg/l
L2615157	EB-070921-01	E1613B	1,2,3,7,8-PeCDF	0.00000047	J	µg/l
L2615157	EB-070921-01	E1613B	OCDD	0.0000168	J	µg/l
L2615157	EB-070921-01	E1613B	OCDF	0.00000289	J	µg/l
L2615157	EB-070921-01	E1613B	Total HpCDF	0.000000634		µg/l
L2615157	EB-070921-01	E1613B	Total HxCDD	0.000000271		µg/l
L2615157	EB-070921-02	E1613B	1,2,3,4,6,7,8-HpCDD	0.0000012	J	µg/l
L2615157	EB-070921-02	E1613B	1,2,3,4,6,7,8-HpCDF	0.00000058	J	µg/l
L2615157	EB-070921-02	E1613B	1,2,3,7,8,9-HxCDF	0.00000047	J	µg/l
L2615157	EB-070921-02	E1613B	OCDD	0.000016	J	µg/l
L2615157	EB-070921-02	E1613B	OCDF	0.0000023	J	µg/l
L2615157	EB-071221-01	E1613B	1,2,3,4,6,7,8-HpCDD	0.00000097	J	µg/l
L2615157	EB-071221-01	E1613B	OCDD	0.0000131	J	µg/l
L2615157	EB-071221-01	E1613B	OCDF	0.000001	J	µg/l
L2615157	EB-071221-01	E1613B	Total HpCDD	0.00000128		µg/l
L2615157	EB-071221-02	E1613B	1,2,3,4,6,7,8-HpCDD	0.0000013	J	µg/l
L2615157	EB-071221-02	E1613B	1,2,3,4,6,7,8-HpCDF	0.00000031	J	µg/l
L2615157	EB-071221-02	E1613B	1,2,3,7,8,9-HxCDF	0.00000066	J	µg/l
L2615157	EB-071221-02	E1613B	2,3,4,7,8-PeCDF	0.0000002	J	µg/l
L2615157	EB-071221-02	E1613B	OCDD	0.000014	J	µg/l
L2615157	EB-071221-02	E1613B	OCDF	0.000001	J	µg/l
L2615157	EB-071221-02	E1613B	Total HpCDD	0.0000013		µg/l
L2645768	EB-092221-01	E1613B	1,2,3,4,6,7,8-HpCDD	1.2	J	pg/l
L2645768	EB-092221-01	E1613B	1,2,3,4,6,7,8-HpCDF	1.9	J	pg/l
L2645768	EB-092221-01	E1613B	1,2,3,4,7,8,9-HpCDF	0.76	J	pg/l
L2645768	EB-092221-01	E1613B	1,2,3,7,8,9-HxCDD	0.88	J	pg/l
L2645768	EB-092221-01	E1613B	1,2,3,7,8,9-HxCDF	1.4	J	pg/l
L2645768	EB-092221-01	E1613B	OCDD	4.7	J	pg/l
L2645768	EB-092221-01	E1613B	OCDF	2.3	J	pg/l
L2645768	EB-092221-01	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.83	J	pg/l
L2645768	EB-092221-01	E1668	Decachlorobiphenyl	17.7	J	pg/l
L2645768	EB-092221-01	E1668	Dichlorobiphenyl	43.5	J	pg/l
L2645768	EB-092221-01	E1668	Heptachlorobiphenyl	6.78	J	pg/l
L2645768	EB-092221-01	E1668	Hexachlorobiphenyl	13.4	J	pg/l
L2645768	EB-092221-01	E1668	Monochlorobiphenyl	2.8	J	pg/l
L2645768	EB-092221-01	E1668	Octachlorobiphenyl	3.96	J	pg/l
L2645768	EB-092221-01	E1668	PCB, Total	160	J	pg/l
L2645768	EB-092221-01	E1668	PCB-085/110/115/116/117	6.39	J	pg/l
L2645768	EB-092221-01	E1668	PCB-11	37.2	J	pg/l
L2645768	EB-092221-01	E1668	PCB-118	4.5	J	pg/l
L2645768	EB-092221-01	E1668	PCB-129/138/163	3.8	J	pg/l
L2645768	EB-092221-01	E1668	PCB-132	1.28	J	pg/l
L2645768	EB-092221-01	E1668	PCB-135/151	1.68	J	pg/l
L2645768	EB-092221-01	E1668	PCB-147/149	2.41	J	pg/l
L2645768	EB-092221-01	E1668	PCB-153/168	3.16	J	pg/l
L2645768	EB-092221-01	E1668	PCB-167	0.48	J	pg/l
L2645768	EB-092221-01	E1668	PCB-169	0.59	J	pg/l
L2645768	EB-092221-01	E1668	PCB-170	0.77	J	pg/l
L2645768	EB-092221-01	E1668	PCB-174	1.11	J	pg/l
L2645768	EB-092221-01	E1668	PCB-18/30	3.4	J	pg/l
L2645768	EB-092221-01	E1668	PCB-180/193	2.27	J	pg/l
L2645768	EB-092221-01	E1668	PCB-187	1.8	J	pg/l
L2645768	EB-092221-01	E1668	PCB-194	2.5	J	pg/l

Table H-23 - Equipment Blank Detections
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

SDG	Equipment Blank ID	Method	Analyte	Result	Flag	Units
L2645768	EB-092221-01	E1668	PCB-198/199	1.46	J	pg/l
L2645768	EB-092221-01	E1668	PCB-20/28	9.2	J	pg/l
L2645768	EB-092221-01	E1668	PCB-21/33	5.41	J	pg/l
L2645768	EB-092221-01	E1668	PCB-3	2.8	J	pg/l
L2645768	EB-092221-01	E1668	PCB-31	8.49	J	pg/l
L2645768	EB-092221-01	E1668	PCB-37	3.28	J	pg/l
L2645768	EB-092221-01	E1668	PCB-44/47/65	6.8	J	pg/l
L2645768	EB-092221-01	E1668	PCB-49/69	1.92	J	pg/l
L2645768	EB-092221-01	E1668	PCB-52	2.8	J	pg/l
L2645768	EB-092221-01	E1668	PCB-61/70/74/76	5	J	pg/l
L2645768	EB-092221-01	E1668	PCB-66	4.25	J	pg/l
L2645768	EB-092221-01	E1668	PCB-8	6.3	J	pg/l
L2645768	EB-092221-01	E1668	PCB-86/87/97/108/119/125	3.3	J	pg/l
L2645768	EB-092221-01	E1668	PCB-90/101/113	3.94	J	pg/l
L2645768	EB-092221-01	E1668	PCB-95	3.18	J	pg/l
L2645768	EB-092221-01	E1668	Pentachlorobiphenyl	21.3	J	pg/l
L2645768	EB-092221-01	E1668	Tetrachlorobiphenyl	20.8	J	pg/l
L2645768	EB-092221-01	E1668	Trichlorobiphenyl	29.8	J	pg/l
L2645768	EB-092321-01	E1613B	1,2,3,4,6,7,8-HpCDD	2.1	J	pg/l
L2645768	EB-092321-01	E1613B	1,2,3,4,6,7,8-HpCDF	1	J	pg/l
L2645768	EB-092321-01	E1613B	OCDD	11.9	J	pg/l
L2645768	EB-092321-01	E1668	2,2',3,4,4',5,6-Heptachlorobiphenyl	0.97	J	pg/l
L2645768	EB-092321-01	E1668	Decachlorobiphenyl	14.3	J	pg/l
L2645768	EB-092321-01	E1668	Dichlorobiphenyl	55.2	J	pg/l
L2645768	EB-092321-01	E1668	Heptachlorobiphenyl	13.2	J	pg/l
L2645768	EB-092321-01	E1668	Hexachlorobiphenyl	19.5	J	pg/l
L2645768	EB-092321-01	E1668	Octachlorobiphenyl	8.47	J	pg/l
L2645768	EB-092321-01	E1668	PCB, Total	215	J	pg/l
L2645768	EB-092321-01	E1668	PCB-085/110/115/116/117	7.73	J	pg/l
L2645768	EB-092321-01	E1668	PCB-105	2.09	J	pg/l
L2645768	EB-092321-01	E1668	PCB-11	42.5	J	pg/l
L2645768	EB-092321-01	E1668	PCB-118	5.7	J	pg/l
L2645768	EB-092321-01	E1668	PCB-128/166	0.95	J	pg/l
L2645768	EB-092321-01	E1668	PCB-129/138/163	5.46	J	pg/l
L2645768	EB-092321-01	E1668	PCB-132	1.7	J	pg/l
L2645768	EB-092321-01	E1668	PCB-135/151	0.9	J	pg/l
L2645768	EB-092321-01	E1668	PCB-136	0.627	J	pg/l
L2645768	EB-092321-01	E1668	PCB-141	1.33	J	pg/l
L2645768	EB-092321-01	E1668	PCB-147/149	2.68	J	pg/l
L2645768	EB-092321-01	E1668	PCB-15	5.5	J	pg/l
L2645768	EB-092321-01	E1668	PCB-153/168	4.9	J	pg/l
L2645768	EB-092321-01	E1668	PCB-155	0.32	J	pg/l
L2645768	EB-092321-01	E1668	PCB-158	0.593	J	pg/l
L2645768	EB-092321-01	E1668	PCB-170	1.1	J	pg/l
L2645768	EB-092321-01	E1668	PCB-174	1.1	J	pg/l
L2645768	EB-092321-01	E1668	PCB-18/30	4.72	J	pg/l
L2645768	EB-092321-01	E1668	PCB-180/193	7.8	J	pg/l
L2645768	EB-092321-01	E1668	PCB-187	2.2	J	pg/l
L2645768	EB-092321-01	E1668	PCB-194	3.6	J	pg/l
L2645768	EB-092321-01	E1668	PCB-196	0.51	J	pg/l
L2645768	EB-092321-01	E1668	PCB-198/199	2.66	J	pg/l
L2645768	EB-092321-01	E1668	PCB-20/28	10.4	J	pg/l
L2645768	EB-092321-01	E1668	PCB-203	1.7	J	pg/l
L2645768	EB-092321-01	E1668	PCB-21/33	7.1	J	pg/l
L2645768	EB-092321-01	E1668	PCB-22	5.47	J	pg/l
L2645768	EB-092321-01	E1668	PCB-31	8.07	J	pg/l
L2645768	EB-092321-01	E1668	PCB-37	3.2	J	pg/l
L2645768	EB-092321-01	E1668	PCB-40/41/71	3.1	J	pg/l
L2645768	EB-092321-01	E1668	PCB-44/47/65	7.68	J	pg/l
L2645768	EB-092321-01	E1668	PCB-49/69	3.31	J	pg/l
L2645768	EB-092321-01	E1668	PCB-52	4.03	J	pg/l
L2645768	EB-092321-01	E1668	PCB-61/70/74/76	9.02	J	pg/l
L2645768	EB-092321-01	E1668	PCB-64	1.8	J	pg/l
L2645768	EB-092321-01	E1668	PCB-66	4.3	J	pg/l
L2645768	EB-092321-01	E1668	PCB-8	7.2	J	pg/l
L2645768	EB-092321-01	E1668	PCB-83/99	2.57	J	pg/l
L2645768	EB-092321-01	E1668	PCB-84	1.8	J	pg/l
L2645768	EB-092321-01	E1668	PCB-86/87/97/108/119/125	5.6	J	pg/l

Table H-23 - Equipment Blank Detections
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

SDG	Equipment Blank ID	Method	Analyte	Result	Flag	Units
L2645768	EB-092321-01	E1668	PCB-90/101/113	4	J	pg/l
L2645768	EB-092321-01	E1668	PCB-95	3.02	J	pg/l
L2645768	EB-092321-01	E1668	Pentachlorobiphenyl	32.5	J	pg/l
L2645768	EB-092321-01	E1668	Tetrachlorobiphenyl	33.2	J	pg/l
L2645768	EB-092321-01	E1668	Trichlorobiphenyl	39	J	pg/l
K2202673	WC-EB01-030922	E1613B	1,2,3,4,6,7,8-HpCDF	0.00000154	J	µg/l
K2202673	WC-EB01-030922	E1613B	OCDD	0.00000736	J	µg/l
K2202673	WC-EB01-030922	E1613B	OCDF	0.00000472	J	µg/l
K2202673	WC-EB01-030922	E1613B	Total HpCDF	0.00000154	J	µg/l
K2202673	WC-EB01-030922	SW8270DSIM	2-Methylnaphthalene	0.004	J	µg/l
K2202673	WC-EB01-030922	SW8270DSIM	Naphthalene	0.014	J	µg/l
K2203345	WC-EB01-03302022	E1613B	1,2,3,4,6,7,8-HpCDF	0.0000183	J	µg/l
K2203345	WC-EB01-03302022	E1613B	1,2,3,6,7,8-HxCDD	0.0000016	J	µg/l
K2203345	WC-EB01-03302022	E1613B	2,3,7,8-TCDD	0.0000028	J	µg/l
K2203345	WC-EB01-03302022	E1613B	OCDF	0.000029	J	µg/l
K2203345	WC-EB01-03302022	E1613B	Total HpCDF	0.0000209	J	µg/l
K2203345	WC-EB01-03302022	E1613B	Total HxCDD	0.0000016	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	2-Methylnaphthalene	0.0062	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Acenaphthylene	0.0025	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Anthracene	0.0015	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Benzo(a)anthracene	0.0038	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Benzo(b)fluoranthene	0.002	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Benzo(g,h,i)perylene	0.0035	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Benzo(k)fluoranthene	0.0011	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Chrysene	0.0017	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Dibenzo(a,h)anthracene	0.0018	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Dibenzofuran	0.0021	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Fluoranthene	0.002	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Fluorene	0.0092	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Indeno(1,2,3-cd)pyrene	0.0023	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Naphthalene	0.0079	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Phenanthrene	0.0099	J	µg/l
K2203345	WC-EB01-03302022	SW8270DSIM	Pyrene	0.0019	J	µg/l

Notes:
EB = equipment blank
µg/l = microgram per liter
pg/l = picogram per liter
SDG = sample delivery group

Table H-24 - Polychlorinated Biphenyl Aroclor Samples Selected for Congener Analysis
Portland Harbor Superfund Site, Willbridge Cove Project Area, Portland, Oregon
Phase 1 Pre-Design Investigation, Data Quality Evaluation Report

Sample ID	Sample Type	Date Sampled
WC-SGPD12	N	6/29/2021
WC-SGPD20	N	6/29/2021

Notes:
ID = Identifier
N = normal sample