

January 10, 2024

VIA ELECTRONIC FILING

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street SE, Suite 100
Salem, OR 97301-3398

Re: Docket UE 219—PacifiCorp’s Compliance Filing

On July 29, 2021, the Public Utility Commission of Oregon (Commission) issued Order No. 21-242, adopting staff recommendations to approve PacifiCorp d/b/a Pacific Power’s (PacifiCorp or the Company) Application for Approval of a Property Transfer Agreement with the Klamath River Renewal Corporation (KRRC), subject to the several conditions. Those conditions included the following three requirements regarding reports provided to KRRC and the states of Oregon and California (the States):

4. *PacifiCorp shall file in this docket any written report it provides to KRRC and the States regarding each Pre-Existing Environmental Condition, as such provision is required by Section 3.5(b). Each such written report is to be filed on the same date it is provided to KRRC and the States. Additionally, PacifiCorp is to file in this docket any updates to each report provided to KRR and the States under Section 3.5(b).*
5. *PacifiCorp shall file in this docket the report it is to provide KRRC and the States regarding the status of its efforts to resolve the Pre-Existing Environmental Conditions under Section 3.5(c) of the Property Transfer Agreement. This report is to be filed on the same date it is provided to KRRC and the States.*
6. *PacifiCorp shall promptly file in this docket its agreement with KRRC and the States regarding all Pre-Existing Environmental Conditions not resolved in accordance with Section 3.5 as of Closing; i.e., the “Retained Environmental Obligations” contemplated in Section 3.5(d)*

PacifiCorp recently discovered that three reports were submitted in 2023 to KRRC and the States; however, the reports were not filed in this docket. The Company submits this compliance filing to ensure the reports from 2023 are filed in docket UE 219 as required in Order No. 21-242.

- Attachment A - Supplement No. 1 to the Site Investigation Work Plan for Oregon and California (January 2023)
- Attachment B - Site Investigation Reports for Oregon and California (March 2023)
- Attachment C - Removal Action Plan for Oregon and California (September 2023)

The Company apologizes for this oversight and is taking steps to ensure future reports are filed in docket UE 219 the same day they are submitted to KRRC and the States.

Docket UE 219
Public Utility Commission of Oregon
January 10, 2024
Page 2

If you have any questions matter, please contact Cathie Allen, Regulatory Affairs Manager, at (503) 813-5934.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matthew McVee', written in a cursive style.

Matthew McVee
Vice President, Regulatory Policy and Operations

Enclosures

Attachment A

Supplement No. 1 to the Site Investigation Work Plan for Oregon
and California (January 2023)

**Lower Klamath Hydroelectric Project
(FERC No. P-14803)**

Oregon Site Investigation Work Plan Supplement No. 1

Final

January 2023

Prepared by:

Jacobs

Prepared for:



Lower Klamath Hydroelectric Project
(FERC No. P-14803)

Project No: D3514100.A.CS.EV.01
Document Title: Oregon Site Investigation Work Plan Supplement No. 1
Document No.: PPS0615220711PDX
Revision: Final
Date: January 2023
Client Name: PacifiCorp, Demian Ebert, Klamath Program Manager, 503-813-6625
Project Manager: Emilio Candanoza, Jacobs, 541-768-3509

Jacobs Engineering Group Inc.

2020 SW Fourth Avenue
Suite 300
Portland, Oregon
United States
T +1.503.235.5000
www.jacobs.com

© Copyright 2022 Jacobs Engineering Group Inc. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.

Limitation: This document has been prepared on behalf of, and for the exclusive use of Jacobs' client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Contents

1.	Introduction	1-1
1.1	Purpose and Objectives	1-1
1.2	Recognized Environmental Conditions Addressed in This Oregon Supplement.....	1-1
1.3	Background	1-2
1.4	Investigative Standard and Future Uses	1-2
1.5	Oregon Supplement Organization	1-3
2.	Site Evaluation and Investigation.....	2-1
2.1	High-voltage Switchyards (REC 8)	2-1
2.1.1	Findings from Previous Investigations	2-1
2.1.2	Sampling Plan.....	2-1
2.2	Retained Easement Areas (REC 6).....	2-2
2.2.1	Description.....	2-2
2.2.2	Assessment Process	2-3
2.3	Inaccessible Areas (REC 15)	2-3
2.4	Underground Storage Tanks (REC 16)	2-3
2.4.1	Description.....	2-3
2.4.2	Assessment Process	2-3
2.5	Undiscovered Impacted Soil and Groundwater (RECs 5, 9, and 17)	2-4
2.5.1	Description.....	2-4
2.5.2	Assessment Process	2-5
3.	References.....	3-1

Appendices

- A Underground Storage Tank Registration and Decommissioning Documents
- B Consolidated Comment Matrix

Tables

- 1-1 Site Future Uses and Exposure Pathways
- 2-1 Proposed Sampling and Analysis Plan for Soil at J.C. Boyle Substation and Switchyard

Figures

- 1-1 Site Investigation Work Plan Supplement No. 1 Recognized Environmental Conditions
- 1-2 J.C. Boyle Substation and Switchyard
- 2-1 J.C. Boyle Substation and Switchyard Sampling Grid
- 2-2 Retained Easement Recognized Environmental Conditions

Acronyms and Abbreviations

AECOM	AECOM Technical Services, Inc.
Agreement	Property Transfer Agreement entered into by PacifiCorp and Klamath River Renewal Corporation
COPC	constituent of potential concern
EPA	U.S. Environmental Protection Agency
ESA	environmental site assessment
FERC	Federal Energy Regulatory Commission
Jacobs	Jacobs Engineering Group Inc.
KRRC	Klamath River Renewal Corporation
ODEQ	Oregon Department of Environmental Quality
PCB	polychlorinated biphenyl
PEC	pre-existing environmental condition
Project	Lower Klamath Hydroelectric Project
REC	recognized environmental condition
Oregon SIWP	Oregon Site Investigation Work Plan
Oregon Supplement	Oregon Site Investigation Work Plan Supplement No. 1
UST	underground storage tank

1. Introduction

As part of the Lower Klamath Hydroelectric Project (FERC No. P-14803), PacifiCorp and the Klamath River Renewal Corporation (KRRC) have entered into a legally-binding Property Transfer Agreement (Agreement) that identifies 17 pre-existing environmental conditions (PECs) located in the states of California and Oregon. All of the PECs are identified in Exhibit C of the Agreement.

While the Agreement and specifically Exhibit C discuss the resolution of PECs, the *Oregon Site Investigation Work Plan* (Oregon SIWP) (Jacobs 2021a) and this *Oregon Site Investigation Work Plan Supplement No. 1* (Oregon Supplement) refer to the Exhibit C items generically as recognized environmental conditions (RECs). Not all PECs in Exhibit C have been formally identified as a REC in a Phase I environmental site assessment (ESA).

PacifiCorp submitted the Oregon SIWP to the State of Oregon and the KRRC on November 16, 2021. On November 17, 2021, PacifiCorp submitted the Oregon SIWP to the Oregon Public Utilities Commission, as required in Order No. 21-242. The Oregon SIWP described the sampling activities to be performed to confirm the presence or absence of constituents of potential concern (COPCs) at concentrations greater than identified screening levels at the one REC located in Oregon – the J.C. Boyle Dispersed Recreation Area.

1.1 Purpose and Objectives

PacifiCorp retained Jacobs Engineering Group Inc. (Jacobs) to develop this Oregon Supplement and identify the process by which the remaining (i.e., not addressed in the Oregon SIWP) Exhibit C RECs located in Oregon will be brought forward for site assessment and closure. This Oregon Supplement incorporates the Oregon SIWP by reference and provides specific information necessary to address remaining RECs in accordance with the Oregon SIWP, which was approved by the KRRC (Lowy, pers. comm. 2021) and the State of Oregon (Matthews, pers. comm. 2021) and which was implemented when assessing the J.C. Boyle Dispersed Recreation Area (Jacobs 2021a).

The primary objective of this Oregon Supplement is to establish the means by which the remaining Exhibit C RECs located in Oregon will be assessed and closed per the Agreement. Secondary objectives are to identify the key environmental data that will support closure of the remaining seven RECs and outline the various sampling approaches for each REC so that as much analytical and field observational data as possible can be collected for REC closure under a single mobilization.

The field and analytical data will be used to determine and delineate the vertical and horizontal extent of potentially impacted soil, groundwater, or both, as needed, for REC closure. Waste characterization data will also be collected to help in planning a remedial action at a site. These data will be used to determine offsite disposal requirements and onsite waste segregation and management requirements for hazardous and nonhazardous waste, if encountered.

1.2 Recognized Environmental Conditions Addressed in This Oregon Supplement

The following seven Exhibit C RECs are addressed in this Oregon Supplement:¹

- Condition 5 – Undiscovered Impacted Soil and Groundwater at the four Powerhouses

¹ The REC names in this list are verbatim from Exhibit C. Elsewhere in this Oregon Supplement, "high-voltage" is hyphenated when referencing Condition 8.

- Condition 6 – Underground Storage Tanks (USTs)
- Condition 8 – High voltage switchyards
- Condition 9 – Undiscovered Impacted Soil and Groundwater at the 4 Dam Developments
- Condition 15 – Inaccessible areas
- Condition 16 – Retained easement areas
- Condition 17 – Undiscovered Impacted Soil and Groundwater outside the removal work zone

These RECs (Figure 1-1) were not included in the Oregon SIWP because during Oregon SIWP development, the RECs were unknown, undiscoverable, or inaccessible or because REC-specific investigations could not be completed. For example: (1) Access to the J.C. Boyle switchyard (Figure 1-2) was determined to be especially hazardous since the high-voltage switchyard is active; and (2) Unknown areas remain unknown until decommissioning and demolition of the dam commences. To satisfy Agreement Section 3.5(c), this Oregon Supplement presents PacifiCorp's proposed approach to address the remaining Exhibit C RECs in a manner that will minimize disruption or delay of dam removal efforts by the KRRRC and that will allow for expedited remediation or disposal of potential contaminants if identified during dam removal.

This Oregon Supplement proposes a sampling approach for the J.C. Boyle switchyard (REC 8) that includes a figure illustrating planned soil sample locations and a table identifying media to be sampled, sample collection depths, and laboratory analyses to be performed.

The RECs identified in this Oregon Supplement will be assessed by following the same processes, procedures, and standards that were approved for the Oregon SIWP.

1.3 Background

The Oregon SIWP (Jacobs 2021a) provides a detailed background of the J.C. Boyle Development, a complete list of the Exhibit C RECs, and a discussion of the surrounding lands and historical practices. The Oregon SIWP content is incorporated in this Oregon Supplement by reference.

Pertinent to the RECs addressed in this Oregon Supplement are the two Phase I ESAs conducted for the Oregon and California hydroelectric developments (AECOM 2018, 2020). Of the RECs identified by AECOM and documented in Exhibit C of the Agreement, PacifiCorp prepared an Oregon SIWP for the J.C. Boyle Dispersed Recreation Area (Jacobs 2021a). The RECs associated with Copco No. 1, Copco No. 2, and Iron Gate dams in California were addressed separately in a California SIWP (Jacobs 2021b).

The dams and associated powerhouses have been and continue to be operated to generate and distribute electricity until dam removal activities begin. Hazardous materials that have been used onsite include diesel fuel, leaded and unleaded gasoline, non-polychlorinated biphenyls (non-PCBs), and governor, transformer, and motor oils. Battery banks and oils are stored within secondary containment systems. As noted in the Phase I ESA conducted by AECOM, the powerhouses appeared to be in good operating condition, with proper housekeeping and hazardous materials management practices (AECOM 2018).

1.4 Investigative Standard and Future Uses

Notwithstanding any specific process or procedure identified in this Oregon Supplement, the work performed under this Oregon Supplement will be carried out in accordance with the Investigative Standard, as defined in Section 1.5 of the Oregon SIWP (Jacobs 2021a). Unlike the Oregon SIWP, this Oregon Supplement addresses multiple RECs, necessitating the identification of intended future uses and

exposure pathways at the remaining RECs (Table 1-1). The exposure pathways will be used to determine the screening levels that were developed in Section 3.3 of the Oregon SIWP (Jacobs 2021a). The analytical results from investigations at a REC will be evaluated against these screening levels to determine if the REC can be closed or if further assessment, remediation, risk assessment, or a combination are required.

Table 1-1. Site Future Uses and Exposure Pathways

Exhibit C REC No.	Site/REC	Site Future Use	Exposure Pathways
8	High-voltage switchyards (and substations)	Active recreation	Residential/leaching to groundwater
16	Retained Easements	Active Recreation	Residential/leaching to groundwater
15	Inaccessible Areas	Passive recreation/natural habitat	Residential/ecological/leaching to groundwater
6	Underground Storage Tanks	Active recreation	Residential/leaching to groundwater
5	Undiscovered Impacted Soil and Groundwater at the Four Powerhouses	Active recreation	Residential/leaching to groundwater
9	Undiscovered Impacted Soil and Groundwater at the Four Dam Developments	Active recreation	Residential/leaching to groundwater
17	Undiscovered Impacted Soil and Groundwater Outside the Removal Work Zone	Passive recreation/natural habitat	Residential/ecological/leaching to groundwater

The Investigative Standard includes preparation of a Site Investigation Report to document the investigation and assessments performed, as described in Section 4 of the Oregon SIWP (Jacobs 2021a).

Except as may be otherwise expressly approved in writing by PacifiCorp, KRRC, the State of California, and the State of Oregon, the implementation of any work under this Oregon Supplement and any updates or follow-up will constitute Jacobs' representation to PacifiCorp, KRRC, and the State of Oregon, that such work complies with the Investigative Standard as presented in the Oregon SIWP (Jacobs 2021a).

1.5 Oregon Supplement Organization

This Oregon Supplement is organized into three sections and two appendices. Supporting tables and figures are located in text (Table 1-1) and at the end of text (all others). The sections and appendices are summarized as follows:

- **Section 1 – Introduction:** Describes the Oregon Supplement purpose and objectives, identifies the RECs to be addressed, provides background information on the evolution of the RECs, and touches on investigative standards and future site uses. See Section 1 of the Oregon SIWP (Jacobs 2021a) for complete descriptions of the program organization, program timeline, and investigative standards.
- **Section 2 – Site Evaluation and Investigation:** Describes the evaluation process for addressing the seven remaining RECs not included in the Oregon SIWP.
- **Section 3 – References:** Provides a bibliographic listing of documents cited in this Oregon Supplement.

- **Appendix A – Underground Storage Tank Registration and Decommissioning Documents:** Contains documents associated with the Oregon Department of Environmental Quality (DEQ) UST registration and decommissioning.
- **Appendix B – Consolidated Comment Matrix:** Contains consolidated review comments and responses from the KRRC and Oregon related to this Oregon Supplement.

2. Site Evaluation and Investigation

This section presents the results of the site investigations and evaluations conducted for the seven RECs listed in Section 1. The Sampling and Analysis Plan (Appendix A of the Oregon SIWP) will be followed for each REC.

The High-voltage switchyards and Retained Easement RECs are evaluated because: 1) the substation, switchyard, and easement locations are known; 2) they are accessible to some degree; and 3) their environmental conditions can be reasonably evaluated in the near-term. The USTs REC is evaluated should an unknown UST be discovered during dam decommissioning or demolition. Because evaluation of undiscovered RECs is not possible at this time, this Oregon Supplement presents a process to be implemented should impacted soil or groundwater be encountered in the subject areas during dam decommissioning and demolition.

2.1 High-voltage Switchyards (REC 8)

High-voltage switchyards and substations (collectively called switchyards here for ease of use) are connected directly to PacifiCorp's electrical generation, transmission, and distribution systems. Switchyards are integral for distributing power and maintaining stability of the local electrical grid. An abundance of high-voltage elements makes work within switchyards restricted without specialized planning. However, following further review and discussions with PacifiCorp substation operations, environmental sampling within the energized switchyards is considered possible with appropriate safety measures. Consequently, this Oregon Supplement identifies the means and methods by which the J.C. Boyle switchyard will be assessed.

2.1.1 Findings from Previous Investigations

The J.C. Boyle Development has one approximate 150- by 150-foot switchyard that was noted by AECOM (2018, 2020) to contain "electrical transformers, substations, transmission poles, and lines within a fenced gravel area. The majority of the transmission pole footings, substations, and transformers are on top of cement pads. It was noted that the 'yellow glass portion' of the high-voltage transformer bushings may potentially contain Polychlorinated Biphenyl (PCBs) in the oil." There is a potential for PCBs to be present within the switchyard because the J.C. Boyle Development and original supporting structures were completed in 1958 (AECOM 2020) and because use of PCBs was not banned under the Toxic Substances Control Act until 1979.

2.1.2 Sampling Plan

Of note is that there are no records of spills or releases at the switchyards. The environmental sampling activities are being performed to confirm the presence or absence of PCBs within the switchyard. If analytical results from the initial sampling event indicate the presence of PCBs, then additional sampling at the switchyard may be performed within identified areas of concern as per *40 Code of Federal Regulations Part 761, Subpart N*. Concrete sampling will additionally be performed for PCBs at the switchyard, and the analytical results will be used to help determine disposal options for concrete.

Prior to collecting soil samples, field staff will use Global Positioning System software to lay out a 25- by 25-foot sampling grid (Figure 2-1). Field staff will note facility structures, topography, and drainage in the area and will adjust the planned sample locations as necessary. The planned sample locations will be marked for approval by the PacifiCorp substation operations group and for utility clearance prior to sampling.

The COPCs for the switchyard and substation are PCBs and transformer oil. Consequently, soil samples will be analyzed for PCBs by U.S. Environmental Protection Agency (EPA) Method SW846 8082A and for oil and grease by EPA Method 1664. Should PCBs be detected in soil samples, EPA Method 1668 (PCB homologue method) with EPA Extraction Method SW846 3540C may be performed on select soil samples. If groundwater is encountered when collecting soil samples at the switchyards, unfiltered grab groundwater samples will be collected for submittal to the analytical laboratory. Surface gravel will be removed to allow sampling of fine-grained native soil or fine import material. Soil samples from a depth of 0.5 to 1.0 foot below native surface grade will be collected (Table 2-1, Oregon SIWP Appendix A [Jacobs 2021a]). The soil samples will be advanced via hand auger. Soil borings will be extended if visual observations indicate that transformer oil has migrated deeper than near surface grade.

Because the J.C. Boyle switchyard is located in a relatively flat area immediately adjacent to the Klamath River in an otherwise steep, access-limited canyon (Figures 1-2 and 2-1), the most likely future use for the switchyard is active recreation (Table 1-1). Such a use will set the applicable soil and groundwater screening levels as described in Oregon SIWP Section 1.5 and developed in Oregon SIWP Section 3.3 (Jacobs 2021a). The validated analytical data will be evaluated against the applicable screening levels, and a site assessment report will be prepared in accordance with Section 4 of the Oregon SIWP (Jacobs 2021a).

Data collection for the switchyard is anticipated to occur in the spring of 2023.

2.2 Retained Easement Areas (REC 6)

2.2.1 Description

Retained easement areas have been identified in Exhibit C as a PEC and are further described in that exhibit as “Any conditions in retained easement areas relating to the presence or operations of retained transmission facilities.” Per the Agreement, PacifiCorp-owned property in Oregon will be conveyed to the KRRC and eventually the State of Oregon. As this process occurs, PacifiCorp will retain easements for the existing transmission and distribution system. Existing easements on privately- or federally-owned property are not included in this REC. Therefore, retained easements, for the purpose of this Oregon Supplement, are defined as the right-of-way on PacifiCorp-owned property in Oregon containing PacifiCorp electrical transmission and distribution system and all other ancillary infrastructure and related access roads. The retained easements are used for accessing, maintaining, operating, repairing, replacing, enlarging, reconstructing, or removing PacifiCorp’s electrical transmission and distribution facilities.

Also included are related electrical transmission facilities such as towers, poles, pads, anchors, supports, transformers, switchyards, vaults, substations, communications facilities, fiber optic or other communications equipment, and any other improvements or facilities associated with the management of these facilities. The retained easement area is the current physical location of the transmission facilities along with an additional area of 100 feet, as measured on the surface of the property and from each side of the transmission or distribution facility.

Aside from incidental observations relating to power poles near J.C. Boyle Dam, retained easements were not assessed under the Phase 1 ESAs that were performed for the J.C. Boyle Development (AECOM 2018; AECOM 2020), and because the retained easement was not assessed, there is potential for PECs to be present within the easement.

There are approximately 10,200 linear feet of retained easements (approximately 52 acres) over four parcels (Figure 2-2).

2.2.2 Assessment Process

The assessment process for the retained easement areas is as follows:

- Perform a review of reasonably obtainable historical documents for the retained easement areas including aerial photographs, historical topographic maps, or other available property records.
- Perform a site reconnaissance survey. Qualified staff will walk accessible parts of the retained easement areas.
- Based on the evaluation and findings of the document review and site reconnaissance by a qualified environmental professional, potential new PECs may be identified. For newly identified PECs within the retained easements, determine the potential COPCs for the PEC(s), perform a site assessment(s) according to the Oregon SIWP (Jacobs 2021a), and evaluate the analytical results against the screening levels for the future uses and exposure pathways established in Table 1-1.
- Document findings in a Site Investigation Report for PEC closure in accordance with Section 4 of the Oregon SIWP (Jacobs 2021a). If new PECs are not identified, the Site Investigation Report will contain a recommendation for REC closure per the terms of the Agreement and the process developed with the KRRC and the State of Oregon.

2.3 Inaccessible Areas (REC 15)

Agreement Exhibit C contains a REC for Inaccessible Areas, without further elaboration adequate to allow investigation. The draft Phase I ESA for the J.C. Boyle Development and other California dam developments contained aerial photographs with points of interest, which at the time, were inaccessible for field reconnaissance due to either locked gates or unsafe road conditions (AECOM 2020). In response to inquiries from PacifiCorp, in April 2022, the KRRC provided further definition of the inaccessible areas (AECOM, pers. comm. 2022). The supplemental information included identification of ten specific locations, none of which are in Oregon. Because there are no inaccessible areas in Oregon identified as part of this REC, PacifiCorp is recommending that this REC be closed per the terms of the Agreement and the process developed with the KRRC and the State of Oregon.

2.4 Underground Storage Tanks (REC 16)

2.4.1 Description

Seven USTs were identified during a Phase I ESA for the Iron Gate Fish Hatchery and the J.C. Boyle, Copco No. 1, Copco No. 2, and Iron Gate developments (AECOM 2018). One of the seven USTs was identified to be associated with the J.C. Boyle Powerhouse. However, the Environmental Database Report for the J.C. Boyle Powerhouse contained no additional information regarding the UST and its location. Because no additional information regarding the UST and its location could be identified, the UST is not mappable and is consequently considered to be an unregistered, "orphan site" (AECOM 2018). No USTs were identified in the area around the J.C. Boyle Powerhouse during ground-penetrating radar surveys conducted by the KRRC, as described in *Draft Buried Structures Site Investigation* (KPC 2020).

2.4.2 Assessment Process

Because no specific USTs have been identified and investigated for this Oregon Supplement, the following assessment process will be observed if the KRRC identifies a UST or suspected UST when removing the J.C. Boyle Development:

- The KRRC will immediately notify PacifiCorp of the discovery. PacifiCorp will: 1) confirm that the UST is located within the Lower Klamath Project FERC boundary; 2) oversee partial exposure of the UST to determine its approximate size; and 3) determine the approximate volume of any residual contents.
- PacifiCorp will determine the potential COPCs for the UST, perform a site assessment according to the Oregon SIWP (Jacobs 2021a), and evaluate the analytical results against the screening levels for the future uses and exposure pathways established in Table 1-1.
- PacifiCorp will coordinate UST removal actions with the Oregon DEQ UST Program. PacifiCorp will additionally initiate and follow the UST registration and decommissioning process outlined in Appendix B.
- General UST removal activities by a licensed contractor will include: 1) full exposure of the UST and preparation of the UST for removal; 2) removal and containment of residual UST contents; 3) cleaning of the UST and containment of decontamination water; 4) upon confirmation by a Certified Industrial Hygienist that the UST is inert, removal of the UST; and 5) offsite disposal of the cleaned UST.
- Upon removal of the UST PacifiCorp will collect soil confirmation samples from the excavation floor and sidewalls and, if required, from expanded excavation floor and sidewalls.
- PacifiCorp will analyze confirmation samples for COPCs related to the former UST contents, and the analytical results from confirmation sampling will be compared against screening levels as described in Oregon SIWP Section 1.5 and developed in Oregon SIWP Section 3.3 (Jacobs 2021a).
- When excavating the UST and if expanding the excavation to obtain additional confirmation soil samples, PacifiCorp will segregate identified impacted soil from unimpacted soil; stockpile all excavated soil on plastic sheeting; and inspect and manage stockpiled soil per regulatory requirements.
- PacifiCorp will properly transport and dispose stockpiled soil and decontamination wastes.
- Upon completion of excavation and confirmation sampling, and if the KRRC requests, PacifiCorp will have the excavation backfilled and compacted with an approved fill material.
- Upon completion of UST excavation, removal, disposal, and confirmation sampling, PacifiCorp will prepare a removal report to document UST removal activities and formally request UST case closure from the Oregon DEQ.
- PacifiCorp recognizes that if a UST is found, it is likely to be in one of the KRRC's active construction areas. Because discovery of a UST has the potential to disrupt the dam removal or restoration timelines, PacifiCorp will actively coordinate with the KRRC and its contractors throughout the investigation and removal process to minimize any disruption to the dam removal process.

2.5 Undiscovered Impacted Soil and Groundwater (RECs 5, 9, and 17)

2.5.1 Description

Three RECs are collectively identified as undiscovered and have the potential to contain impacted soil and groundwater. These RECs are divided into three areas: (1) the powerhouses (REC 5); (2) the dam developments (REC 9); and (3) areas outside the removal work zone (REC 17). Portions of these areas may never be fully evaluated because they are inaccessible or cannot be accessed (for example, soil or groundwater beneath the powerhouse foundation left in place by the KRRC). Because these RECs all address the same potential issue, but at different locations, they are consolidated into a single discussion in this Oregon Supplement.

The objective for these RECs presented in this Oregon Supplement is to establish a process whereby impacted soil and groundwater within the RECs can be addressed if such impacts are encountered. With the standardized approach described in the next section, PacifiCorp will be able to minimize delays related to characterizing and remediating a PEC so that REC closure can be obtained in a timely manner. The approach will be employed if potential contamination associated with these three RECs is identified during dam removal.

If impacted soil or groundwater is encountered within these areas, PacifiCorp will establish whether the impacted soil and groundwater is localized or representative of a contaminant plume. PacifiCorp will then determine if there is a complete migration pathway for the contaminant to a surface water; dilution factors will additionally be assessed on a case-by-case basis if potential contamination is identified. Upon completion of a site investigation, analysis and evaluation of samples, and a risk assessment, PacifiCorp will determine if there is a requirement to implement some type of clean-up, containment, or monitoring program for the REC.

2.5.2 Assessment Process

This section establishes an assessment process whereby PacifiCorp will address impacted soil and groundwater if encountered by the KRRC when decommissioning and demolishing structures at these locations. The reasons for establishing such a process are to help ensure that:

- There is a standardized approach acceptable to the KRRC and the State of Oregon.
- With a standardized approach in place, assessment or remediation of impacted soil and groundwater can be initiated in an expeditious manner to minimize delays associated with dam removal.
- With a standardized approach in place, PacifiCorp can minimize schedule delays and satisfactorily complete required investigative or remedial actions to obtain closure should any PECs come to light.

The stepwise approach will be formalized in a contingency plan to be developed by KRRC and PacifiCorp in advance of construction. The stepwise approach will be used when managing the undiscovered PECs, as follows:

1) Identification of Potential Contamination

The KRRC will have qualified environmental staff onsite during dam removal activities. Such staff will be qualified to collect environmental samples and perform site-specific assessments. Such staff will also be responsible for observing general site conditions and documenting if groundwater appears to be impacted or if soil has a chemical odor, is stained, or has elevated photoionization detector readings greater than 50 parts per million by volume. Should such conditions arise, such staff will report the observations and provide relevant data to PacifiCorp in writing. PacifiCorp will, in turn, mobilize a qualified team-member to further evaluate site conditions.

2) Sampling and Evaluation of Analytical Results against Established Screening Levels

Upon notification by the KRRC of impacted soil or groundwater and a PEC, PacifiCorp will enlist an environmental professional who will additionally evaluate the potential impacts.

Soil and groundwater samples will be collected as appropriate and in accordance with the Oregon SIWP and Appendix A of the Oregon SIWP (Jacobs 2021a). Field sampling and PEC evaluation will be coordinated with the KRRC with respect to ongoing dam removal activities to ensure that any impacts to ongoing dam removal work are minimized.

Upon receipt of the validated analytical results from sampling, the analytical results will be compared against the established screening levels for the determined future use, and recommendations will be made for PEC closure or further assessment, remediation, risk assessment, or a combination.

3) Remediation and Removal of Impacted Media

PacifiCorp recognizes that assessment and evaluation of impacted soil or groundwater may delay ongoing dam removal work at some locations. Because of this potential for delay, at PacifiCorp's discretion and in coordination with the KRRC, PacifiCorp may proceed directly to site remediation to minimize impacts on dam removal activities and progress.

Removal action in advance of testing means that PacifiCorp would manage impacted materials as outlined in the contingency plan. Potentially impacted soil or groundwater will be excavated and hauled to an approved waste staging area identified by the KRRC and as outlined in the contingency plan. Impacted soil will be segregated from unimpacted soil, and water will be properly containerized within secondary containment. Soil stockpiles will be placed on and covered with plastic sheeting, and stockpiles and containerized wastes will be inspected weekly and actively managed by PacifiCorp. Upon evaluation of the analytical results for the soil stockpiles, PacifiCorp will identify which stockpiles can be reused or disposed onsite by the KRRC and which soil stockpiles will be disposed of offsite by PacifiCorp. Containerized water will be disposed of offsite by PacifiCorp or may be reused onsite for dust suppression by the KRRC depending on the analytical results.

As part of a removal action, PacifiCorp will collect confirmation samples from excavation floors and sidewalls and will also collect soil samples from the floor and sidewalls of an expanded excavation should that be required. The confirmation samples will be analyzed for COPCs and will be evaluated against the screening levels as described in Oregon SIWP Section 1.5 and developed in Oregon SIWP Section 3.3 (Jacobs 2021a). Upon evaluation of the analytical results from confirmation sampling, PacifiCorp will identify if the removal action is incomplete and additional excavation is required or if the removal action is complete and the excavation can be backfilled and compacted (if necessary).

4) Site Investigation Report and PEC Closure

Upon completion of site assessment or remedial activities, PacifiCorp will prepare a Site Investigation Report for PEC closure in accordance with Section 4 of the Oregon SIWP (Jacobs 2021a). The PEC will also be recommended for closure by PacifiCorp per the terms of the Agreement and the process developed with the KRRC and the State of Oregon. If impacted soil and groundwater are not observed at completion of facilities removal for RECs 5 and 9 (dams and powerhouses) and at the completion of restoration for REC 17, then the RECs will be recommended for closure by PacifiCorp per the terms of the Agreement and the process developed with the KRRC and the State of Oregon.

3. References

AECOM Technical Services, Inc. (AECOM). 2018. J.C. Boyle Dam, Copco No. 1 Dam, Copco No. 2 Dam, Iron Gate Dam, and Iron Gate Fish Hatchery Phase I Environmental Site Assessments. Prepared for Klamath River Renewal Corporation. November.

AECOM Technical Services, Inc. (AECOM). 2020. *Draft Phase I Environmental Site Assessment of the Parcel B Lands*. Prepared for Klamath River Renewal Corporation. March.

AECOM Technical Services, Inc. (AECOM). 2022. Personal communication (email) with Demian Ebert, PacifiCorp. April 18.

Jacobs. 2021a. *Oregon Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Jacobs. 2021b. *California Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Knight Piesold Consulting (KPC). 2020. *Draft Buried Structures Site Investigation*. April.

Lowy, Lloyd, Klamath River Renewal Corporation. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.

Matthews, Chris, Oregon Department of Justice. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.

Table

Table 2-1. Proposed Sampling and Analysis Plan for Soil at J.C. Boyle Substation and Switchyard
 Lower Klamath Hydroelectric Project: Oregon Site Investigation Work Plan Supplement No. 1

Location Description	Boring Location	Sample ID	Depth (ft bgs)	Total 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds (EPA Method SW8260B)	Semi-volatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (NWTPH-Gx)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (NWTPH-Dx)	Polynuclear Aromatic Hydrocarbons (EPA Method SW8270C-SIM)	Oil and Grease (EPA Method SW846 1664)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 8082A)	STLC* (when TTL results are 10x STLC limit)	TCLP* (when TTL results are 20x TCLP limit)	Ignitability (EPA Method 1030), Reactivity (SW 846 CH7), Corrosivity (SW-846 9045)	
J.C. Boyle Dispersed Recreation Area - 2	JBSY-A1	JBSY-A1-0.0-YYYYMMDD	Surface									X	X				
		JBSY-A1-1.0-YYYYMMDD	0.5-1.0									X	X				
	JBSY-A2	JBSY-A2-0.0-YYYYMMDD	Surface										X	X			
		JBSY-A2-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-A3	JBSY-A3-0.0-YYYYMMDD	Surface										X	X			
		JBSY-A3-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-A4	JBSY-A4-0.0-YYYYMMDD	Surface										X	X			
		JBSY-A4-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-A5	JBSY-A5-0.0-YYYYMMDD	Surface										X	X			
		JBSY-A5-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-A6	JBSY-A6-0.0-YYYYMMDD	Surface										X	X			
		JBSY-A6-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-A7	JBSY-A7-0.0-YYYYMMDD	Surface										X	X			
		JBSY-A7-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-A8	JBSY-A8-0.0-YYYYMMDD	Surface										X	X			
		JBSY-A8-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-A9	JBSY-A9-0.0-YYYYMMDD	Surface										X	X			
		JBSY-A9-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-B1	JBSY-B1-0.0-YYYYMMDD	Surface										X	X			
		JBSY-B1-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-B2	JBSY-B2-0.0-YYYYMMDD	Surface										X	X			
		JBSY-B2-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-B3	JBSY-B3-0.0-YYYYMMDD	Surface										X	X			
		JBSY-B3-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-B4	JBSY-B4-0.0-YYYYMMDD	Surface										X	X			
		JBSY-B4-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-B5	JBSY-B5-0.0-YYYYMMDD	Surface										X	X			
		JBSY-B5-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-B6	JBSY-B6-0.0-YYYYMMDD	Surface										X	X			
		JBSY-B6-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-B7	JBSY-B7-0.0-YYYYMMDD	Surface										X	X			
		JBSY-B7-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-B8	JBSY-B8-0.0-YYYYMMDD	Surface										X	X			
		JBSY-B8-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-B9	JBSY-B9-0.0-YYYYMMDD	Surface										X	X			
		JBSY-B9-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-C1	JBSY-C1-0.0-YYYYMMDD	Surface										X	X			
		JBSY-C1-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-C2	JBSY-C2-0.0-YYYYMMDD	Surface										X	X			
		JBSY-C2-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-C3	JBSY-C3-0.0-YYYYMMDD	Surface										X	X			
		JBSY-C3-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-C4	JBSY-C4-0.0-YYYYMMDD	Surface										X	X			
		JBSY-C4-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-C6	JBSY-C6-0.0-YYYYMMDD	Surface										X	X			
		JBSY-C6-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-C7	JBSY-C7-0.0-YYYYMMDD	Surface										X	X			
		JBSY-C7-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-C9	JBSY-C9-0.0-YYYYMMDD	Surface										X	X			
		JBSY-C9-1.0-YYYYMMDD	0.5-1.0										X	X			

Table 2-1. Proposed Sampling and Analysis Plan for Soil at J.C. Boyle Substation and Switchyard
 Lower Klamath Hydroelectric Project: Oregon Site Investigation Work Plan Supplement No. 1

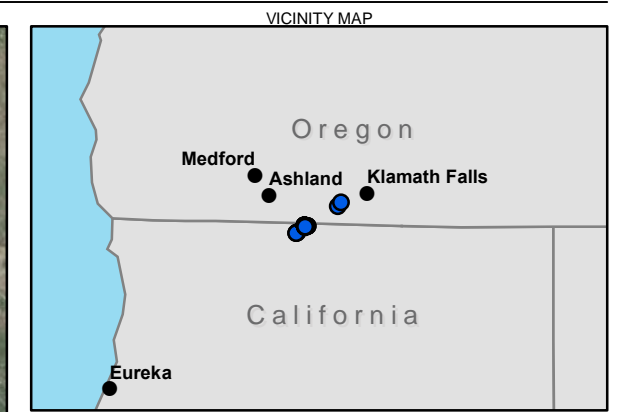
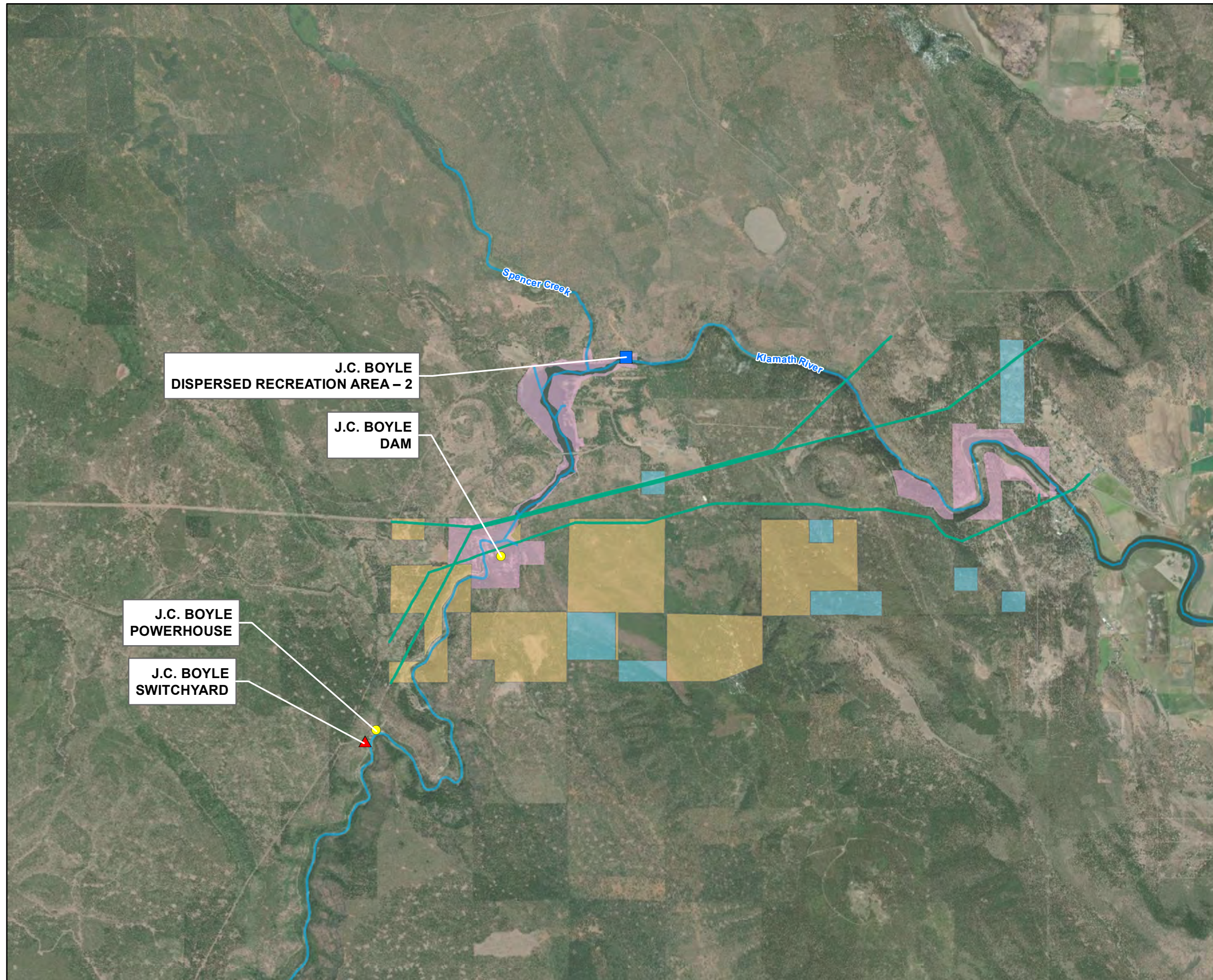
Location Description	Boring Location	Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds (EPA Method SW8260B)	Semi-volatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (NWTPH-Gx)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (NWTPH-Dx)	Polynuclear Aromatic Hydrocarbons (EPA Method SW8270C-SIM)	Oil and Grease (EPA Method SW846 1664)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 8082A)	STLC* (when TTLC results are 10x STLCL limit)	TCLP* (when TTLC results are 20x TCLPL limit)	Ignitability (EPA Method 1030), Reactivity (SW 846 CH7), Corrosivity (SW-846 9045)	
J.C. Boyle Dispersed Recreation Area - 2+A105	JBSY-D2	JBSY-D2-0.0-YYYYMMDD	Surface									X	X				
		JBSY-D2-1.0-YYYYMMDD	0.5-1.0									X	X				
	JBSY-D3	JBSY-D3-0.0-YYYYMMDD	Surface										X	X			
		JBSY-D3-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-D4	JBSY-D4-0.0-YYYYMMDD	Surface										X	X			
		JBSY-D4-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-D5	JBSY-D5-0.0-YYYYMMDD	Surface										X	X			
		JBSY-D5-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-D6	JBSY-D6-0.0-YYYYMMDD	Surface										X	X			
		JBSY-D6-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-D7	JBSY-D7-0.0-YYYYMMDD	Surface										X	X			
		JBSY-D7-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-D8	JBSY-D8-0.0-YYYYMMDD	Surface										X	X			
		JBSY-D8-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-D9	JBSY-D9-0.0-YYYYMMDD	Surface										X	X			
		JBSY-D9-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-E2	JBSY-E2-0.0-YYYYMMDD	Surface										X	X			
		JBSY-E2-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-E3	JBSY-E3-0.0-YYYYMMDD	Surface										X	X			
		JBSY-E3-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-E4	JBSY-E4-0.0-YYYYMMDD	Surface										X	X			
		JBSY-E4-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-E5	JBSY-E5-0.0-YYYYMMDD	Surface										X	X			
		JBSY-E5-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-E6	JBSY-E6-0.0-YYYYMMDD	Surface										X	X			
		JBSY-E6-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-E7	JBSY-E7-0.0-YYYYMMDD	Surface										X	X			
		JBSY-E7-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-E8	JBSY-E8-0.0-YYYYMMDD	Surface										X	X			
		JBSY-E8-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-E9	JBSY-E9-0.0-YYYYMMDD	Surface										X	X			
		JBSY-E9-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-F2	JBSY-F2-0.0-YYYYMMDD	Surface										X	X			
		JBSY-F2-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-F3	JBSY-F3-0.0-YYYYMMDD	Surface										X	X			
		JBSY-F3-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-F4	JBSY-F4-0.0-YYYYMMDD	Surface										X	X			
		JBSY-F4-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-F5	JBSY-F5-0.0-YYYYMMDD	Surface										X	X			
		JBSY-F5-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-F6	JBSY-F6-0.0-YYYYMMDD	Surface										X	X			
		JBSY-F6-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-F7	JBSY-F7-0.0-YYYYMMDD	Surface										X	X			
		JBSY-F7-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-F8	JBSY-F8-0.0-YYYYMMDD	Surface										X	X			
		JBSY-F8-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-F9	JBSY-F9-0.0-YYYYMMDD	Surface										X	X			
		JBSY-F9-1.0-YYYYMMDD	0.5-1.0										X	X			

Table 2-1. Proposed Sampling and Analysis Plan for Soil at J.C. Boyle Substation and Switchyard
 Lower Klamath Hydroelectric Project: Oregon Site Investigation Work Plan Supplement No. 1

Location Description	Boring Location	Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds (EPA Method SW8260B)	Semi-volatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (NWTPH-Gx)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (NWTPH-Dx)	Polynuclear Aromatic Hydrocarbons (EPA Method SW8270C-SIM)	Oil and Grease (EPA Method SW846 1664)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 8082A)	STLC* (when TTLC results are 10x STLC limit)	TCLP* (when TTLC results are 20x TCLP limit)	Ignitability (EPA Method 1030), Reactivity (SW 846 CH7), Corrosivity (SW-846 9045)	
J.C. Boyle Dispersed Recreation Area - 2	JBSY-G3	JBSY-G3-0.0-YYYYMMDD	Surface									X	X				
		JBSY-G3-1.0-YYYYMMDD	0.5-1.0									X	X				
	JBSY-G4	JBSY-G4-0.0-YYYYMMDD	Surface										X	X			
		JBSY-G4-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-G6	JBSY-G6-0.0-YYYYMMDD	Surface										X	X			
		JBSY-G6-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-G7	JBSY-G7-0.0-YYYYMMDD	Surface										X	X			
		JBSY-G7-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-G9	JBSY-G9-0.0-YYYYMMDD	Surface										X	X			
		JBSY-G9-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-H3	JBSY-H3-0.0-YYYYMMDD	Surface										X	X			
		JBSY-H3-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-H4	JBSY-H4-0.0-YYYYMMDD	Surface										X	X			
		JBSY-H4-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-H5	JBSY-H5-0.0-YYYYMMDD	Surface										X	X			
		JBSY-H5-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-H6	JBSY-H6-0.0-YYYYMMDD	Surface										X	X			
		JBSY-H6-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-H7	JBSY-H7-0.0-YYYYMMDD	Surface										X	X			
		JBSY-H7-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-H8	JBSY-H8-0.0-YYYYMMDD	Surface										X	X			
		JBSY-H8-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-H9	JBSY-H9-0.0-YYYYMMDD	Surface										X	X			
		JBSY-H9-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-I4	JBSY-I4-0.0-YYYYMMDD	Surface										X	X			
		JBSY-I4-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-I5	JBSY-I5-0.0-YYYYMMDD	Surface										X	X			
		JBSY-I5-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-I6	JBSY-I6-0.0-YYYYMMDD	Surface										X	X			
		JBSY-I6-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-I7	JBSY-I7-0.0-YYYYMMDD	Surface										X	X			
		JBSY-I7-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-I8	JBSY-I8-0.0-YYYYMMDD	Surface										X	X			
		JBSY-I8-1.0-YYYYMMDD	0.5-1.0										X	X			
	JBSY-I9	JBSY-I9-0.0-YYYYMMDD	Surface										X	X			
		JBSY-I9-1.0-YYYYMMDD	0.5-1.0										X	X			
ALL	JBSY-WC-YYYYMMDD	Composite		X	X							X	X	X	X	X	

Notes:
 * Hold extractions for metals, SVOCs, and dioxins/furans pending total results (TTLC).
 EPA = U.S. Environmental Protection Agency
 ft bgs = feet below ground surface
 NA = not applicable
 STLC = soluble threshold limit concentration
 TCLP = toxicity characteristic leaching procedure
 TTLC = total threshold limit concentration
 X = sample to be analyzed

Figures



- LEGEND**
- Dam Infrastructure to be Removed
 - ▲ Recognized Environmental Condition (REC)
 - Previously Assessed REC (Jacobs 2021a)
 - PacifiCorp Ownership
 - BLM
 - USFS
 - STATE
 - County Boundary
 - Retained Easement (Transmission Line on PacifiCorp Property)
 - River/Creek

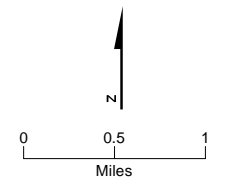


FIGURE 1-1
 Site Investigation Work Plan Supplement No. 1
 Recognized Environmental Conditions
 Lower Klamath Hydroelectric Project



LEGEND

- Dam Infrastructure to be Removed
- ▲ Recognized Environmental Condition (REC)

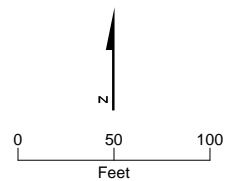
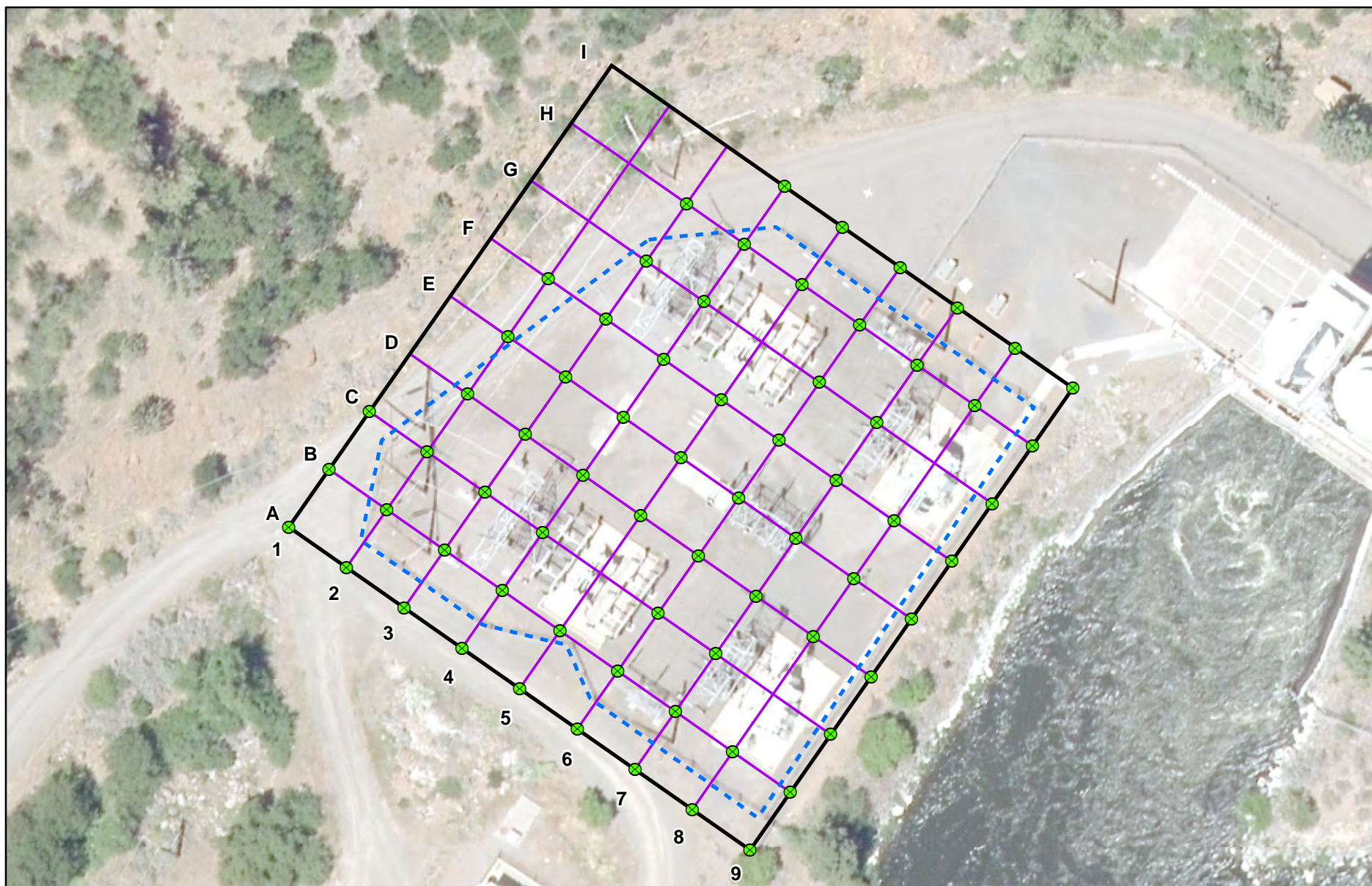






FIGURE 1-2
J.C. Boyle Substation and Switchyard
Lower Klamath Hydroelectric Project



LEGEND

-  Limits of SIWP Supplement No. 1
-  Switchyard Boundary
-  Sampling Grid
-  Proposed Shallow Soil Boring Location

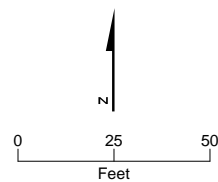
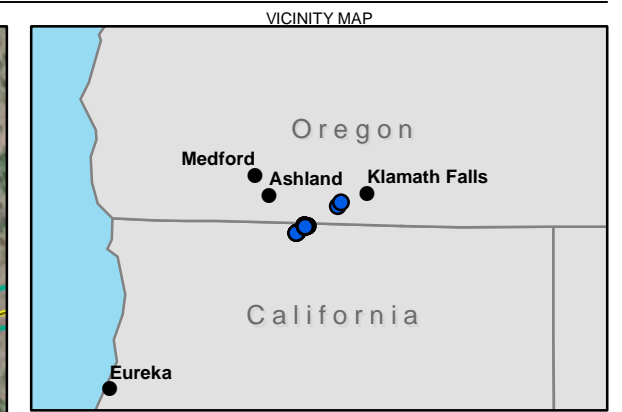
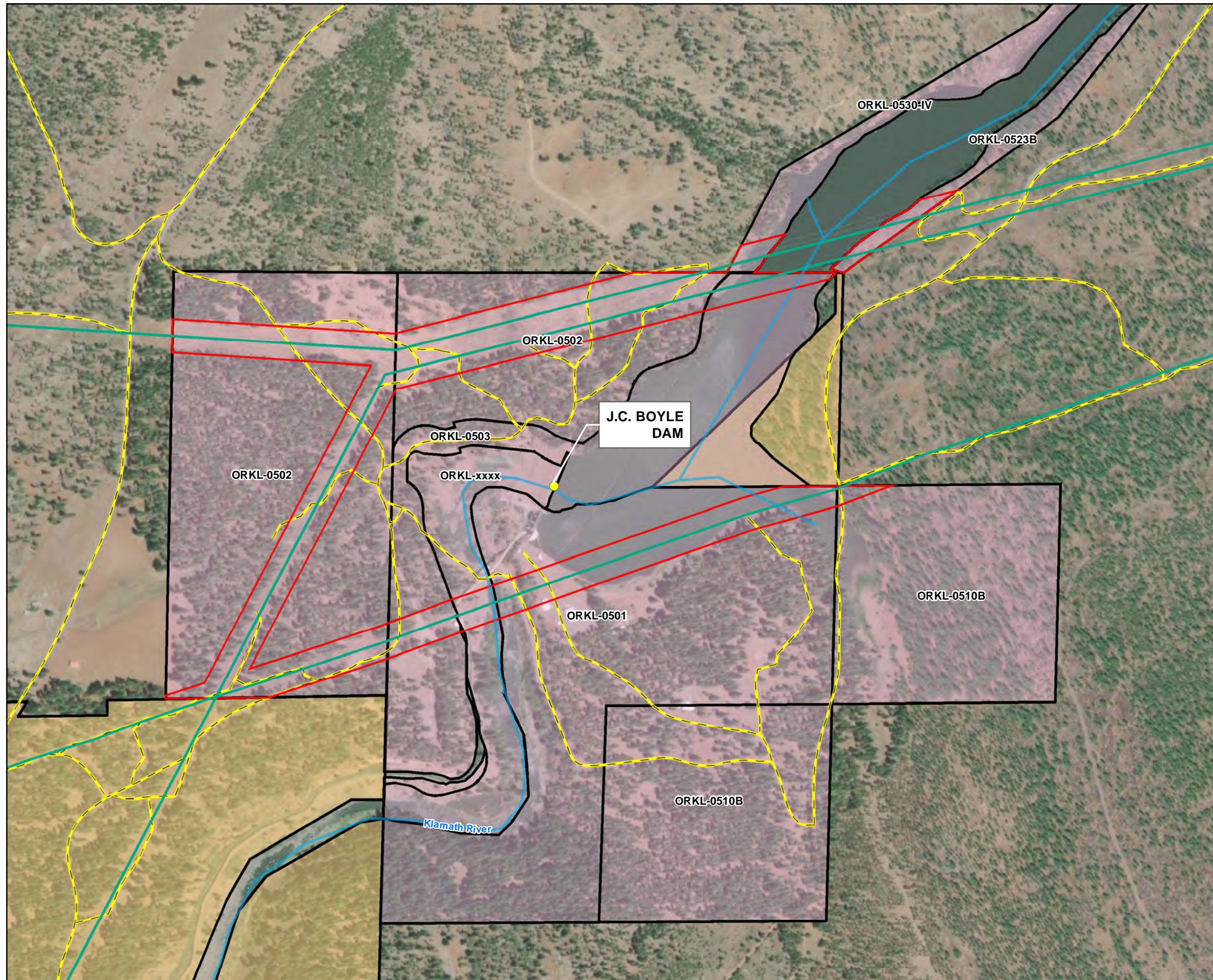


FIGURE 2-1
J.C Boyle Substation and Switchyard Sampling Grid
Lower Klamath Hydroelectric Project



- LEGEND**
- Dam Infrastructure to be Removed
 - Parcel B Lands
 - PacifiCorp Ownership
 - BLM
 - Retained Easements (~ 52 Acres, 10,200 Linear Ft)
 - County Boundary
 - Transmission Line
 - Access Roads
 - River/Creek

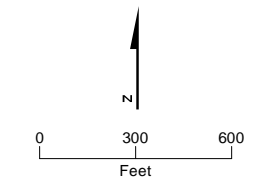


FIGURE 2-2
Retained Easement
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project

Appendix A
Underground Storage Tank Registration and
Decommissioning Documents



State of Oregon
Department of
Environmental
Quality

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY UNDERGROUND STORAGE TANK PROGRAM

GENERAL PERMIT REGISTRATION FORM TO DECOMMISSION EXISTING UNREGISTERED TANKS

and

30-DAY NOTICE OF INTENT TO DECOMMISSION USTS

- This form for registration of existing tanks that have never been reported to DEQ should be submitted at least 30-days before beginning decommissioning by permanent closure.
- To register existing tanks you must submit pages 4 through 8 of this registration form and a check for the amount of the required registration fee. See page 4 to calculate the required fee.
- If you are registering more than five (5) tanks, please make a copy of pages 7 and 8. List the additional tanks on the copy.
- You must call your regional office to receive authorization to proceed with the decommissioning at least 72 hours prior to beginning work. See page 3 for phone numbers.
- You must submit the Underground Storage Tank Decommissioning Checklist and Site Assessment Report to your local Regional Office within 30 days following completion of the tank decommissioning or change-in-service **regardless if cleanup work is ongoing.**

CHECKLIST

1. Be sure signatures are provided for the tank owner, permittee and property owner, **even where one person fills all three roles.**
2. Complete the registration form for all tanks being registered at the facility.
3. Make copies for your records.
4. Enclose your check payable to:
Oregon Department of Environmental Quality
5. Please return the general permit registration form and applicable registration fee to:

Department of Environmental Quality
Attn: Revenue Section
700 NE Multnamah St.
Portland, Oregon 97232

INSTRUCTION PAGE

DESCRIPTION OF GENERAL PERMIT PROGRAM

In lieu of issuing individual permits, Oregon's UST permitting program has adopted a general permit by rule to decommission USTs that identifies the conditions and requirements for temporary and permanent closure or completing a change-in-service. By signing the registration forms, you are certifying that you will comply with all the conditions and requirements of the general permit to decommission USTs.

DEFINITIONS

Facility – the place where the tank is located.

Decommission – means temporary or permanent closure, including temporary or permanent removal from operation, filling in-place, removal from the ground or change-in-service to non-regulated status.

Owner – means a person who currently owns an UST or owned an UST during the tanks operational life. If registered with the Secretary of State, Corporations Division, the UST owner is the legal business name.

Permittee – means the owner or person designated by the owner, who is in control or has responsibility for daily UST system operation and maintenance, financial responsibility and UST operator training requirements under a general permit pursuant to OAR 340-150-0160 through 340-150-0168. If registered with the Secretary of State, Corporations Division, the permittee is the legal business name. The permittee is mailed the annual compliance fee invoice.

Property owner – means the legal owner of the real property on which an UST is located (the name that appears on the County deed records).

GENERAL PERMIT REGISTRATION FORM

1. Please fill in the name, address and phone number of the facility. If this facility is registered with DEQ please include the DEQ facility number.
2. Please fill in the number of tanks in the space provided in the general permit registration fee section. For existing tanks not previously registered, back fees are required by OAR 340-150-0110 (6). Calculate the total amount due.
3. Please fill in the tank owner's legal name, address and phone number. The legal name is the name of the tank owner as filed with the Secretary of State, Corporations Division, if applicable. The tank owner must sign the registration form.
4. The tank owner can designate a permittee for each facility. Please ask the permittee in charge of the facility to fill in their legal name, address and phone number. The legal name is the name of the permittee as filed with the Secretary of State, Corporations Division, if applicable. The permittee must sign the registration form.
5. Please fill in the property owner's name, address and phone number. The property owner's name should be the name in the county deed records. The property owner must sign the registration form.
6. There must be three signatures for each completed registration form – the tank owner, permittee and property owner. **IF ONE PERSON FILLS ALL THREE ROLES, THAT PERSON MUST SIGN THREE TIMES.**
7. Complete all sections and pages of the form.

LICENSED SERVICE PROVIDERS AND SUPERVISORS

ORS 466.750 and OAR 340 – Division 160 requires that licensed service providers perform tank decommission work. If contaminated soil is discovered during decommissioning, and a decision is made to remediate the site using the soil matrix rules, ORS 466.750 and OAR 340 – Division 162 requires that licensed service providers perform soil matrix cleanup work. During certain critical phases as specified in the rules, a licensed supervisor must be present on site to monitor the work. A list of licensed service providers and supervisors is available upon request by calling (503) 229-6652 or toll-free in Oregon 1-800-742-7878 (a message answering machine). **NOTE: AN OWNER OR PERMITTEE MAY PERFORM UST SERVICES ONLY IF THEY HAVE TAKEN AND PASSED THE APPROPRIATE UST SUPERVISOR EXAMINATION OFFERED BY A NATIONAL TESTING SERVICE (OAR 340-150-0156).**

INSTRUCTION PAGE

HELP WITH THIS REGISTRATION FORM

If you have any questions about this registration form, please phone the DEQ UST Program at (503) 229-6652. You can also phone the UST Program's toll-free Oregon number, 1-800-742-7878. This is a message answering machine for calls made in Oregon. Underground Storage Tank Program staff will return your call within 24 hours (one business day). You can also send an e-mail to tanks.info@deq.state.or.us. Our regional staff is also available to answer questions regarding the general permit program and this general permit registration form (see below for telephone numbers).

COPIES OF GENERAL PERMIT CONDITIONS AND REQUIREMENTS AND UST PROGRAM RULES

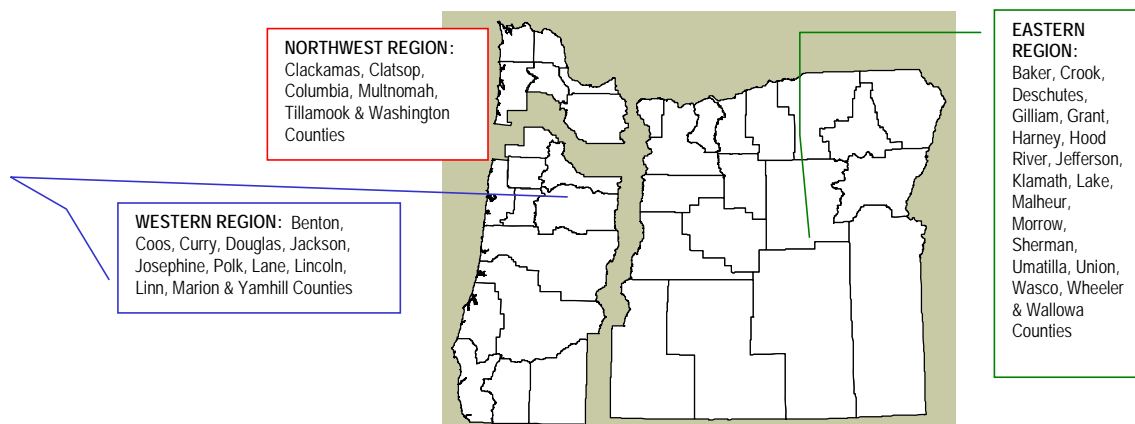
Copies of the general permit to decommission conditions and requirements and UST Program rules and laws can be obtained from:

1. Any of the DEQ offices listed below,
2. By calling the UST HELPLINE at 1-800-742-7878,
3. Send an e-mail to tanks.info@deq.state.or.us, or
4. Downloading from the UST home page at:

<http://www.deq.state.or.us/lq/tanks/ust/index.htm>

View Oregon Administrative Rules (OAR) and open Division 150 to OAR 34-150-0166 & 340-150-0168.

View Oregon Revised Statutes (ORS) and open Chapter 466 to ORS 466.706 to 466.845



EASTERN REGION / BEND

Phone: 541-388-6146

NORTHWEST REGION / PORTLAND

Phone: 503-229-5263

UST HELPLINE: 1-800-742-7878
(toll free in Oregon)

WESTERN REGION / MEDFORD

Phone: 541-776-6010

WESTERN REGION / COOS BAY

Phone: 541-269-2721

WESTERN REGION / EUGENE

Phone: 541-686-7838

GENERAL PERMIT REGISTRATION FORM
TO DECOMMISSION UNREGISTERED USTs

PLEASE PRINT

FACILITY NAME: _____

FACILITY ADDRESS: _____

CITY, STATE & ZIP: _____

PHONE: _____ **FACILITY NUMBER:** _____

(If known)

GENERAL PERMIT REGISTRATION FEE

For existing tanks installed in 1988 or earlier the registration fee is \$500 per tank.

Number of existing tanks being registered ____ x \$500 = \$_____ Total Fee Due

Note: If an existing tank was installed after 1988 please contact the Department at 503-229-6652 or 1-800-742-7878 for assistance in calculating the fee.

For existing tanks not previously registered and permitted, back fees are due and payable with this general permit registration form in accordance with OAR 340-150-0110 (6).

30-DAY NOTICE OF INTENT TO DECOMMISSION INFORMATION

Work To Be Performed By: _____
(Name of Permittee, Tank Owner, Property Owner or Licensed Service Provider)

If performed by Service Provider: License # _____

Contact Phone: _____ Contact Mobile Phone: _____

Will tank removal or potential cleanup affect adjacent property or right-of-way property?

Yes _____ No _____

Date decommissioning is scheduled to begin: _____

GENERAL PERMIT REGISTRATION FORM TO DECOMMISSION UNREGISTERED USTs

<p>_____</p> <p>1. TANK OWNER* as registered with the Secretary of State, Corporations Division</p> <p>_____</p> <p>Name of Official (<i>Please Print</i>)</p> <p>_____</p> <p>Signature of Official _____ Date _____</p> <p>I will decommission the USTs described on the <i>Notification and Description of Underground Storage Tank Systems</i> pages in accordance with the conditions and requirements of the general permit to decommission.</p>	<p>_____</p> <p>Mailing Address (<i>Please Print</i>)</p> <p>_____</p> <p>City, State and Zip Code</p> <p>_____</p> <p>Area Code and Telephone Number</p>
---	---

<p>_____</p> <p>2. PERMITTEE* as registered with the Secretary of State, Corporations Division</p> <p>_____</p> <p>Name of Official (<i>Please Print</i>)</p> <p>_____</p> <p>Signature of Official _____ Date _____</p> <p>I will decommission the USTs described on the <i>Notification and Description of Underground Storage Tank Systems</i> pages in accordance with the conditions and requirements of the general permit to decommission.</p>	<p>_____</p> <p>Mailing Address (<i>Please Print</i>)</p> <p>_____</p> <p>City, State and Zip Code</p> <p>_____</p> <p>Area Code and Telephone Number</p>
--	---

<p>_____</p> <p>3. PROPERTY OWNER is name that appears on the County deed record for this property.</p> <p>_____</p> <p>Name of Official (<i>Please Print</i>)</p> <p>_____</p> <p>Signature of Official _____ Date _____</p>	<p>_____</p> <p>Mailing Address (<i>Please Print</i>)</p> <p>_____</p> <p>City, State and Zip Code</p> <p>_____</p> <p>Area Code and Telephone Number</p>
--	---

* If this facility or tanks are owned by a person, or operated by a permittee that is a business registered with the Secretary of State, Corporations Division, you must use that legal business name for purposes of registering these USTs with the Department. Please make sure that your business registration with the Oregon Corporations Division (503-986-2200) is active or your application may be placed on hold until your registration has been renewed.

Return Completed Form to: Department of Environmental Quality
 Attn.: Revenue Section
 700 NE Multnomah St.
 Portland, OR 97232

Notification and Description of Underground Storage Tank Systems

TYPE OF OWNER		INDIAN COUNTRY	
<input type="checkbox"/> Federal Government <input type="checkbox"/> State Government <input type="checkbox"/> Local Government	<input type="checkbox"/> Commercial <input type="checkbox"/> Private	Tanks are located on land within an Indian Reservation or on trust lands outside reservation boundaries. <input type="checkbox"/> Tanks are owned by a Native American nation or tribe. <input type="checkbox"/>	Tribe or Nation:
TYPE OF FACILITY			
<input type="checkbox"/> Gas Station <input type="checkbox"/> Petroleum Distributor <input type="checkbox"/> Air Taxi (Airline) <input type="checkbox"/> Aircraft Owner <input type="checkbox"/> Auto Dealership	<input type="checkbox"/> Railroad <input type="checkbox"/> Federal - Non-Military <input type="checkbox"/> Federal - Military <input type="checkbox"/> Industrial <input type="checkbox"/> Contractor	<input type="checkbox"/> Trucking/Transport <input type="checkbox"/> Utilities <input type="checkbox"/> Residential <input type="checkbox"/> Farm <input type="checkbox"/> Other (Explain)	
FINANCIAL RESPONSIBILITY			
<input type="checkbox"/> I will meet the financial responsibility requirements in accordance with OAR 340 – Division 151			
Check All that Apply			
<input type="checkbox"/> Pollution Liability Insurance <input type="checkbox"/> Self Insurance <input type="checkbox"/> Exempt (Federal or State Government)	<input type="checkbox"/> Letter of Credit <input type="checkbox"/> Surety Bond	<input type="checkbox"/> Guarantee <input type="checkbox"/> Local Government	

The financial responsibility requirements are designed to make sure that the tank owner, property owner or permittee can pay the costs of cleaning up leaks and compensating third parties for bodily injury and property damage caused by leaking USTs. A plain language summary of the financial responsibility requirements can be downloaded from the Internet at <http://www.epa.gov/swerust1/pubs/dollars.htm>. For a list of known insurance providers go to <http://www.epa.gov/swerust1/pubs/inlist.htm>.

CONTACT PERSON IN CHARGE OF TANKS			
Name:	Job Title:	Address:	Phone Number (Include Area Code):
CERTIFICATION (Read and sign after completing all section)			
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.			
Name and official title of owner or owner's authorized representative (Print) Name: Title:	Signature	Date Signed	

NOTIFICATION AND DESCRIPTION OF UNDERGROUND STORAGE TANK SYSTEMS

(Complete for each tank at this location)

Tank Identification Number	Tank No.	Tank No.	Tank No.	Tank No.	Tank No.
1. Status of Tank (Check (√) only one)					
Currently in Use					
Temporarily Out of Use					
Permanently Out of Use					
2. Date of Installation (month & year)					
3. Estimated Total Capacity (gallons)					
4. Material of Construction (Check (√) all that apply)					
Asphalt Coated or Bare Steel					
Cathodically Protected Steel					
Epoxy Coated Steel					
Composite (Steel with Fiberglass)					
Fiberglass Reinforced Plastic					
Lined Interior					
Double Walled					
Polyethylene Tank Jacket					
Concrete					
Excavation Liner					
Unknown					
Other Material, Please Specify					
Has Tank been Repaired?					
Check (√) Box if Yes					
Date of Repairs					
5. Piping – Material (Check (√) all that apply)					
Bare Steel					
Bare Steel Wrapped					
Galvanized Steel					
Fiberglass Reinforced Plastic					
Copper					
Cathodically Protected					
Double Walled					
Secondary Containment					
Unknown					
Not in Contact with Soil					
Other Material, Please Specify					
6. Piping – Type (Check (√) all that apply)					
Suction – No Valve at Tank					
Suction – Valve at Tank					
Pressure					
Gravity Feed					
Has Piping been Repaired?					
Check (√) Box if Yes					
Date of Repair					

NOTIFICATION AND DESCRIPTION OF UNDERGROUND STORAGE TANK SYSTEMS

(Complete for each tank at this location)

Tank Identification Number	Tank No.	Tank No.	Tank No.	Tank No.	Tank No.
-----------------------------------	-----------------	-----------------	-----------------	-----------------	-----------------

7. Substance Currently or Last Stored in Greatest Quantity by Volume

Check (√) Only One Substance per Tank)

Gasoline					
Diesel					
Gasohol					
Kerosene					
Heating Oil					
Used Oil					

Hazardous Substance					
CERCLA Name and/or					
CAS Number					

Mixture of Substances					
Please Specify Mixture					

Other					
Please Specify Other					

8. Release Detection (Check (√) all that Apply)

	Tank	Pipe	Tank	Pipe	Tank	Pipe	Tank	Pipe	Tank	Pipe
Manual Tank Gauging		█		█		█		█		█
Tank Tightness Testing										
Inventory Control										
Automatic Tank Gauging										
Vapor Monitoring										
Groundwater Monitoring										
Secondary Containment										
Automatic Line Leak Detector	█		█		█		█		█	
Line Tightness Testing	█		█		█		█		█	
No Release Detection Required (Emergency Generator // Field Constructed Tanks)										
Other Method Allowed by Department										
Other Method, Please Specify										

9. Spill and Overfill Protection

Overfill Device Installed					
Spill Device Installed					

Appendix B
Consolidated Comment Matrix

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
<i>California Department of Water Resources / California Department of Fish and Wildlife - Office of Spill Prevention and Response (Comments on the California Site Investigation Work Plan Supplement)</i>					
CA-General	KT	General		CDFW-OSPR would like to conduct a site visit during the fieldwork, which PacifiCorp/Jacobs indicates will occur in the fall and winter of 2022-23. CDFW-OSPR requests PacifiCorp/Jacobs provide a schedule for fieldwork to be conducted, which will allow CDFW-OSPR to determine appropriate dates for a site visit to observe fieldwork activities and assess the effectiveness of avoidance and minimization measures that have been implemented.	If CDFW-OSPR staff are available when the PacifiCorp team is conducting this work, a site visit can be arranged. The implementation schedule has not been set, but once it is there will be limited flexibility.
CA-1	KT	High-Voltage Switchyards (REC 8)	Section 2.1, page 2-1	High Voltage Switchyards (REC 8). CDFW would like additional documentation of PacifiCorp's obligation to assess conditions prior to extinguishing the easement or otherwise terminating the use. Perhaps include text in the REC closure form and include text in the retained easement.	In the Property Transfer Agreement (Agreement) Section 3.5(a) requires that PacifiCorp resolve all pre-existing environmental conditions at its sole cost and expense to the reasonable satisfaction of the KRRC in consultation with the respective State. The sites PacifiCorp will not be able to address at closing will all have to be in the Post-Closing Environmental Resolution Agreement as a Retained Environmental Obligation (per Agreement Exhibit F). Section 2.2 of the Post-Closing Environmental Resolution Agreement repeats Agreement Section 3.5(a). Additionally, Agreement Exhibit H-1, Section B.1 states that "Grantor shall, at its sole cost and expense, maintain the Substation Easement Areas and the Retained Substation Facilities in an orderly and safe condition and comply with all laws, including all regulatory, environmental, and safety requirements, applicable to Grantor and its activities under the Substation Easement including the use and management of the Retained Substation Facilities and the Substation Easement Areas." PacifiCorp interprets this as requiring PacifiCorp to do the necessary investigation and clean-up if an easement is released. No edits to Supplement No. 1 are necessary.
CA-2	KT		Section 2.1.2 Sampling Plan and Table 2-1, Page 2-2	The Supplement #1 states: "The COPCs for the switchyards are PCBs and transformer oil." Filtering is not considered appropriate for water samples to be analyzed for PCBs because contaminants that sorb to particulates are removed when filtered. We recommend that PacifiCorp/Jacobs perform a risk assessment using unfiltered data.	Section 2.1.2 of Supplement No. 1 has been modified to state the following: "If groundwater is encountered when collecting soil samples at the switchyards, unfiltered grab groundwater samples will be collected for submittal to the analytical laboratory." The groundwater samples will be analyzed for the same COPCs as the soil samples.
CA-3	KT		Section 2.1.2 Sampling Plan, Page 2-2	The Supplement #1 states: "Consequently, soil samples will be analyzed for PCBs by U.S. Environmental Protection Agency (EPA) Method SW846 8082A..." CDFW-OSPR strongly recommends that homologue analysis be used to estimate total PCBs concentrations in soil and groundwater samples. It is unclear if Aroclor-based methods or PCB congener-specific and PCB homologue methods will be used in analytical testing services for samples. The analytical method described in Valoppi et al. (2000) should be used for assessing risk of the 28 PCB congeners that exhibit dioxin-like toxicity.	The methods in Supplement No. 1 reflect current guidance from EPA and DTSC. Specifically, as recommended by DTSC in HERO guidance, Human Health Risk Assessment Note Number 8: Recommendations for Evaluating Polychlorinated Biphenyls (PCBs) at Contaminated Sites in California (DTSC/HERO 2020) and the PCB Evaluation Quick Reference Guide (DTSC 2023), soil samples will be analyzed for PCBs per EPA Method SW846 8082A. The PCB Evaluation Quick Reference Guide specifically states, "DTSC and U.S. EPA require Method 8082 for PCB analysis, and recommend Method 1668 or 680 on select samples to provide a detailed specification of PCBs in certain situations." Section 2.1.2 of Supplement No. 1 has been modified to state the following: "Should PCBs be detected in soil samples, EPA Method 1668 (PCB homologue method) with EPA Extraction Method SW846 3540C may be performed on select soil samples." This edit has also been made to OR Supplement No. 1.

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
CA-4	KT		Section 2.4.2 Assessment Process, Page 2-4	Please verify the assessment process can be accomplished without interfering with dam removal. For example, some of the bulleted actions could affect schedule (e.g. acquiring a removal permit from the CUPA [Certified Unified Program Agency]) and we're wondering if dam removal activities can proceed while the assessment process is implemented.	Whether dam removal activities could proceed should an undocumented UST (or other issue) be discovered will depend on the location and size of the UST and how quickly the CUPA would respond with issuance of a UST Removal Permit, approval of the UST Removal Work Plan, and concurrence with planned removal schedule. PacifiCorp presumes that the UST would minimally be cordoned with temporary fencing, etc., and that dam removal activities would resume while permitting and the approvals process for UST removal proceeds. Per discussion with the CUPA on October 5, 2022, the turnaround time for UST removal upon discovery and under purview by the CUPA is approximately 1 week from submittal of a proper UST removal permit application with proper UST removal work plan. No edits to Supplement No. 1 are necessary.
CA-5	KT		Section 2.5 Undiscovered Impacted Soil and Groundwater (RECs 5, 9, and 17), Page 2-4	The Supplement #1 indicates: <i>"The objective for the RECs presented in this California Supplement is to establish a process whereby impacted soil and groundwater within the RECs can be addressed if such impacts are encountered."</i> CDFW-OSPR requires PacifiCorp/Jacobs ensure contaminants which may enter State waters are not at levels deleterious to fish, mammals, plant life or bird life (Fish and Game Code section 5650). The California Fish and Game Code identifies "Fish" as <i>"a wild fish, mollusk, crustacean, invertebrate, amphibian, or part, spawn, or ovum of any of these animals."</i> CDFW-OSPR suggests that the PacifiCorp/Jacobs continue to monitor contaminant concentrations in surface water if PacifiCorp/Jacobs detects concentrations over the project action limit in ground water.	PacifiCorp is currently not required to monitor contaminant concentrations in surface water within the dam developments as they exist now. Before performing such monitoring, impacted soil or groundwater would first have to be encountered within features associated with REC 5, 9, or 17. Section 2.5.1 of Supplement No. 1 has been modified to read as follows: "If impacted soil or groundwater is encountered within these areas, PacifiCorp will establish whether the impacted soil and groundwater is localized or representative of a contaminant plume. PacifiCorp will then determine if there is a complete migration pathway for the contaminant to a surface water; dilution factors will additionally be assessed on a case-by-case basis if potential contamination is identified. Upon completion of a site investigation, evaluation of analytical results, and a risk assessment, PacifiCorp will determine if there is a requirement to implement some type of clean-up, containment, or monitoring program for the REC." This same edit has been made to OR Supplement No. 1.
CA-6	KT		Section 2.5 Undiscovered Impacted Soil and Groundwater (RECs 5, 9, and 17), Page 2-4	Once potential contamination is identified, please provide dilution factors for transport between groundwater and surface water. If sufficient validation is not available for a specific dilution factor, please make the conservative assumption that there is no dilution of contaminants between ground and surface waters.	Please see the response to CA-5.
CA-7	KT		Section 2.5.2 Assessment Process, Page 2-5	Same comment as #4 [CA-4] above. CDFW notes that PacifiCorp acknowledge in the Supplement that assessment and evaluation of impacted soil or groundwater may delay ongoing dam removal work at some locations. Is there other contingency planning that could occur with KRRC?	PacifiCorp is fully aware of the potential implications from any discovered issues to affect the overall project schedule. Item 3 on page 2-5 indicates that PacifiCorp may proceed directly to clean-up of a suspect location, stockpile the material, and then do the assessment and evaluation necessary to determine the scope of the issue, if any. Rapid removal in close coordination with the KRRC team is the best way to minimize potential effects on the dam removal work schedule. PacifiCorp has confirmed that the KRRC will have a plan to address this issue should it occur (Morton D. McMillen, McMillen Jacobs Associates, to Demian Ebert, PacifiCorp, on October 31, 2022, at 6:19 AM). Section 2.5.2 of Supplement No. 1 has been modified to read as follows: "The stepwise approach will be formalized in a contingency plan to be developed by KRRC and PacifiCorp in advance of construction. The stepwise approach will be used when managing the undiscovered PECs, as follows:..."

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
CA-8	KT		Section 2.5.2 (1) Identification of Potential Contamination, Page 2-5	Please confirm PacifiCorp's assumption is correct that KRRC will have environmental staff onsite that can identify hazardous materials.	<p>McMillan Jacobs Associates is the KRRC's representative for removal. McMillan Jacobs Associates confirmed that they will have environmental staff onsite during all removal work and a contractual relationship with a firm qualified to collect samples and do a site-specific assessment (Morton D. McMillen, McMillen Jacobs Associates, to Demian Ebert, PacifiCorp, on October 31, 2022, at 6:19 AM).</p> <p>Section 2.5.2 (1) of Supplement No. 1 has been modified to read as follows: "The KRRC will have qualified environmental staff onsite during dam removal activities. Such staff will be qualified to collect environmental samples and perform site-specific assessments."</p>
CA-9	KT		Section 2.5.2 (3) Remediation and Removal of Impacted Media, Page 2-5	Please confirm that KRRC has identified an approved waste staging area. If possible, please also confirm that the waste staging area can accommodate the potential materials that could be discovered. Please also determine if RES intends to use a certain amount of soil for restoration such that any contaminated soil that can't be reused would impact restoration plans. We're wondering what sort of adjustments, if any, RES (or the team) would need to make if all the soil can't be reused onsite.	<p>Because these particular RECs are currently unknown and unknowable, clean-up actions cannot be developed, and selection of specific stockpile locations or potential uses of excess material have not been developed. However, PacifiCorp expects that development of a detailed contingency plan (see response to CA-7) will be developed before the start of construction. That plan would be coordinated with the KRRC's team to identify waste staging areas, stockpile management, soil reuse, backfill and compaction, and offsite disposal requirements all with an eye toward reducing potential conflicts and schedule impacts on the dam removal project.</p> <p>Section 2.5.2 (3) of Supplement No. 1 has been modified to read as follows: "Removal action in advance of testing means that PacifiCorp would manage impacted materials as outlined in the contingency plan. Potentially impacted soil or groundwater will be excavated and hauled to an approved waste staging area identified by the KRRC and as outlined in the contingency plan."</p> <p>The corresponding edit has been made to OR Supplement No. 1.</p>
CA-10	KT		Section 2.5.2 (4) Site Investigation Report and PEC Closure, Page 2-6	CDFW requests that RECs not be closed by default. Instead, PacifiCorp should acquire CDFW's and KRRC's concurrence prior to closing the REC.	Section 2.5.2 (4) of Supplement No. 1 has been modified to read as follows: "If impacted soil and groundwater are not observed at completion of facilities removal for RECs 5 and 9 (dams and powerhouses) and at the completion of restoration for REC 17, then the RECs will be recommended for closure by PacifiCorp per the terms of the Agreement and the process developed with the KRRC and the State of California."

* KT = Kevin Takei

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
<i>Klamath River Renewal Corporation (Comments on the California and Oregon Site Investigation Work Plan Supplements)</i>					
KRRC-General	LL			I should add, as a general matter, that KRRC incorporates the States' comments.	Acknowledged.
KRRC-1	LL	CA Supplement	Section 1.2, last paragraph	Please rephrase as "The RECs identified in this California Supplement will be assessed by following the same processes, procedures, and standards provided for in the California SIWP."	The KRRC and State of California approvals of the California SIWP are recommended in the document in order to establish precedence for use of the same processes, procedures, and standards when assessing the RECs identified in the California Supplement. The last sentence of the first paragraph in Section 1.1 in Supplement No. 1 now reads as follows: "This California Supplement incorporates the California SIWP by reference and provides specific information necessary to address remaining RECs in accordance with the California SIWP, which was approved by the KRRC (Lowy, pers. comm. 2021) and the State of California and which was implemented when assessing the various RECs within the Copco No. 1, Copco No. 2, and Iron Gate developments (Jacobs 2021a)." The last paragraph of Section 1.2 in Supplement No. 1 now reads as follows: "The RECs identified in this California Supplement will be assessed by following the same processes, procedures, and standards that were approved for the California SIWP."
KRRC-2	LL	CA Supplement	Section 1.4	Please add the following at the beginning of the first sentence: "“Notwithstanding any specific process or procedure identified in this California Supplement, ...”"	This text has been incorporated into the document.
KRRC-3	LL	CA Supplement	Section 1.4, Table 1-1	What was the basis for determining the future uses of the different areas? For example, I question whether it's correct to refer to the future uses of all of the retained easements as industrial – certainly some areas are but outside of the exclusive easement areas I'm not sure that's the case.	The future uses listed in Table 1-1 were confirmed by the State of California on November 7, 2022 (Kevin Takei, State of California, to Demian Ebert, PacifiCorp, November 8, 2022, at 12:10 p.m.) and have been incorporated into Supplement No. 1.
KRRC-4	LL	CA Supplement	Section 2.1	Please state the methodology for quantity of samples and grid spacing etc. KRRC suggests the EPA methodology (40 CFR Part 761, Subpart N) for characterizing the media.	Section 2.1.2 of Supplement No. 1 has been modified to read as follows: "Of note is that there are no records of spills or releases at the switchyards. The environmental sampling activities are being performed to confirm the presence or absence of PCBs within the switchyards. If analytical results from the initial sampling event indicate the presence of PCBs, then additional sampling at the Copco No. 1 or Iron Gate switchyards may be performed within identified areas of concern as per 40 Code of Federal Regulations Part 761, Subpart N. Concrete sampling will additionally be performed for PCBs at the switchyards, and the analytical results will be used to help determine disposal options for concrete."
KRRC-5	LL	CA Supplement	Section 2.1, second paragraph	The assertion that the retained easement areas in the high-voltage switchyards will not be assessed at this time is not something that, as far as I know, has been discussed previously with KRRC. I understand the rationale and don't necessarily object but that discussion should take place. If that is, in fact, where we end up, then PacifiCorp's obligation to assess and remediate these easement areas at a much later date will need to be expressly identified in the Post-Closing Environmental Resolution Agreement and the reservation of easements, and carved out of any closure of any other retained easement areas.	Please see the response to CA-1.

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
KRRC-6	LL	CA Supplement	Section 2.1.2, penultimate (second-to-last) paragraph	The likely future use of the switchyard areas should be determined at the relevant time in consultation with California and, if applicable, KRRC rather than being assumed by PacifiCorp.	Please see the response to KRRC-3.
KRRC-7	LL	CA Supplement	Section 2.2.1, second paragraph	I believe this acknowledges that the easement area extends 100 feet on each side of the transmission and distribution facilities – please confirm or rephrase accordingly.	The text of the California Supplement correctly states that the retained easements for the transmission and distribution system is the location of existing structures buffered by 100 feet on either side of the line. No edits to Supplement No. 1 are necessary.
KRRC-8	LL	CA Supplement	Section 2.4.2, second bullet	The likely future use of the areas within UST footprints should not be determined by PacifiCorp but rather by KRRC and California.	Please see the response to KRRC-3.
KRRC-9	LL	CA Supplement	Section 2.5.2, paragraph 1	There should be a discussion regarding the extent to which KRRC will have environmental staff onsite during dam removal and the process should be tailored around that.	Please see the response to CA-8.
KRRC-10	LL	CA Supplement	Section 2.5.2, paragraph 3	I'm not sure what "PacifiCorp's discretion in coordination with KRRC" means in this context; a decision to proceed to remediation without investigation should not be made by PacifiCorp without first consulting KRRC; same for deciding which soil stockpiles are to be reused or disposed of onsite.	The goal of this entire item is to reduce the potential for the overall dam removal project to be delayed by the need to investigate, analyze, and then clean-up a newly discovered potential contamination site. Instead, if contamination is identified as potentially present, PacifiCorp may at its discretion, and in consultation with the KRRC, proceed to clean-up a suspected site simply to expedite the overall removal project. Management of soil would be detailed in a contingency plan (see response to CA-9). Section 2.5.2 (3) of Supplement No. 1 has been modified to read as follows: "Because of this potential for delay, at PacifiCorp's discretion and in coordination with the KRRC, PacifiCorp may proceed directly to site remediation to minimize impacts on dam removal activities and progress."
KRRC-11	LL	OR Supplement	Section 1.2, last paragraph	Please rephrase as "The RECs identified in this Oregon Supplement will be assessed by following the same processes, procedures, and standards provided for in the Oregon SIWP."	The KRRC and State of Oregon approvals of the Oregon SIWP are recommended in the document in order to establish precedence for use of the same processes, procedures, and standards when assessing the RECs identified in the Oregon Supplement. The last sentence of the first paragraph in Section 1.1 of Supplement No. 1 now reads as follows: "This Oregon Supplement incorporates the Oregon SIWP by reference and provides specific information necessary to address remaining RECs in accordance with the Oregon SIWP, which was approved by the KRRC (Lowy, pers. comm. 2021) and the State of Oregon (Matthews, pers. comm. 2021) and which was implemented when assessing J.C. Boyle Dispersed Recreation Area - 2 (Jacobs 2021a)." The last paragraph of Section 1.2 in Supplement No. 1 now reads as follows: "The RECs identified in this Oregon Supplement will be assessed by following the same processes, procedures, and standards that were approved for the Oregon SIWP."

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
KRRC-12	LL	OR Supplement	Section 1.4, first paragraph	Please add the following at the beginning of the first sentence: ""Notwithstanding any specific process or procedure identified in this Oregon Supplement, ..."	This text has been incorporated into the document.
KRRC-13	LL	OR Supplement	Section 1.4, Table 1-1	What was the basis for determining the future uses of the different areas? For example, I question whether it's correct to refer to the future uses of the retained easements as industrial as there are not any exclusive easement areas in Oregon.	The future uses listed in Table 1-1 were based on the uses for various areas as established in the SIWP. The review process for the draft Final Supplement was intended to ensure that future uses conformed with Oregon's ultimate vision for these locations. Per Oregon's recommendation, the future use for retained easements has been changed to Active Recreation per Oregon's comment (see Comment OR-1).
KRRC-14	LL	OR Supplement	Section 2.1	The Oregon Supplement only indicates sampling of the sub-surface soil. KRRC believes PacifiCorp should also sample the gravel and the concrete, as it will be relocated or disposed of.	Soil beneath gravel would be expected to be impacted by potential PCB or dielectric fluid spills. If PCBs were present in potential spills, the PCBs would have been washed through the gravel and attached to the fines in the soil. The gravel is not expected to contain much fine material and those fine materials are needed to run the analytical tests. The following text has been added to Section 2.1 of Supplement No. 1: "Concrete sampling will additionally be performed for PCBs at the switchyard, and the analytical results will be used to help determine disposal options for concrete."
KRRC-15	LL	OR Supplement	Section 2.2.2, third bullet	Again, future uses of that portion of the property should be determined by consulting KRRC and Oregon.	The future site uses as shown in Table 1-1 have been approved by the KRRC and Oregon. The second sentence of this bullet has been modified to read: "For newly identified PECs within the retained easements, determine the potential COPCs for the PEC(s), perform a site assessment(s) according to the Oregon SIWP (Jacobs 2021a), and evaluate the analytical results against the screening levels for the future uses and exposure pathways established in Table 1-1." The corresponding edit has been made to CA Supplement No. 1.
KRRC-16	LL	OR Supplement	Section 2.4.2, second bullet	Same comment as 2.2.2 [KRRC-15].	The future site uses as shown in Table 1-1 have been approved by the KRRC and Oregon. The text of this bullet has been modified to read: "PacifiCorp will determine the potential COPCs for the UST, perform a site assessment according to the Oregon SIWP (Jacobs 2021a), and evaluate the analytical results against the screening levels for the future uses and exposure pathways established in Table 1-1." The corresponding edit has been made to CA Supplement No. 1.
KRRC-17	LL	OR Supplement	Section 2.5.2, paragraph 1	There should be a discussion regarding the extent to which KRRC will have environmental staff onsite during dam removal and the process should be tailored around that.	Please see the response to CA-8. The corresponding edit has been made to Oregon Supplement No. 1.
KRRC-18	LL	OR Supplement	Section 2.5.2, paragraph 3	A decision to proceed to remediation without investigation should not be made by PacifiCorp without first consulting KRRC; same for deciding which soil stockpiles are to be reused or disposed of onsite	Please see the response to KRRC-10. The corresponding edit has been made to Oregon Supplement No. 1.

* LL = Lloyd Lowy

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
<i>Oregon Department of Justice (Comments on the Site Investigation Work Plan Supplements)</i>					
OR-1	CM		General	Oregon joins in the comments by KRRRC and the Golden State. Our only specific comment is that we believe the future uses described for the retained easement areas in Oregon are incorrect – the land is not “industrial” as the likely exposure pathway will actually be “active recreation” (as none of the areas are exclusively for use by PacifiCorp – these are transmission line easements). Therefore those areas will need to be remediated (as necessary) to the higher standard.	The future use for the retained easements has been changed to Active Recreation. Also, please see the response to KRRRC-13.

* CM = Chris Matthews

References

- California Department of Toxic Substances Control (DTSC). 2023. *Polychlorinated Biphenyl (PCB) Evaluation Quick Reference Guide*. <https://dtsc.ca.gov/brownfields/polychlorinated-biphenyl-pcb-evaluation-quick-reference-guide/>.
- California Department of Toxic Substances Control Human and Ecological Risk Office (DTSC HERO). 2020. *Human Health Risk Assessment Note Number 8: Recommendations for Evaluating Polychlorinated Biphenyls (PCBs) at Contaminated Sites in California*. June.
- Valoppi, L., M. Petreas, R. M. Donohoe, L. Sullivan, and C.A. Callahan. 2000. "Use of PCB Congener and Homologue Analysis in Ecological Risk Assessment." *Environmental Toxicology and Risk Assessment: Recent Achievements in Environmental Fate and Transport*. Ninth Volume, ASTM STP 1381, F. T. Price, K. V. Brix, and N. K. Lane, Eds., American Society for Testing and Materials, West Conshohochen, PA. 9:147-160.

**Lower Klamath Hydroelectric Project
(FERC No. P-14803)**

California Site Investigation Work Plan Supplement No. 1

Final

January 2023

Prepared by:

Jacobs

Prepared for:



Lower Klamath Hydroelectric Project
(FERC No. P-14803)

Project No: D3514100.A.CS.EV.01
Document Title: California Site Investigation Work Plan Supplement No. 1
Document No.: PPS0615220711PDX
Revision: Final
Date: January 2023
Client Name: PacifiCorp, Demian Ebert, Klamath Program Manager, 503-813-6625
Project Manager: Emilio Candanoza, Jacobs, 541-768-3509

Jacobs Engineering Group Inc.

2020 SW Fourth Avenue
Suite 300
Portland, Oregon
United States
T +1.503.235.5000
www.jacobs.com

© Copyright 2022 Jacobs Engineering Group Inc. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.

Limitation: This document has been prepared on behalf of, and for the exclusive use of Jacobs' client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Contents

1.	Introduction	1-1
1.1	Purpose and Objectives	1-1
1.2	Recognized Environmental Conditions Addressed in This California Supplement	1-1
1.3	Background	1-2
1.4	Investigative Standard and Future Uses	1-3
1.5	California Supplement Organization	1-4
2.	Site Evaluation and Investigation	2-1
2.1	High-voltage Switchyards (REC 8)	2-1
2.1.1	Findings from Previous Investigations	2-1
2.1.2	Sampling Plan	2-1
2.2	Retained Easement Areas (REC 6)	2-2
2.2.1	Description	2-2
2.2.2	Assessment Process	2-3
2.3	Inaccessible Areas (REC 15)	2-3
2.4	Underground Storage Tanks (REC 16)	2-3
2.4.1	Description	2-3
2.4.2	Assessment Process	2-4
2.5	Undiscovered Impacted Soil and Groundwater (RECs 5, 9, and 17)	2-4
2.5.1	Description	2-4
2.5.2	Assessment Process	2-5
3.	References	3-1

Appendix

Consolidated Comment Matrix

Tables

1-1	Site Future Uses and Exposure Pathways
2-1	Proposed Sampling and Analysis Plan for Soil at Copco No. 1 and Iron Gate Switchyards
2-2	Summary of Inaccessible Area RECs

Figures

1-1	Site Investigation Work Plan Supplement No. 1 Recognized Environmental Conditions
1-2	Copco No. 1 Dam Recognized Environmental Conditions
1-3	Copco No. 2 Dam Recognized Environmental Conditions
1-4	Iron Gate Dam Recognized Environmental Conditions
2-1	Copco No. 1 Switchyard and Sampling Grid
2-2	Iron Gate Switchyard Sample Locations
2-3	Retained Easement Recognized Environmental Conditions

Acronyms and Abbreviations

AECOM	AECOM Technical Services, Inc.
Agreement	Property Transfer Agreement entered into by PacifiCorp and Klamath River Renewal Corporation
COPC	constituent of potential concern
CUPA	Certified Unified Program Agency
EPA	U.S. Environmental Protection Agency
ESA	environmental site assessment
FERC	Federal Energy Regulatory Commission
Jacobs	Jacobs Engineering Group Inc.
KRRC	Klamath River Renewal Corporation
PCB	polychlorinated biphenyl
PEC	pre-existing environmental condition
Project	Lower Klamath Hydroelectric Project
REC	recognized environmental condition
California SIWP	California Site Investigation Work Plan
California Supplement	California Site Investigation Work Plan Supplement No. 1
UST	underground storage tank

1. Introduction

As part of the Lower Klamath Hydroelectric Project (FERC No. P-14803), PacifiCorp and the Klamath River Renewal Corporation (KRRC) have entered into a legally-binding Property Transfer Agreement (Agreement) that identifies 17 pre-existing environmental conditions (PECs) located in the states of California and Oregon. All of the PECs are identified in Exhibit C of the Agreement.

While the Agreement and specifically Exhibit C discuss the resolution of PECs, the *California Site Investigation Work Plan* (California SIWP) (Jacobs 2021a) and this *California Site Investigation Work Plan Supplement No. 1* (California Supplement) refer to the Exhibit C items generically as recognized environmental conditions (RECs). Not all PECs in Exhibit C have been formally identified as a REC in a Phase I environmental site assessment (ESA).

PacifiCorp submitted the California SIWP to the State of California and the KRRC on November 16, 2021. The California SIWP described the sampling activities to be performed to confirm the presence or absence of constituents of potential concern (COPCs) at concentrations greater than selected screening levels at the RECs located in California, as identified in Section 1.3 and depicted on Figures 1-1 through 1-4.

1.1 Purpose and Objectives

PacifiCorp retained Jacobs Engineering Group Inc. (Jacobs) to develop this California Supplement and identify the process by which the remaining (i.e., not addressed in the California SIWP) Exhibit C RECs located in California will be brought forward for site assessment and closure. This California Supplement incorporates the California SIWP by reference and provides specific information necessary to address remaining RECs in accordance with the California SIWP, which was approved by the KRRC (Lowy, pers. comm. 2021) and the State of California and which was implemented when assessing the various RECs within the Copco No. 1, Copco No. 2, and Iron Gate developments (Jacobs 2021a).

The primary objective of this California Supplement is to establish the means by which the remaining Exhibit C RECs located in California will be assessed and closed per the Agreement. Secondary objectives are to identify the key environmental data that will support closure of the remaining seven RECs and outline the various sampling approaches for each REC so that as much analytical and field observational data as possible can be collected for REC closure under a single mobilization.

The field and analytical data will be used to determine and delineate the vertical and horizontal extent of potentially impacted soil, groundwater, or both, as needed, for REC closure. Waste characterization data will also be collected to help in planning a remedial action at a site. These data will be used to determine offsite disposal requirements and onsite waste segregation and management requirements for hazardous and nonhazardous waste, if encountered.

1.2 Recognized Environmental Conditions Addressed in This California Supplement

The following seven Exhibit C RECs are addressed in this California Supplement:¹

- Condition 5 – Undiscovered Impacted Soil and Groundwater at the four Powerhouses

¹ The REC names in this list are verbatim from Exhibit C. Elsewhere in this California Supplement, "high-voltage" is hyphenated when referencing Condition 8.

- Condition 6 – Underground Storage Tanks (USTs)
- Condition 8 – High voltage switchyards
- Condition 9 – Undiscovered Impacted Soil and Groundwater at the 4 Dam Developments
- Condition 15 – Inaccessible areas
- Condition 16 – Retained easement areas
- Condition 17 – Undiscovered Impacted Soil and Groundwater outside the removal work zone

These RECs (Figure 1-1) were not included in the California SIWP because during SIWP development, the RECs were unknown, undiscoverable, or inaccessible or because REC-specific investigations could not be completed. For example: (1) Access to the Copco No. 1 and Iron Gate switchyards (Figure 1-2) was determined to be especially hazardous since the high-voltage switchyards are active; and (2) Unknown areas remain unknown until decommissioning and demolition of the dam commences. To satisfy Agreement Section 3.5(c), this California Supplement presents PacifiCorp's proposed approach to address the remaining Exhibit C RECs in a manner that will minimize disruption or delay of dam removal efforts by the KRRC and that will allow for expedited remediation or disposal of potential contaminants if identified during dam removal.

This California Supplement proposes a sampling approach for the switchyards (REC 8) that includes a figure illustrating planned soil sample locations and a table identifying media to be sampled, sample collection depths, and laboratory analyses to be performed.

The RECs identified in this California Supplement will be assessed by following the same processes, procedures, and standards that were approved for the California SIWP.

1.3 Background

The California SIWP (Jacobs 2021a) provides detailed background information on the Copco No. 1, Copco No. 2, and Iron Gate developments, a complete list of the Exhibit C RECs, and a discussion of the surrounding lands and historical practices. The California SIWP content is incorporated into this California Supplement by reference.

Pertinent to the RECs addressed in this California Supplement are the two Phase I ESAs conducted for the Oregon and California hydroelectric developments (AECOM 2018, 2020). Of the RECs identified by AECOM and documented in Exhibit C of the Agreement, PacifiCorp prepared an Oregon SIWP for the J.C. Boyle Dispersed Recreation Area (Jacobs 2021b) and a California SIWP (Jacobs 2021a) for the following RECs:

- Copco No. 1 Dynamite Cave
- Copco No. 1 Debris Piles/Scrap Yard (Parcel B REC 4)
- Wood-Stave Penstock
- Copco No. 2 Wood Pile (Parcel B REC 7)
- Copco No. 2 Powerhouse Transformer Fire (not included in Exhibit C of the Agreement)
- Copco No. 2 Former Mobile Oil Containment Building
- Underground Storage Tanks (USTs)
- Copco No. 2 Burn Pit (Parcel B REC 6)
- Iron Gate Shooting Range (Parcel B REC 9)

- Iron Gate Hatchery Burn Pit
- Iron Gate Hatchery Settling Ponds

The dams and associated powerhouses have been and continue to be operated to generate and distribute electricity until dam removal activities begin. Hazardous materials that have been used onsite include diesel fuel, leaded and unleaded gasoline, non-polychlorinated biphenyls (non-PCBs), and governor, transformer, and motor oils. Battery banks and oils are stored within secondary containment systems. As noted in the Phase I ESA conducted by AECOM, the powerhouses appeared to be in good operating condition, with proper housekeeping and hazardous materials management practices (AECOM 2018).

1.4 Investigative Standard and Future Uses

Notwithstanding any specific process or procedure identified in this California Supplement, the work performed under this California Supplement will be carried out in accordance with the Investigative Standard, as defined in Section 1.5 of the California SIWP (Jacobs 2021a). This California Supplement addresses multiple RECs, necessitating the identification of intended future uses and exposure pathways at the remaining RECs (Table 1-1). The exposure pathways will be used to determine the screening levels that were developed in Section 3.3 of the California SIWP (Jacobs 2021a). The analytical results from investigations at a REC will be evaluated against these screening levels to determine if the REC can be closed or if further assessment, remediation, risk assessment, or a combination are required.

Table 1-1. Site Future Uses and Exposure Pathways

Exhibit C REC No.	Site/REC	Site Future Use	Exposure Pathways
8	High-voltage switchyards (and substations)	Active recreation	Residential/leaching to groundwater
16	Retained Easements	Industrial	Industrial/ecological/leaching to groundwater
15	Inaccessible Areas	Passive recreation/natural habitat	Residential/ecological/leaching to groundwater
6	Underground Storage Tanks	Active recreation	Residential/leaching to groundwater
5	Undiscovered Impacted Soil and Groundwater at the Four Powerhouses	Active recreation	Residential/leaching to groundwater
9	Undiscovered Impacted Soil and Groundwater at the Four Dam Developments	Active recreation	Residential/leaching to groundwater
17	Undiscovered Impacted Soil and Groundwater Outside the Removal Work Zone	Passive recreation/natural habitat	Residential/ecological/leaching to groundwater

The Investigative Standard includes preparation of a Site Investigation Report to document the investigation and assessments performed, as described in Section 4 of the California SIWP (Jacobs 2021a).

Except as may be otherwise expressly approved in writing by PacifiCorp, KRRC, the State of California, and the State of Oregon, the implementation of any work under this California Supplement and any updates or

follow-up will constitute Jacobs' representation to PacifiCorp, KRRC, and the State of California that such work complies with the Investigative Standard as presented in the California SIWP (Jacobs 2021a).

1.5 California Supplement Organization

This California Supplement is organized into three sections and one appendix. Supporting tables and figures are located in text (Table 1-1) and at the end of text (all others). The sections and appendix are summarized as follows:

- **Section 1 – Introduction:** Describes the California Supplement purpose and objectives, identifies the RECs to be addressed, provides background information on the evolution of the RECs, and touches on investigative standards and future site uses. See Section 1 of the California SIWP (Jacobs 2021a) for complete descriptions of the program organization, program timeline, and investigative standards.
- **Section 2 – Site Evaluation and Investigation:** Describes the evaluation process for addressing the seven remaining RECs not included in the California SIWP.
- **Section 3 – References:** Provides a bibliographic listing of documents cited in this California Supplement.
- **Appendix – Consolidated Comment Matrix:** Contains consolidated review comments and responses from the KRRC and California related to this California Supplement.

2. Site Evaluation and Investigation

This section presents the results of the site investigations and evaluations conducted for the seven RECs listed in Section 1. The Sampling and Analysis Plan (Appendix A of the California SIWP) will be followed for each REC.

The High-voltage switchyards and Retained Easement RECs are evaluated because: 1) the substation, switchyard, and easement locations are known; 2) they are accessible to some degree; and 3) their environmental conditions can be reasonably evaluated in the near-term. The USTs REC is evaluated should an unknown UST be discovered during dam decommissioning or demolition. Because evaluation of undiscovered RECs is not possible at this time, this California Supplement presents a process to be implemented should impacted soil or groundwater be encountered in the subject areas during dam decommissioning and demolition.

2.1 High-voltage Switchyards (REC 8)

High-voltage switchyards and substations (collectively called switchyards here for ease of use) are connected directly to PacifiCorp's electrical generation, transmission, and distribution systems. Switchyards are integral for distributing power and maintaining stability of the local electrical grid. An abundance of high-voltage elements makes work within switchyards restricted without specialized planning. However, following further review and discussions with PacifiCorp substation operations, environmental sampling within the energized switchyards is considered possible with appropriate safety measures. Consequently, this California Supplement identifies the means and methods by which the Copco No. 1 and Iron Gate switchyards will be assessed.

The two Copco No. 2 switchyards (more precisely the Copco No. 2 230 kV Substation and the Copco No. 2 115/69 kV Substation) are not addressed in this California Supplement. PacifiCorp does not consider either of these to be a REC that need to be addressed at this time because both will remain in service for the foreseeable future and PacifiCorp retains exclusive easements per the Agreement to operate and maintain these facilities. At such time that PacifiCorp terminates operations of either facility, an assessment of conditions will be conducted consistent with the Agreement in coordination with the KRRC and California (as appropriate) and prior to extinguishing the easement.

2.1.1 Findings from Previous Investigations

The Copco No. 1 and Iron Gate switchyards were noted to contain at least one electrical transformer, substations, transmission poles, and lines within a fenced gravel area. The majority of the transmission pole footings, substations, and transformers were on top of concrete pads, and in the case of the Iron Gate substation, on top of a gravel-filled concrete catch basin. It was noted that the "yellow glass portion" of the high-voltage transformer bushings may potentially contain PCBs in the oil (AECOM 2020). PCBs could potentially be present within each of the switchyards because the Copco No. 1 Development and original supporting structures were constructed between 1911 and 1922, because the Iron Gate Development and original supporting structures were constructed between 1961 and 1962 (AECOM 2020), and because use of PCBs was not banned under the Toxic Substances Control Act until 1979.

2.1.2 Sampling Plan

Of note is that there are no records of spills or releases at the switchyards. The environmental sampling activities are being performed to confirm the presence or absence of PCBs within the switchyards. If analytical results from the initial sampling event indicate the presence of PCBs, then additional sampling

at the Copco No. 1 or Iron Gate switchyards may be performed within identified areas of concern as per 40 *Code of Federal Regulations* Part 761, Subpart N. Concrete sampling will additionally be performed for PCBs at the switchyards, and the analytical results will be used to help determine disposal options for concrete.

Prior to collecting soil samples at the Copco No. 1 switchyard, field staff will use Global Positioning System software to lay out a 25- by 25-foot sampling grid (Figure 2-1). The Iron Gate switchyard samples will be collected at the locations specifically associated with the oil-filled transformers (Figure 2-2). Field staff will note facility structures, topography, and drainage in the area and will adjust the planned sample locations as necessary. The planned sample locations will be marked for approval by the PacifiCorp substation operations group and for utility clearance prior to sampling.

The COPCs for the switchyards are PCBs and transformer oil. Consequently, soil samples will be analyzed for PCBs by U.S. Environmental Protection Agency (EPA) Method SW846 8082A and for oil and grease by EPA Method 1664. Should PCBs be detected in soil samples, EPA Method 1668 (PCB homologue method) with EPA Extraction Method SW846 3540C may be performed on select soil samples. If groundwater is encountered when collecting soil samples at the switchyards, unfiltered grab groundwater samples will be collected for submittal to the analytical laboratory. Surface gravel will be removed to allow sampling of fine-grained native soil or fine import material. Soil samples from a depth of 0.5 to 1.0 foot below native surface grade will be collected (Table 2-1 and California SIWP Appendix A [Jacobs 2021a]). The soil samples will be advanced via hand auger. Soil borings will be extended if visual observations indicate that transformer oil has migrated deeper than near surface grade.

Because the switchyards are located in a relatively flat areas immediately adjacent to the Klamath River in an otherwise steep, access-limited canyon (Figures 1-2, 1-3, 2-1, and 2-2), the most likely future use for the switchyards is active recreation (Table 1-1). Such a use will set the applicable soil and groundwater screening levels as described in California SIWP Section 1.5 and developed in California SIWP Section 3.3 (Jacobs 2021a). The validated analytical data will be evaluated against the applicable screening levels, and a site assessment report will be prepared in accordance with Section 4 of the California SIWP (Jacobs 2021a).

Data collection for the switchyard is anticipated to occur in the spring of 2023.

2.2 Retained Easement Areas (REC 6)

2.2.1 Description

Retained easement areas have been identified in Exhibit C as a PEC and are further described in that exhibit as "Any conditions in retained easement areas relating to the presence or operations of retained transmission facilities." Per the Agreement, PacifiCorp-owned property in California will be conveyed to the KRRRC and eventually the State of California. As this process occurs, PacifiCorp will retain easements for the existing transmission and distribution system. Existing easements on privately- or federally-owned property are not included in this REC. Therefore, retained easements, for the purpose of this California Supplement, are defined as the right-of-way on PacifiCorp-owned property in California containing PacifiCorp electrical transmission and distribution system and all other ancillary infrastructure and related access roads. The retained easements are used for accessing, maintaining, operating, repairing, replacing, enlarging, reconstructing, or removing PacifiCorp's electrical transmission and distribution facilities.

Also included are related electrical transmission facilities such as towers, poles, pads, anchors, supports, transformers, switchyards, vaults, substations, communications facilities, fiber optic or other communications equipment, and any other improvements or facilities associated with the management of

these facilities. The retained easement area is the current physical location of the transmission facilities along with an additional area of 100 feet, as measured on the surface of the property and from each side of the transmission or distribution facility.

Retained easements were not assessed under the Phase 1 ESAs that were performed for the Copco No. 1, Copco No. 2, and Iron Gate developments (AECOM 2018; AECOM 2020), and because the retained easements were not assessed, there is potential for RECs to be present within the easements.

There are approximately 74,600 linear feet of retained easements (approximately 320 acres) over seventeen parcels (Figure 2-3).

2.2.2 Assessment Process

The assessment process for the retained easement areas is as follows:

- Perform a review of reasonably obtainable historical documents for the retained easement areas including aerial photographs, historical topographic maps, or other available property records.
- Perform a site reconnaissance survey. Qualified staff will drive through and walk accessible parts of the retained easement areas.
- Based on the evaluation and findings of the document review and site reconnaissance by a qualified environmental professional, potential new PECs may be identified. For newly identified PECs within the retained easements, determine the potential COPCs for the PEC(s), perform a site assessment(s) according to the California SIWP (Jacobs 2021a), and evaluate the analytical results against the screening levels for the future uses and exposure pathways established in Table 1-1.
- Document findings in a Site Investigation Report for PEC closure in accordance with Section 4 of the California SIWP (Jacobs 2021a). If new PECs are not identified, the Site Investigation Report will contain a recommendation for REC closure per the terms of the Agreement and the process developed with the KRRC and the State of California.

2.3 Inaccessible Areas (REC 15)

Agreement Exhibit C contains a REC for Inaccessible Areas, without further elaboration adequate to allow investigation. The draft Phase I ESA for the California and Oregon dam developments contained aerial photographs with points of interest, which at the time, were inaccessible for field reconnaissance due to either locked gates or unsafe road conditions (AECOM 2020). In response to inquiries from PacifiCorp, in April 2022, the KRRC provided further definition of the inaccessible areas (AECOM, pers. comm. 2022). The supplemental information included identification of ten specific locations within California that were subsequently summarized by PacifiCorp as requiring no further action (PacifiCorp 2022). The PacifiCorp (2022) review indicates that two of these locations are private property, one is a vehicle at a recreation site, four are rock outcroppings or vegetation, two are switchyards, and one is a vehicle parked on an access road (Table 2-2, located at the end of text). PacifiCorp is recommending that this REC be closed per the terms of the Agreement and the process developed with the KRRC and the State of California.

2.4 Underground Storage Tanks (REC 16)

2.4.1 Description

Seven USTs were identified during a Phase I ESA for the Iron Gate Fish Hatchery and the J.C. Boyle, Copco No. 1, Copco No. 2, and Iron Gate developments (AECOM 2018). One UST, potentially located near the Copco No. 2 Powerhouse, was further assessed under the California SIWP (Jacobs 2021a). The remaining

USTs, potentially located at the J. C Boyle, Copco No. 1, Copco No. 2, or Iron Gate developments, are either on private land or are considered "orphan sites" because there is insufficient information to physically locate the USTs, if still present (AECOM 2018). When ground-penetrating radar surveys were conducted by the KRRC, USTs were not identified near the Copco No. 1, Copco No. 2, and Iron Gate powerhouses or surrounding areas, as described in *Draft Buried Structures Site Investigation* (KPC 2020).

2.4.2 Assessment Process

When the KRRC is decommissioning or demolishing the Copco No. 1 Copco No. 2, and Iron Gate developments, the following assessment process will be observed if the KRRC identifies a UST or suspected UST:

- The KRRC will immediately notify PacifiCorp of the discovery. PacifiCorp will: 1) confirm that the UST is located within the Lower Klamath Project FERC boundary; 2) oversee partial exposure of the UST to determine its approximate size; and 3) determine the approximate volume of any residual contents.
- PacifiCorp will determine the potential COPCs for the UST, perform a site assessment according to the California SIWP (Jacobs 2021a), and evaluate the analytical results against the screening levels for the future uses and exposure pathways established in Table 1-1.
- PacifiCorp will coordinate UST removal actions with the Siskiyou County Environmental Health Division, which serves as the Certified Unified Program Agency (CUPA) for UST removal and case closure.
- PacifiCorp will additionally prepare a removal work plan for the UST and will obtain a removal permit that will be approved by the CUPA.
- General UST removal activities by a licensed contractor will include: 1) full exposure of the UST and preparation of the UST for removal; 2) removal and containment of residual UST contents; 3) cleaning of the UST and containment of decontamination water; 4) upon confirmation by a Certified Industrial Hygienist that the UST is inert, removal of the UST for offsite disposal.
- Upon removing the UST and as an iterative process based on health and safety and equipment capacity concerns, PacifiCorp will collect soil samples from the excavation floor and sidewalls and, if required, from expanded excavation floor and sidewalls.
- When excavating the UST and if expanding the excavation to obtain additional confirmation soil samples, PacifiCorp will segregate identified impacted soil from unimpacted soil, stockpile excavated soil on plastic sheeting, and manage stockpiled soil per regulatory requirements.
- PacifiCorp will properly transport and dispose of the UST, stockpiled soil, and decontamination wastes.
- Upon completion of excavation and confirmation sampling, PacifiCorp will return the REC to the KRRC for backfilling and compaction with an approved fill material.
- Upon completion of excavating and confirmation sampling, PacifiCorp will additionally prepare a removal report for the UST and request REC closure from the CUPA. PacifiCorp will alternatively initiate remedial process if recommended in the UST removal report.

2.5 Undiscovered Impacted Soil and Groundwater (RECs 5, 9, and 17)

2.5.1 Description

Three RECs are collectively identified as undiscovered and have the potential to contain impacted soil and groundwater. These RECs are divided into three areas: (1) the powerhouses (REC 5); (2) the dam developments (REC 9); and (3) areas outside the removal work zone (REC 17). Portions of these areas may

never be fully evaluated because they are inaccessible or cannot be accessed (for example, soil or groundwater beneath the powerhouse foundation left in place by the KRRC). Because these RECs all address the same potential issue, but at different locations, they are consolidated into a single discussion in this California Supplement.

The objective for the RECs presented in this California Supplement is to establish a process whereby impacted soil and groundwater within the RECs can be addressed if such impacts are encountered. With the standardized approach described in the next section, PacifiCorp will be able to minimize delays related to characterizing and remediating a PEC so that REC closure can be obtained in a timely manner. The approach will be employed if potential contamination associated with these three RECs is identified during dam removal.

If impacted soil or groundwater is encountered within these areas, PacifiCorp will establish whether the impacted soil and groundwater is localized or representative of a contaminant plume. PacifiCorp will then determine if there is a complete migration pathway for the contaminant to a surface water; dilution factors will additionally be assessed on a case-by-case basis if potential contamination is identified. Upon completion of a site investigation, evaluation of analytical results, and a risk assessment, PacifiCorp will determine if there is a requirement to implement some type of clean-up, containment, or monitoring program for the REC.

2.5.2 Assessment Process

This section establishes a process whereby PacifiCorp will assess impacted soil and groundwater if encountered by the KRRC when decommissioning and demolishing structures at these locations. The reasons for establishing such a process are to help ensure that:

- There is a standardized approach acceptable to the KRRC and the State of California.
- With a standardized approach in place, assessment or remediation of impacted soil and groundwater can be initiated in an expeditious manner to minimize delays associated with dam removal.
- With a standardized approach in place, PacifiCorp can minimize schedule delays and satisfactorily complete required investigative or remedial actions to obtain closure should any PECs come to light.

The stepwise approach will be formalized in a contingency plan to be developed by KRRC and PacifiCorp in advance of construction. The stepwise approach will be used when managing the undiscovered PECs, as follows:

1) Identification of Potential Contamination

The KRRC will have qualified environmental staff onsite during dam removal activities. Such staff will be qualified to collect environmental samples and perform site-specific assessments. Such staff will also be responsible for observing general site conditions and documenting if groundwater appears to be impacted or if soil has a chemical odor, is stained, or has elevated photoionization detector readings greater than 50 parts per million by volume. Should such conditions arise, such staff will report the observations and provide relevant data to PacifiCorp in writing. PacifiCorp will, in turn, mobilize a qualified team-member to further evaluate site conditions.

2) Sampling and Evaluation of Analytical Results against Established Screening Levels

Upon notification by the KRRC of impacted soil or groundwater and a PEC, PacifiCorp will enlist an environmental professional who will additionally evaluate the potential impacts.

Soil and groundwater samples will be collected as appropriate and in accordance with the California SIWP and Appendix A of the California SIWP (Jacobs 2021a). Field sampling and PEC evaluation will be coordinated with the KRRC with respect to ongoing dam removal activities to ensure that any impacts to ongoing dam removal work are minimized.

Upon receipt of the validated analytical results from sampling, the analytical results will be compared against the established screening levels for the determined future use, and recommendations will be made for PEC closure or further assessment, remediation, risk assessment, or a combination.

3) Remediation and Removal of Impacted Media

PacifiCorp recognizes that assessment and evaluation of impacted soil or groundwater may delay ongoing dam removal work at some locations. Because of this potential for delay, at PacifiCorp's discretion and in coordination with the KRRC, PacifiCorp may proceed directly to site remediation to minimize impacts on dam removal activities and progress.

Removal action in advance of testing means that PacifiCorp would manage impacted materials as outlined in the contingency plan. Potentially impacted soil or groundwater will be excavated and hauled to an approved waste staging area identified by the KRRC and as outlined in the contingency plan. Impacted soil will be segregated from unimpacted soil, and water will be properly containerized within secondary containment. Soil stockpiles will be placed on and covered with plastic sheeting, and stockpiles and containerized wastes will be inspected weekly and actively managed by PacifiCorp. Upon evaluation of the analytical results for the soil stockpiles, PacifiCorp will identify which stockpiles can be reused or disposed onsite by the KRRC and which soil stockpiles will be disposed of offsite by PacifiCorp. Containerized water will be disposed of offsite by PacifiCorp or may be reused onsite for dust suppression by the KRRC depending on the analytical results.

As part of a removal action, PacifiCorp will collect confirmation samples from excavation floors and sidewalls and will also collect soil samples from the floor and sidewalls of an expanded excavation should that be required. The confirmation samples will be analyzed for COPCs and will be evaluated against the screening levels as described in California SIWP Section 1.5 and developed in California SIWP Section 3.3 (Jacobs 2021a). Upon evaluation of the analytical results from confirmation sampling, PacifiCorp will identify if additional excavation is required or if the removal action is complete and the excavation can be backfilled and compacted (if necessary).

4) Site Investigation Report and PEC Closure

Upon completion of site assessment or remedial activities, PacifiCorp will prepare a Site Investigation Report for PEC closure in accordance with Section 4 of the California SIWP (Jacobs 2021a). The PEC will also be recommended for closure by PacifiCorp per the terms of the Agreement and the process developed with the KRRC and the State of California. If impacted soil and groundwater are not observed at completion of facilities removal for RECs 5 and 9 (dams and powerhouses) and at the completion of restoration for REC 17, then the RECs will be recommended for closure by PacifiCorp per the terms of the Agreement and the process developed with the KRRC and the State of California.

3. References

AECOM Technical Services, Inc. (AECOM). 2018. J.C. Boyle Dam, Copco No. 1 Dam, Copco No. 2 Dam, Iron Gate Dam, and Iron Gate Fish Hatchery Phase I Environmental Site Assessments. Prepared for Klamath River Renewal Corporation. November.

AECOM Technical Services, Inc. (AECOM). 2020. *Draft Phase I Environmental Site Assessment of the Parcel B Lands*. Prepared for Klamath River Renewal Corporation. March.

AECOM Technical Services, Inc. (AECOM). 2022. Personal communication (email) with Demian Ebert, PacifiCorp. April 18.

Jacobs. 2021a. *California Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Jacobs. 2021b. *Oregon Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Knight Piesold Consulting (KPC). 2020. *Draft Buried Structures Site Investigation*. April.

Lowy, Lloyd, Klamath River Renewal Corporation. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.

PacifiCorp. 2022. *Draft Evaluation of Recognized Environmental Condition 15 Inaccessible Areas*. July.

Tables

Table 2-1. Proposed Sampling and Analysis Plan for Soil at Copco No. 1 and Iron Gate Switchyards
PacifiCorp, Lower Klamath Hydroelectric Project

Location Description	Boring Location	Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds (EPA Method SW8260B)	Semivolatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (NWTPH-Gx)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (NWTPH-Dx)	Polynuclear Aromatic Hydrocarbons (EPA Method SW8270C-SIM)	Oil and Grease (EPA Method SW846 1664)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 8082A)	STLC* (when TTLIC results are 10x STLC limit)	TCLP* (when TTLIC results are 20x TCLP limit)	Ignitability (EPA Method 1030), Reactivity (SW 846 CH7), Corrosivity (SW-846 9045)	
Copco No. 1 Switchyard	C1SY-A1	C1SY-A1-0.0-YYYYMMDD	Surface									X	X				
		C1SY-A1-1.0-YYYYMMDD	0.5-1.0									X	X				
	C1SY-A2	C1SY-A2-0.0-YYYYMMDD	Surface										X	X			
		C1SY-A2-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-A3	C1SY-A3-0.0-YYYYMMDD	Surface										X	X			
		C1SY-A3-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-A4	C1SY-A4-0.0-YYYYMMDD	Surface										X	X			
		C1SY-A4-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-A5	C1SY-A5-0.0-YYYYMMDD	Surface										X	X			
		C1SY-A5-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-B1	C1SY-B1-0.0-YYYYMMDD	Surface										X	X			
		C1SY-B1-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-B2	C1SY-B2-0.0-YYYYMMDD	Surface										X	X			
		C1SY-B2-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-B3	C1SY-B3-0.0-YYYYMMDD	Surface										X	X			
		C1SY-B3-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-B4	C1SY-B4-0.0-YYYYMMDD	Surface										X	X			
		C1SY-B4-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-B5	C1SY-B5-0.0-YYYYMMDD	Surface										X	X			
		C1SY-B5-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-C1	C1SY-C1-0.0-YYYYMMDD	Surface										X	X			
		C1SY-C1-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-C2	C1SY-C2-0.0-YYYYMMDD	Surface										X	X			
		C1SY-C2-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-C3	C1SY-C3-0.0-YYYYMMDD	Surface										X	X			
		C1SY-C3-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-C4	C1SY-C4-0.0-YYYYMMDD	Surface										X	X			
		C1SY-C4-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-C5	C1SY-C5-0.0-YYYYMMDD	Surface										X	X			
		C1SY-C5-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-D1	C1SY-D1-0.0-YYYYMMDD	Surface										X	X			
		C1SY-D1-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-D2	C1SY-D2-0.0-YYYYMMDD	Surface										X	X			
		C1SY-D2-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-D3	C1SY-D3-0.0-YYYYMMDD	Surface										X	X			
		C1SY-D3-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-D4	C1SY-D4-0.0-YYYYMMDD	Surface										X	X			
		C1SY-D4-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-D5	C1SY-D5-0.0-YYYYMMDD	Surface										X	X			
		C1SY-D5-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-E2	C1SY-E2-0.0-YYYYMMDD	Surface										X	X			
		C1SY-E2-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-E3	C1SY-E3-0.0-YYYYMMDD	Surface										X	X			
		C1SY-E3-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-E4	C1SY-E4-0.0-YYYYMMDD	Surface										X	X			
		C1SY-E4-1.0-YYYYMMDD	0.5-1.0										X	X			
	C1SY-E5	C1SY-E5-0.0-YYYYMMDD	Surface										X	X			
		C1SY-E5-1.0-YYYYMMDD	0.5-1.0										X	X			
ALL	C2SY-WC-YYYYMMDD	Composite		X	X							X	X	X	X	X	

Table 2-1. Proposed Sampling and Analysis Plan for Soil at Copco No. 1 and Iron Gate Switchyards

PacifiCorp, Lower Klamath Hydroelectric Project

Location Description	Boring Location	Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds (EPA Method SW8260B)	Semivolatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (NWTPH-Gx)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (NWTPH-Dx)	Polynuclear Aromatic Hydrocarbons (EPA Method SW8270C-SIM)	Oil and Grease (EPA Method SW846 1664)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 8082A)	STLC* (when TTLC results are 10x STLC limit)	TCLP* (when TTLC results are 20x TCLP limit)	Ignitability (EPA Method 1030), Reactivity (SW 846 CH7), Corrosivity (SW-846 9045)
Iron Gate Switchyard	IGSY-01	C1SY-01-0.0-YYYYMMDD	Surface									X	X			
		C1SY-01-1.0-YYYYMMDD	0.5-1.0									X	X			
	IGSY-02	C1SY-02-0.0-YYYYMMDD	Surface									X	X			
		C1SY-02-1.0-YYYYMMDD	0.5-1.0									X	X			
	IGSY-03	C1SY-03-0.0-YYYYMMDD	Surface									X	X			
		C1SY-03-1.0-YYYYMMDD	0.5-1.0									X	X			
ALL	IGSY-WC-YYYYMMDD	Composite		X	X						X	X	X	X	X	

Notes:

* Hold extractions for metals, SVOCs, and dioxins/furans pending total results (TTLC).

ft bgs = feet below ground surface

NA = not applicable

STLC = soluble threshold limit concentration

TCLP = toxicity characteristic leaching procedure

TTLC = total threshold limit concentration

USEPA = U.S. Environmental Protection Agency

X = sample to be analyzed

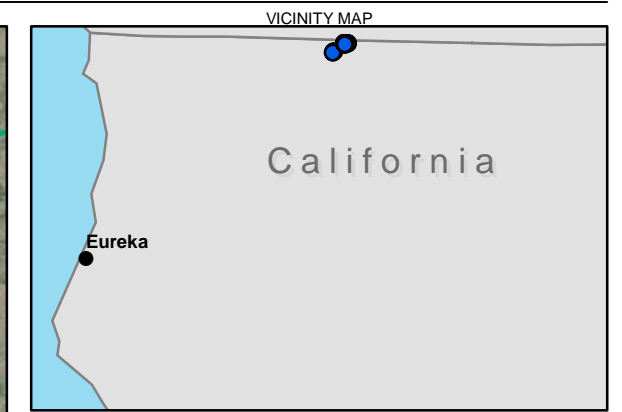
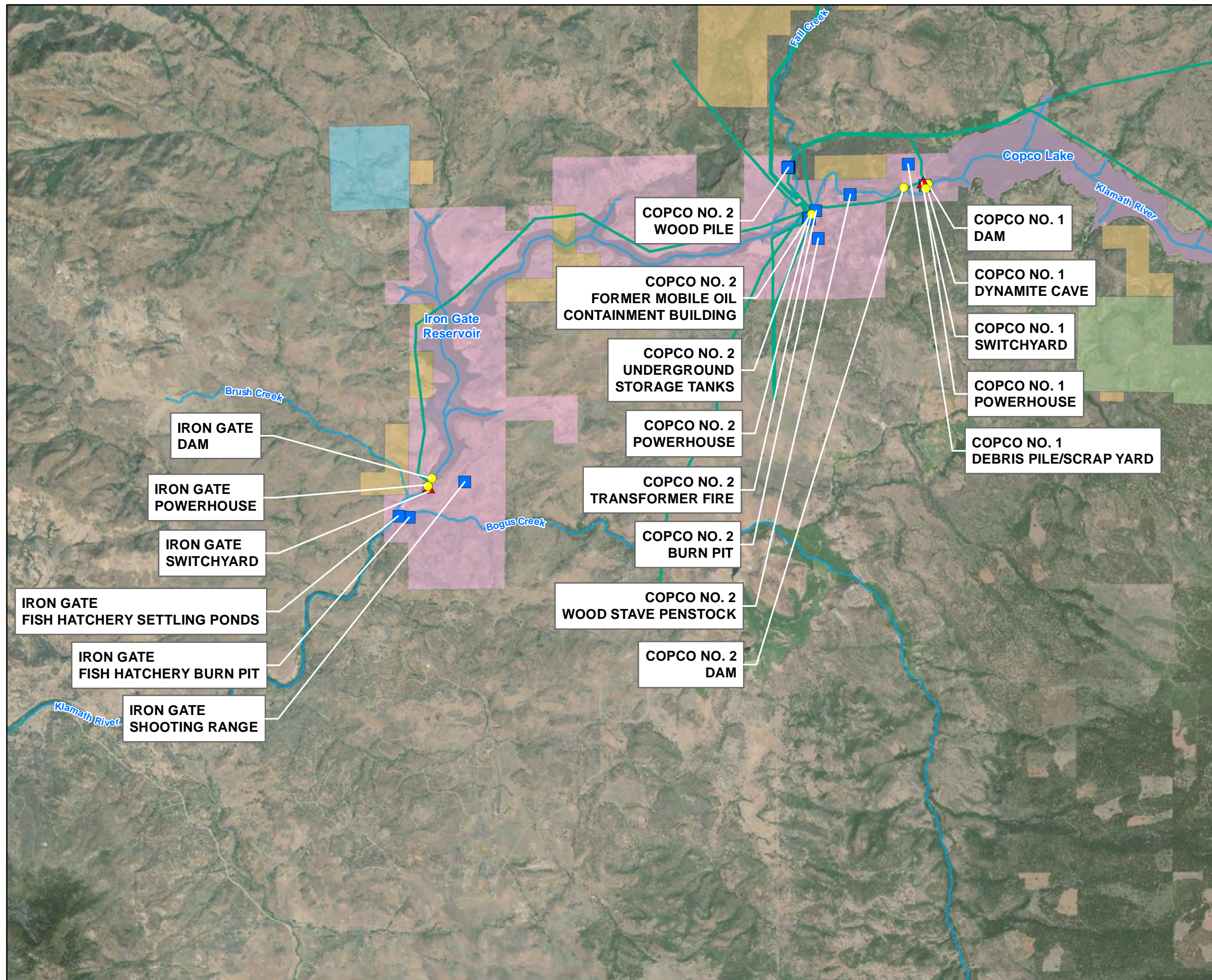
Table 2-2. Summary of Inaccessible Area RECs

PacifiCorp, Lower Klamath Hydroelectric Project

Site Number	Conditions	AECOM Brief Description	PacifiCorp Assessment
B.6.1	Pile or Hill (041-060-090_17)	Slight discoloration from surrounding areas at top of hill, potentially a rock outcrop	This is a bedrock outcrop.
B.6.2	Building (041-040-160_21)	Housing	Private property. The noted development is not on PacifiCorp property.
B.6.3	Buildings and Accessory Structures Appear b/w 2013-2016 (041-030-170_26)	Housing	This is a trailer parked on a right-of-way to private property and is not a fixed structure.
B.6.4	Electrical Structures (004-050-010_54)	Switchyard at Copco 2	Switchyards are addressed in REC 8 and California Supplement No. 1.
B.6.5	Electrical Structures (004-050-100_56)	Switchyard at Copco 2	Switchyards are addressed in REC 8 and California Supplement No. 1.
B.6.6	Discontinuous Feature (004-050-100_63)	Lighter color on side of hill	This is a rock outcropping.
B.6.7	Treeline shifts from 2005-2006 (004-050-100_64)	Treeline shift	PacifiCorp's on-the-ground assessment indicated no activity at this location.
B.6.8	Buildings and Accessory Structures appeared between 2013 and 2016 (004-040-060_79)	Building near Copco 1 lakeshore	This is a private truck with boat trailer that was parked in the recreation site when the 2016 image was taken.
B.6.9	House (004-040-060_80)	Building near Copco 1 lakeshore	This is a private house on private property.
B.6.10	Stockpile or Hill 2011 (004-050-100_122)	Unusual-looking feature on side of hill	This is shrubs and bedrock above Copco 2 Powerhouse.

Source: PacifiCorp. 2022. *Draft Evaluation of Recognized Environmental Condition 15 Inaccessible Areas*. July.

Figures



- LEGEND**
- Dam Infrastructure to be Removed
 - ▲ Recognized Environmental Condition (REC)
 - Previously Assessed REC (Jacobs 2021a)
 - PacifiCorp Ownership
 - BLM
 - USFS
 - STATE
 - County Boundary
 - Retained Easement (Transmission Line on PacifiCorp Property)
 - River/Creek

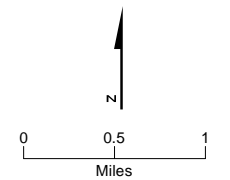
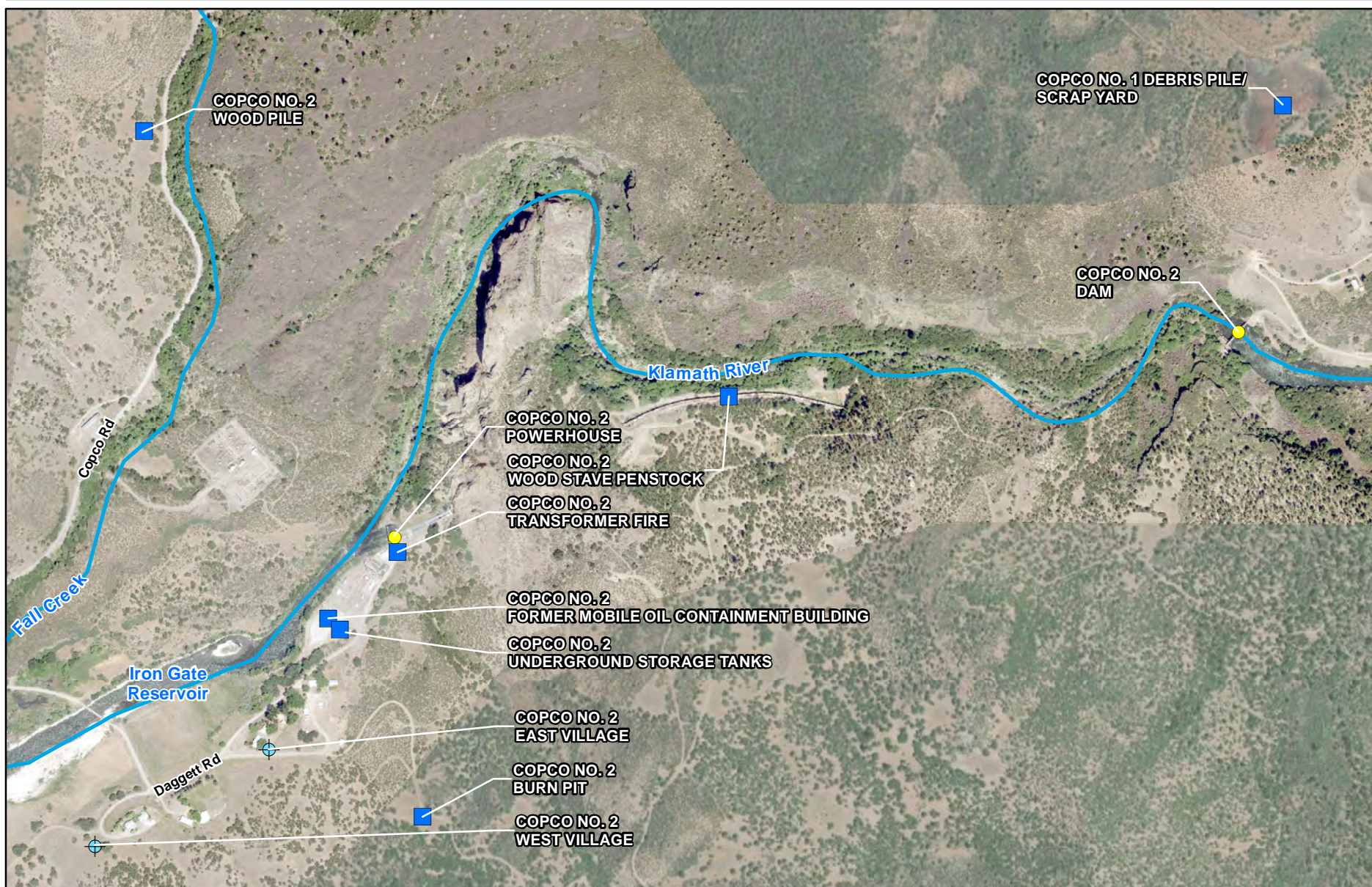


FIGURE 1-1
 Site Investigation Work Plan Supplement No. 1
 Recognized Environmental Conditions
 Lower Klamath Hydroelectric Project



FIGURE 1-2
Copco No. 1 Dam
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



LEGEND

- Dam Infrastructure to be Removed
- ▲ Recognized Environmental Condition (REC)
- Previously Assessed REC (Jacobs 2021a)
- ⊕ Village
- River/Creek

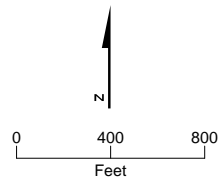
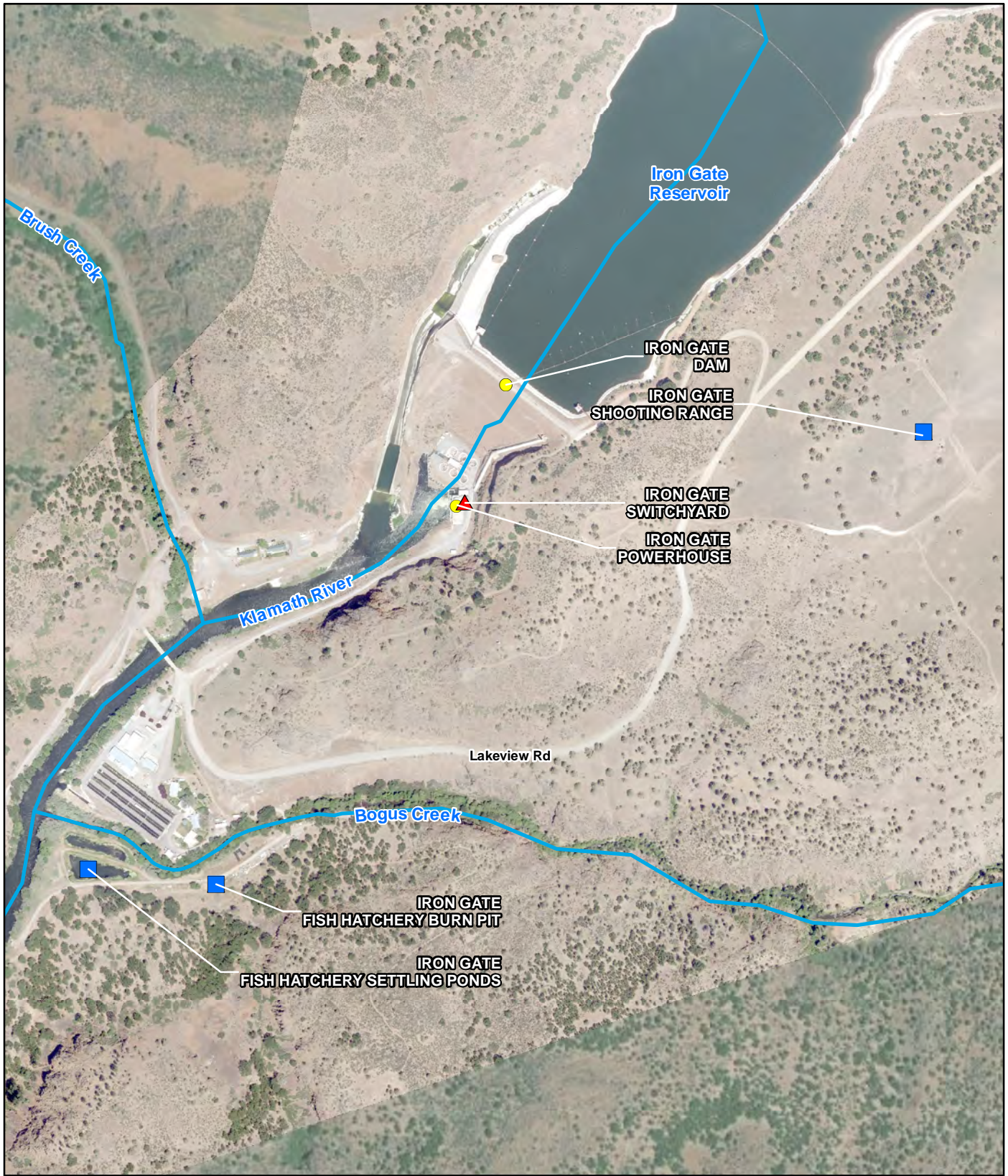


FIGURE 1-3
Copco No. 2 Dam
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



LEGEND

- Dam Infrastructure to be Removed
- ▲ Recognized Environmental Condition (REC)
- Previously Assessed REC (Jacobs 2021a)
- River/Creek

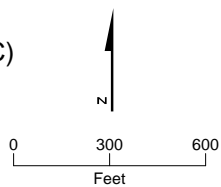
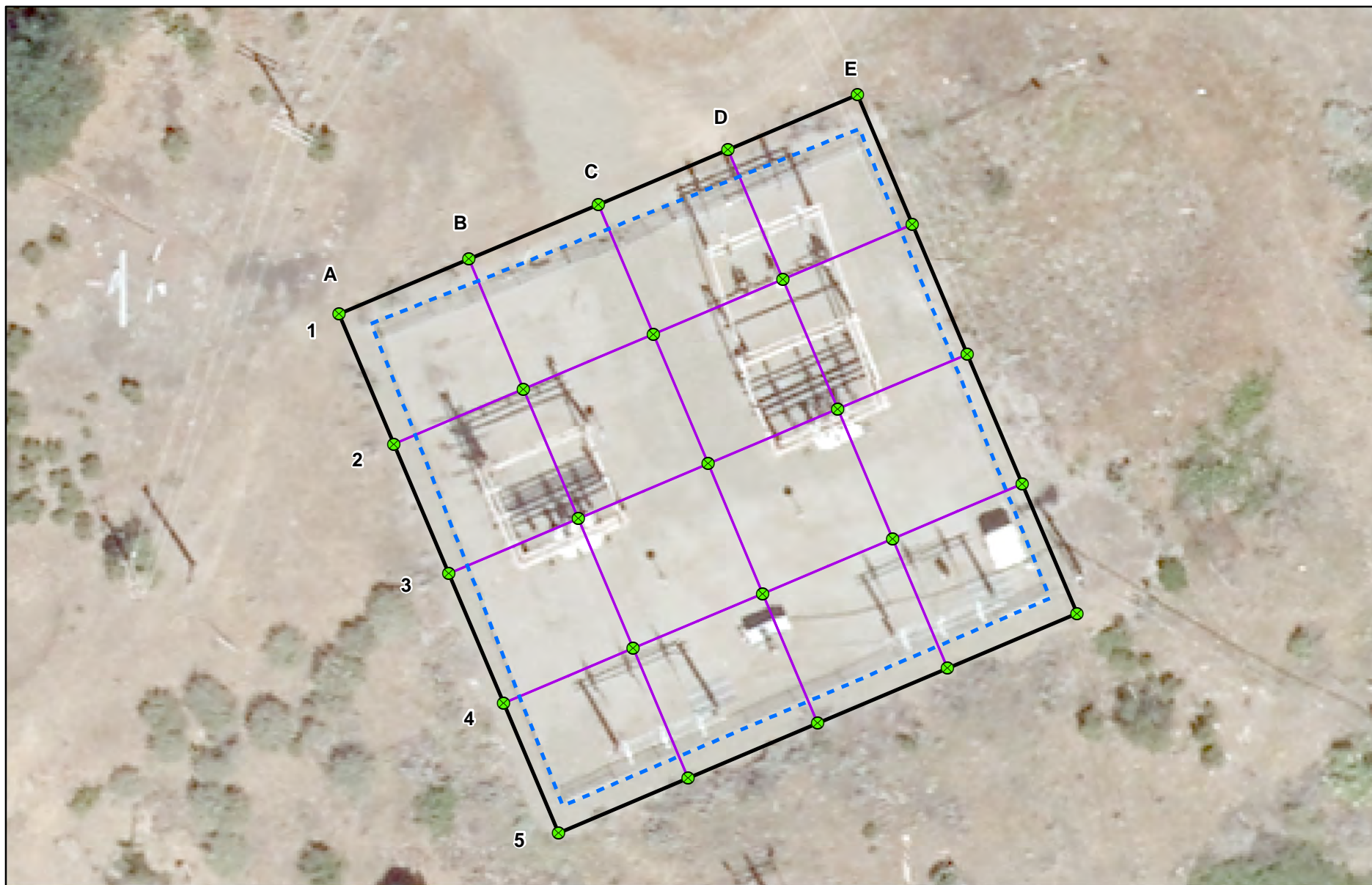


FIGURE 1-4
Iron Gate Dam
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



LEGEND

- Limits of SIWP Supplement No. 1
- Switchyard Boundary
- Sampling Grid
- x Proposed Shallow Soil Boring Location

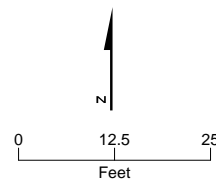





FIGURE 2-1
Copco No. 1 Switchyard and Sampling Grid
Lower Klamath Hydroelectric Project



LEGEND

-  Limits of SIWP Supplement No. 1
-  Switchyard Boundary
-  Proposed Shallow Soil Boring Location

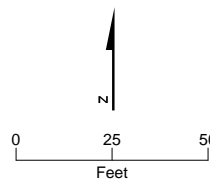
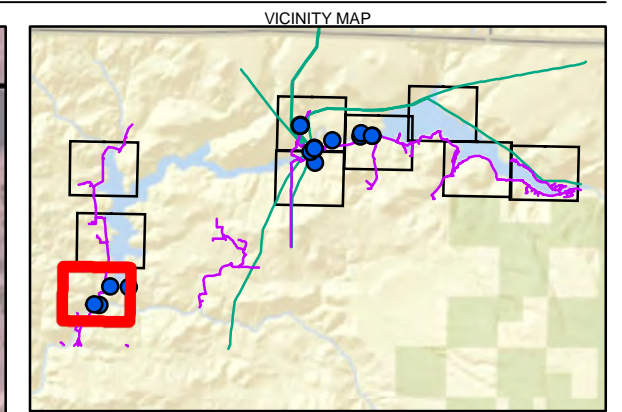
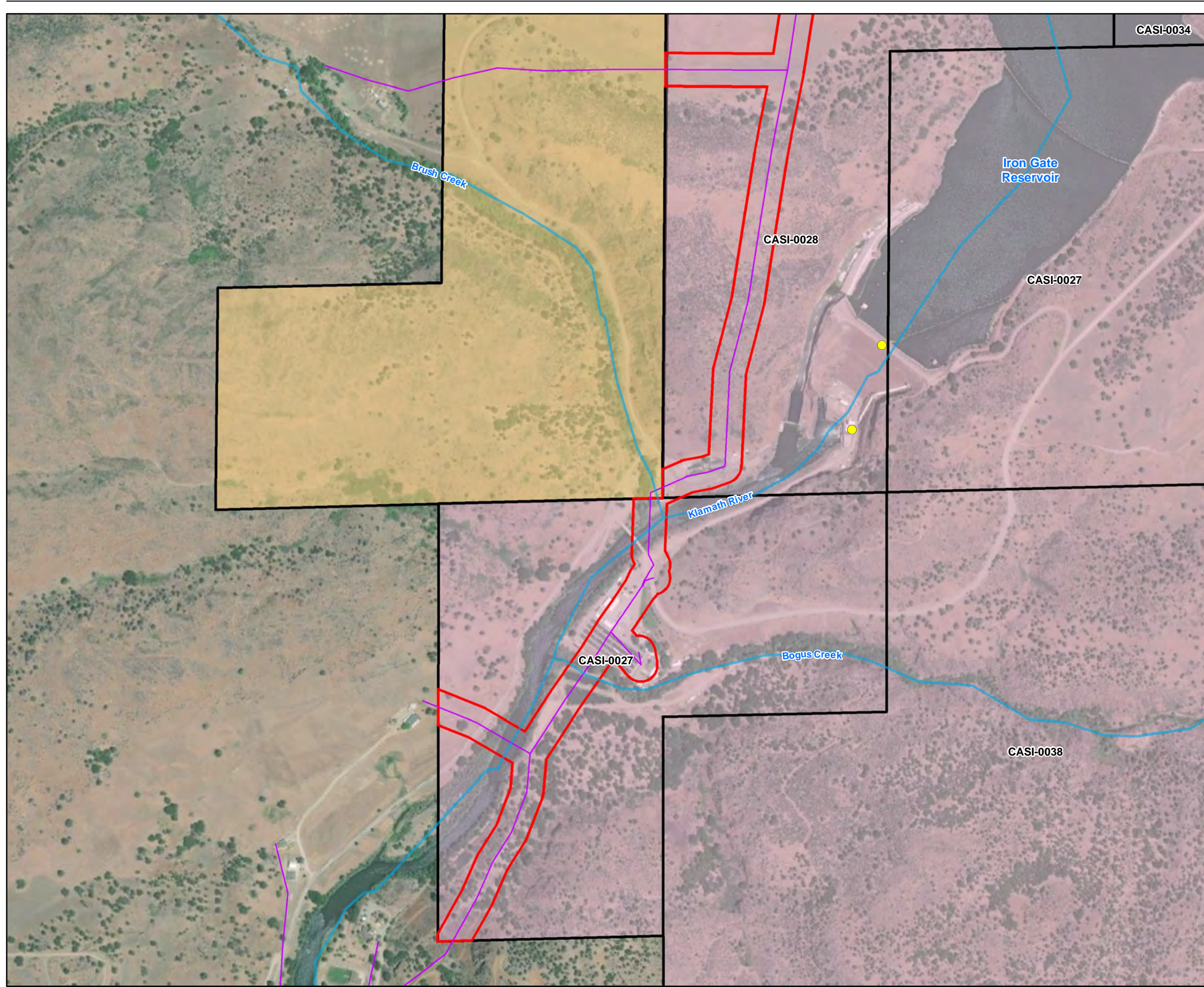


FIGURE 2-2
Iron Gate Switchyard Sample Locations
Lower Klamath Hydroelectric Project



- LEGEND**
- Parcel B Lands
 - PacifiCorp Ownership
 - BLM
 - Retained Easements (~ 320 Acres, 74,630 Linear Ft)
 - Dam Infrastructure to be Removed
 - River/Creek
 - Distribution Line (Retain)

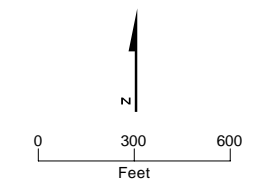
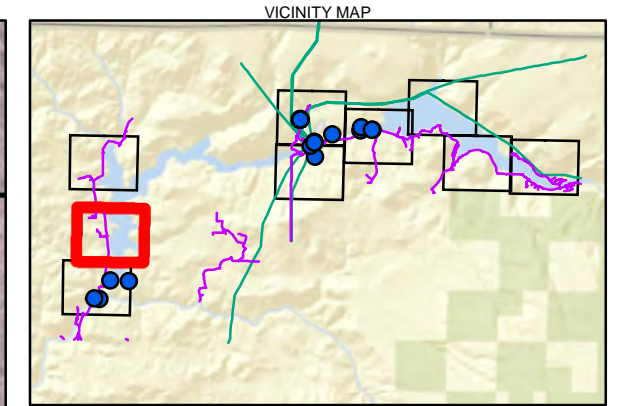
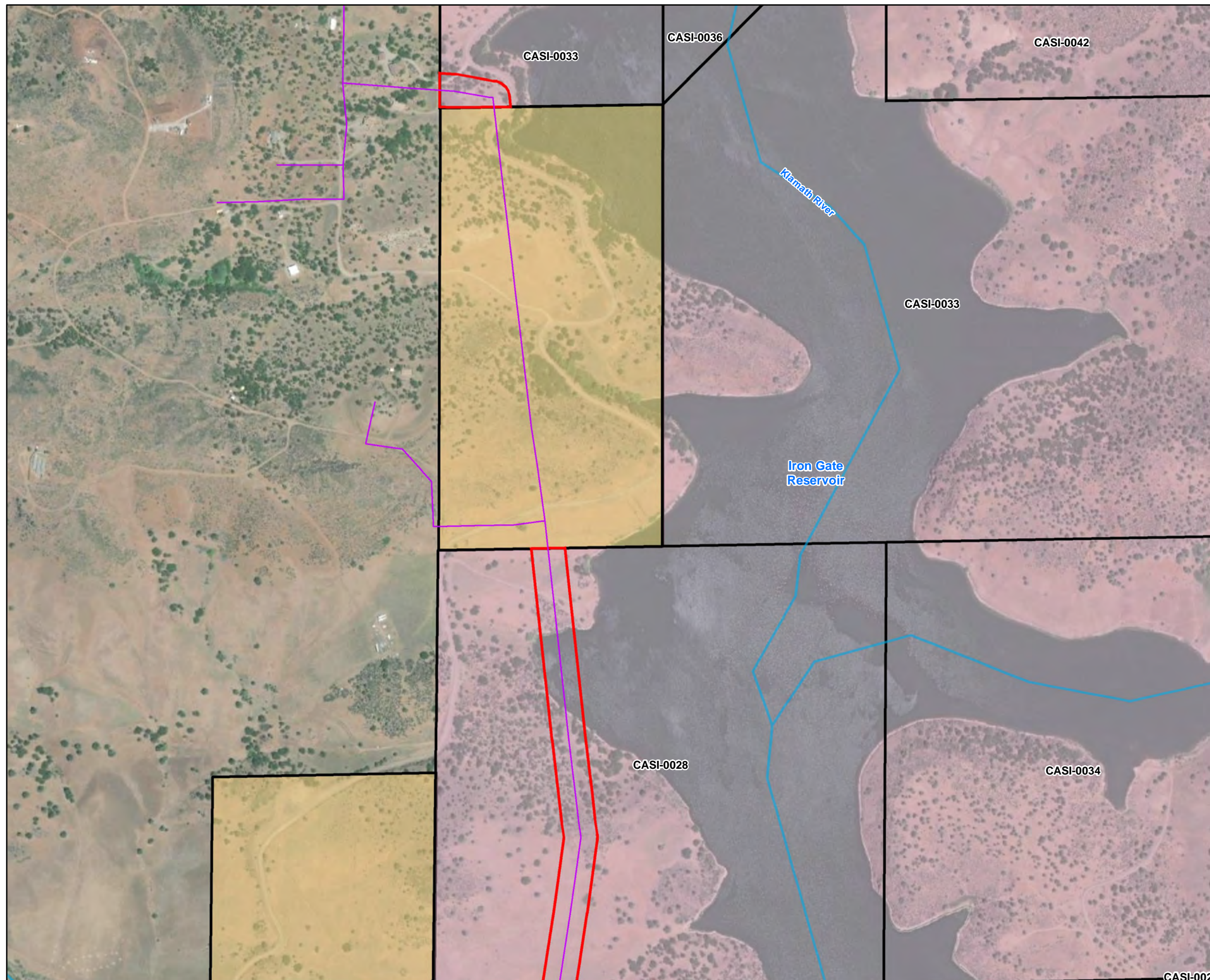


FIGURE 2-3
Sheet 1 of 9
Retained Easement
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



- LEGEND**
- Parcel B Lands
 - PacifiCorp Ownership
 - BLM
 - Retained Easements (~ 320 Acres, 74,630 Linear Ft)
 - River/Creek
 - Distribution Line (Retain)

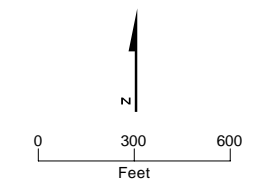
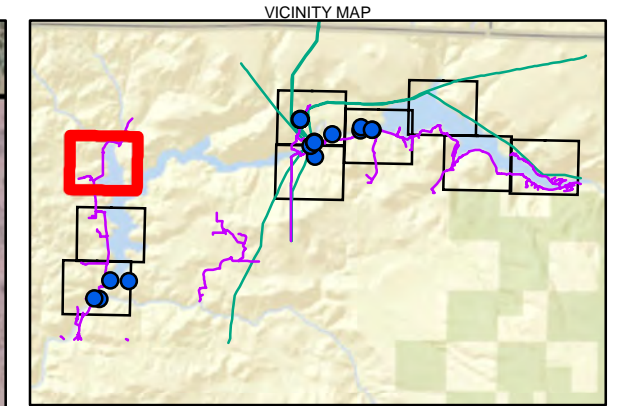
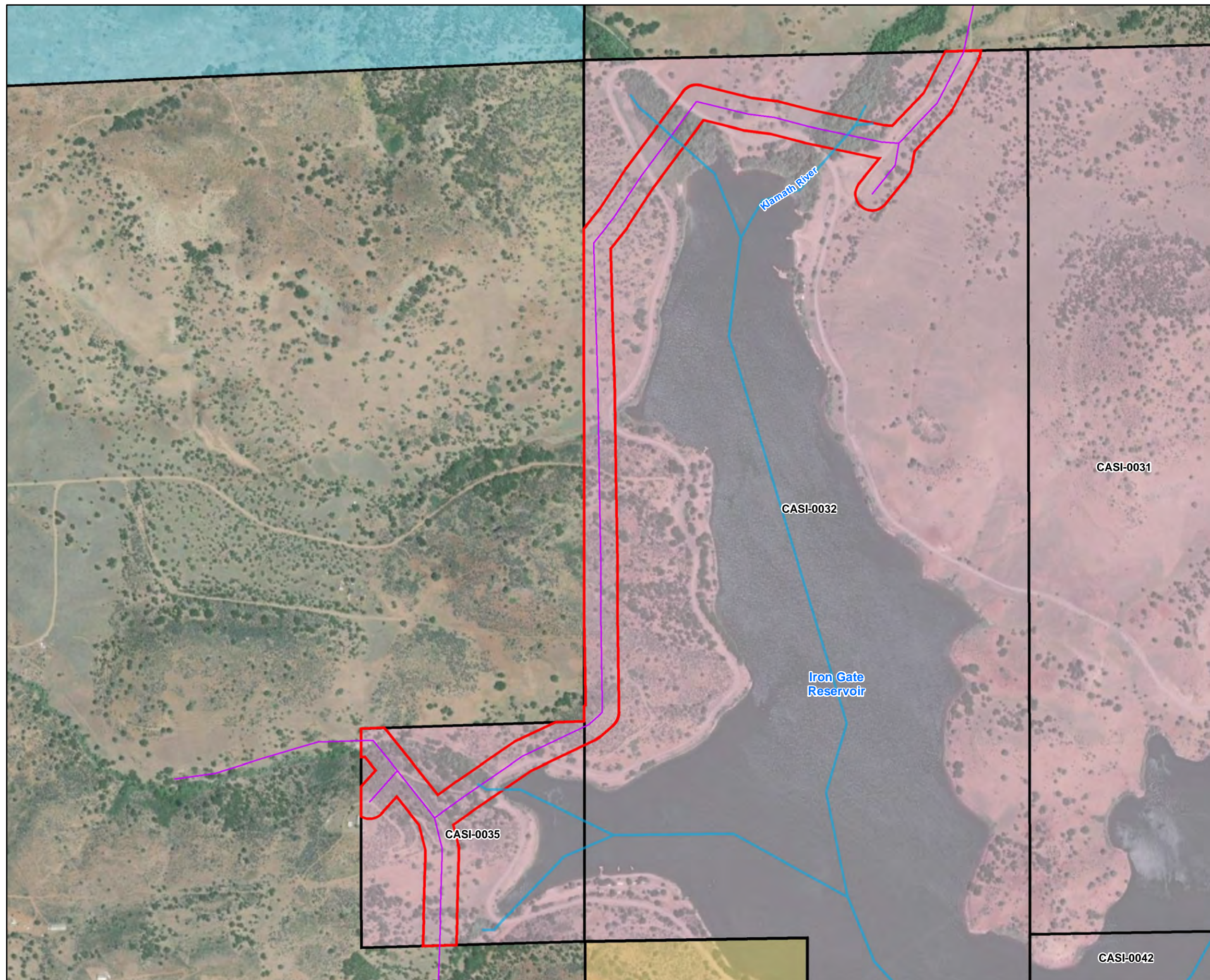


FIGURE 2-3
Sheet 2 of 9
Retained Easement
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



- LEGEND**
- Parcel B Lands
 - PacifiCorp Ownership
 - BLM
 - STATE
 - Retained Easements (~ 320 Acres, 74,630 Linear Ft)
 - River/Creek
 - Distribution Line (Retain)

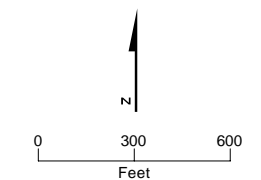
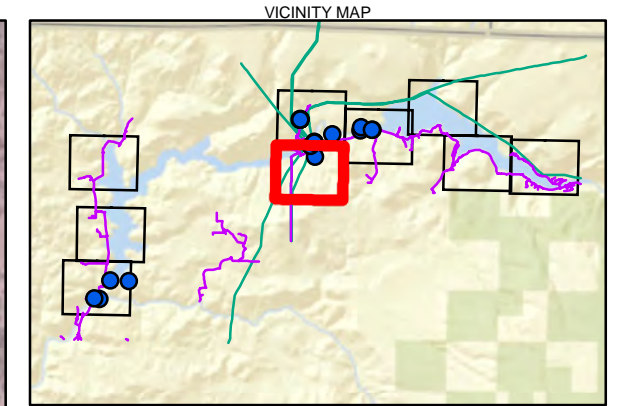
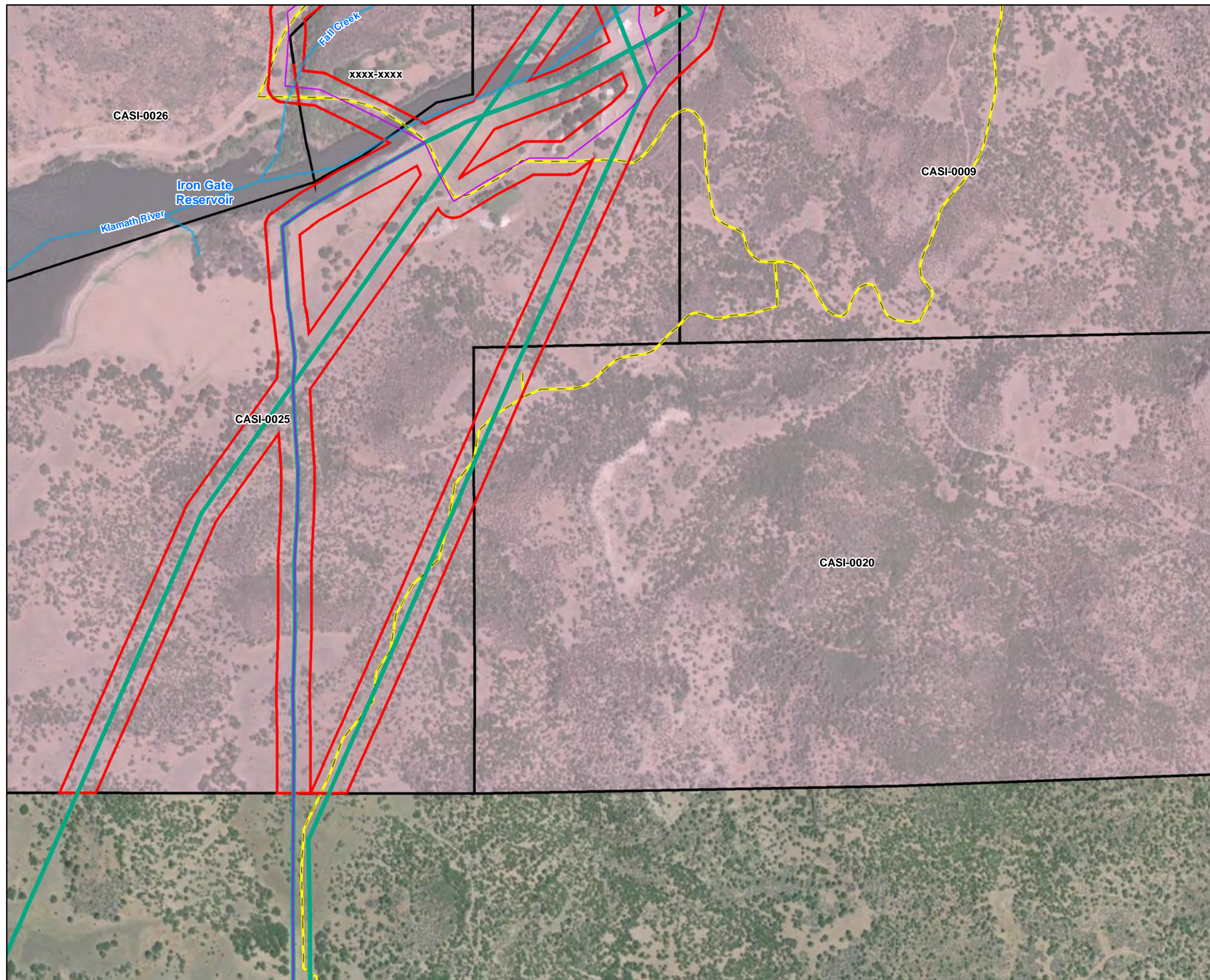


FIGURE 2-3
Sheet 3 of 9
Retained Easement
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



- LEGEND
- PacifiCorp Ownership
 - Retained Easements (~ 320 Acres, 74,630 Linear Ft)
 - Access Roads
 - River/Creek
 - Distribution Line (Retain)
 - Transmission Line (Retain)

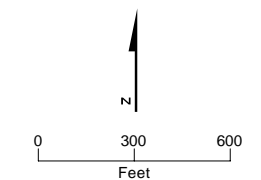
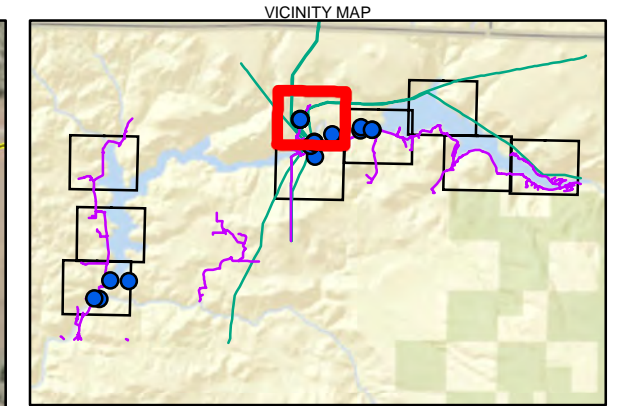
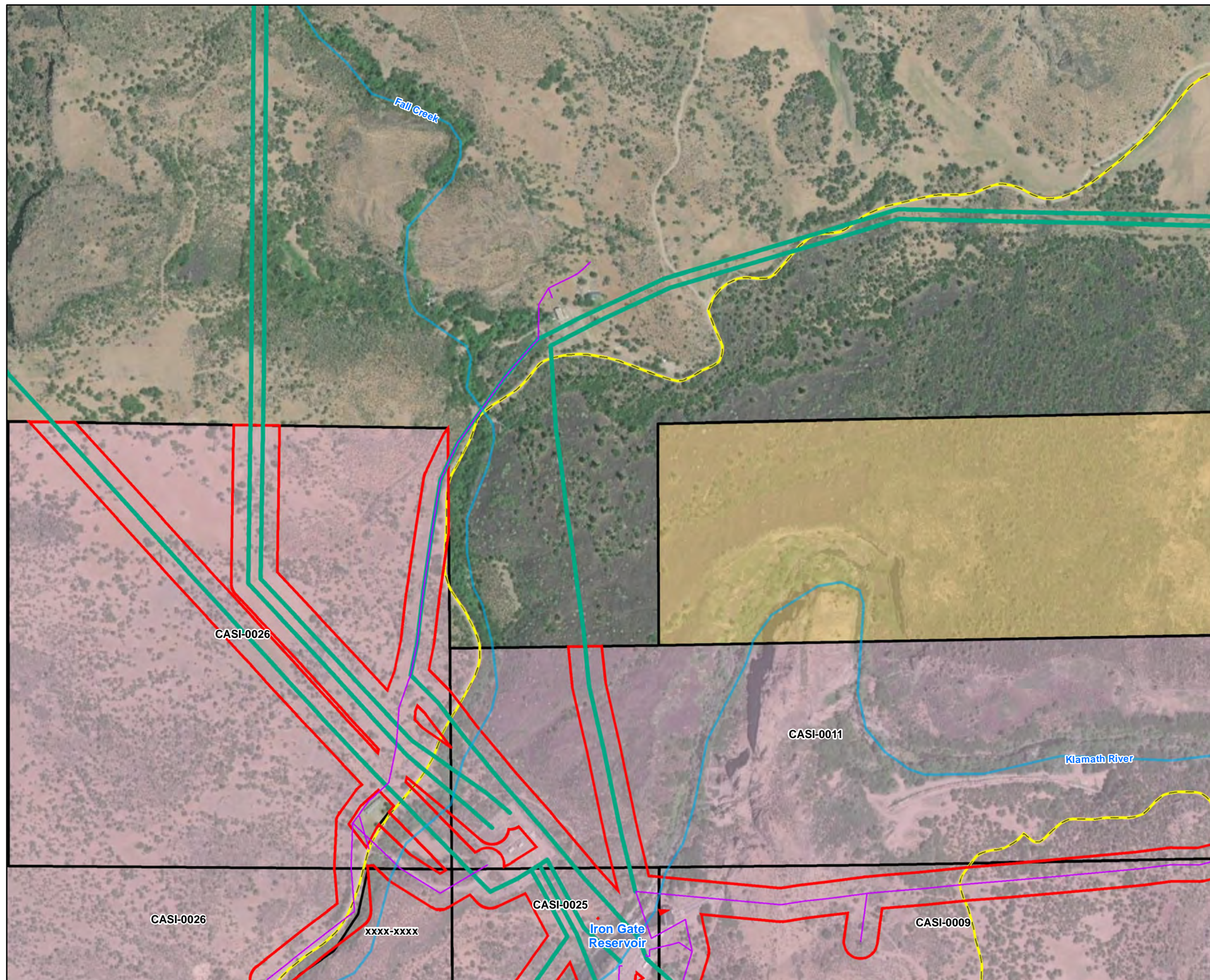


FIGURE 2-3
Sheet 4 of 9
Retained Easement
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



- LEGEND**
- Parcel B Lands
 - PacifiCorp Ownership
 - BLM
 - Retained Easements (~ 320 Acres, 74,630 Linear Ft)
 - Access Roads
 - River/Creek
 - Distribution Line (Retain)
 - Transmission Line (Retain)

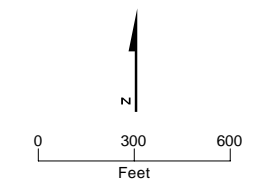
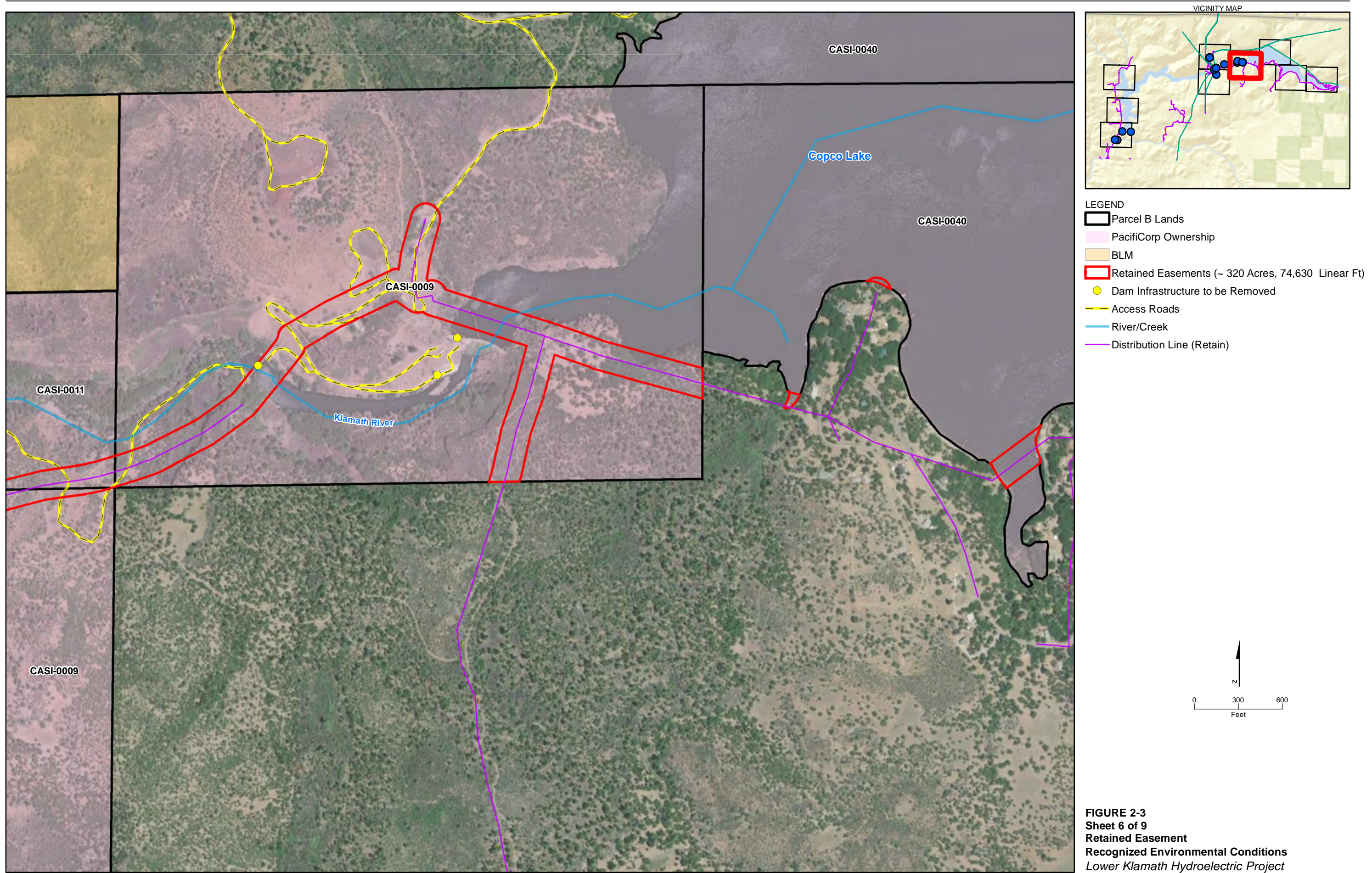
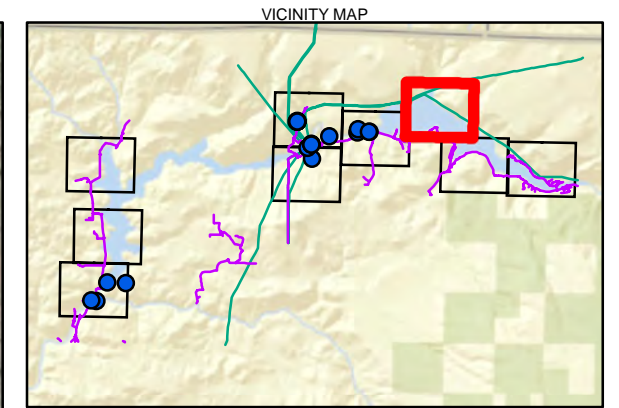
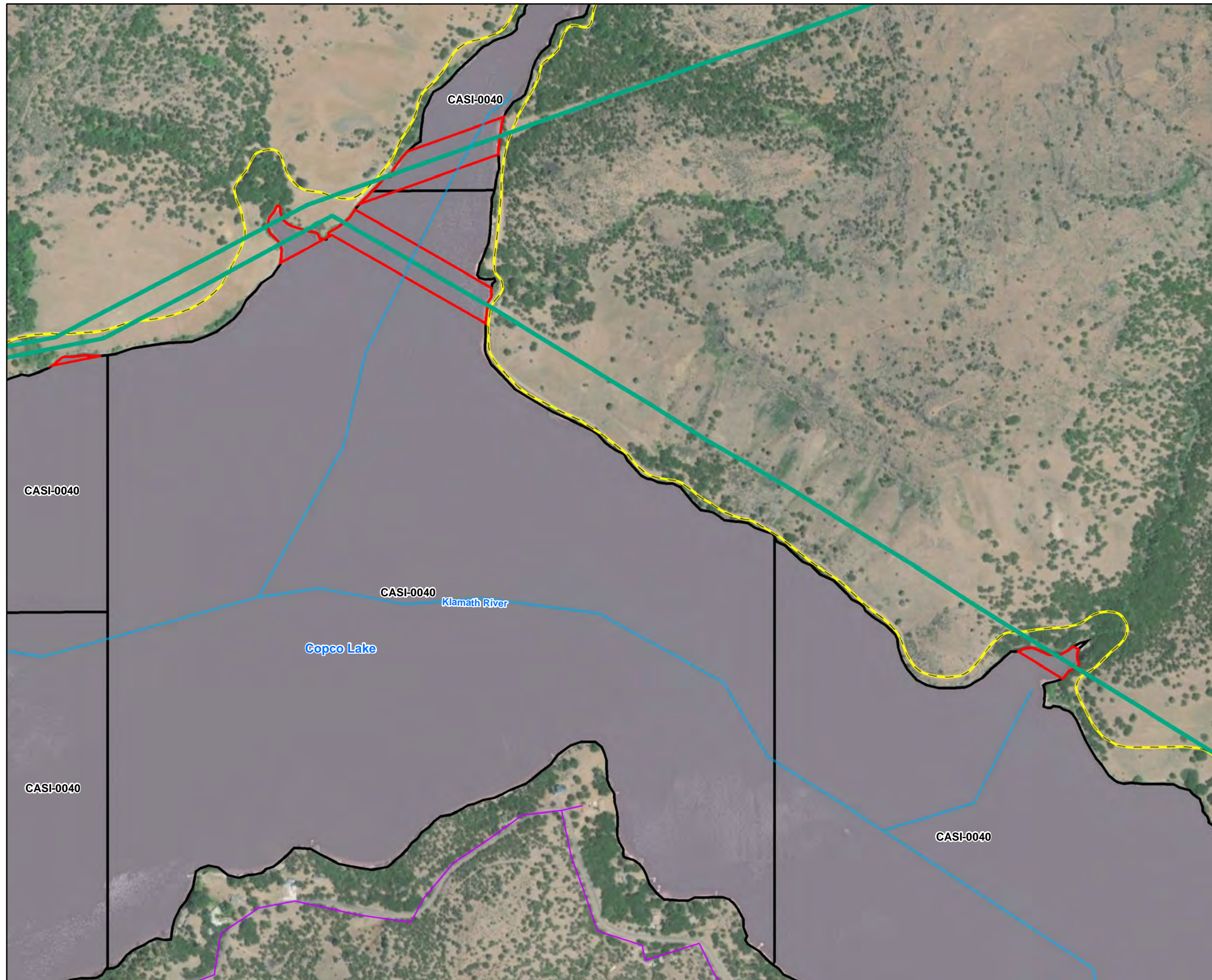


FIGURE 2-3
Sheet 5 of 9
Retained Easement
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project





- LEGEND
- PacifiCorp Ownership
 - Retained Easements (~ 320 Acres, 74,630 Linear Ft)
 - Access Roads
 - River/Creek
 - Distribution Line (Retain)
 - Transmission Line (Retain)

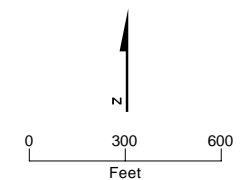
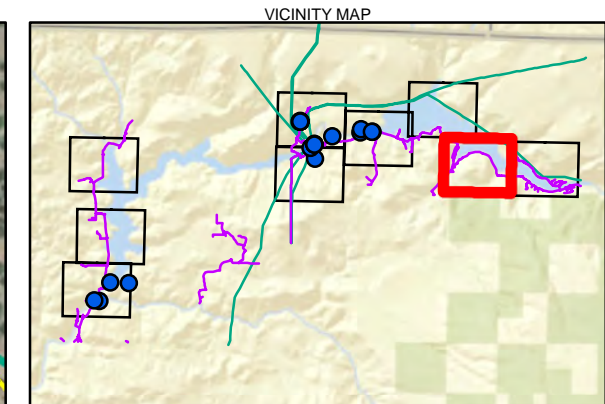
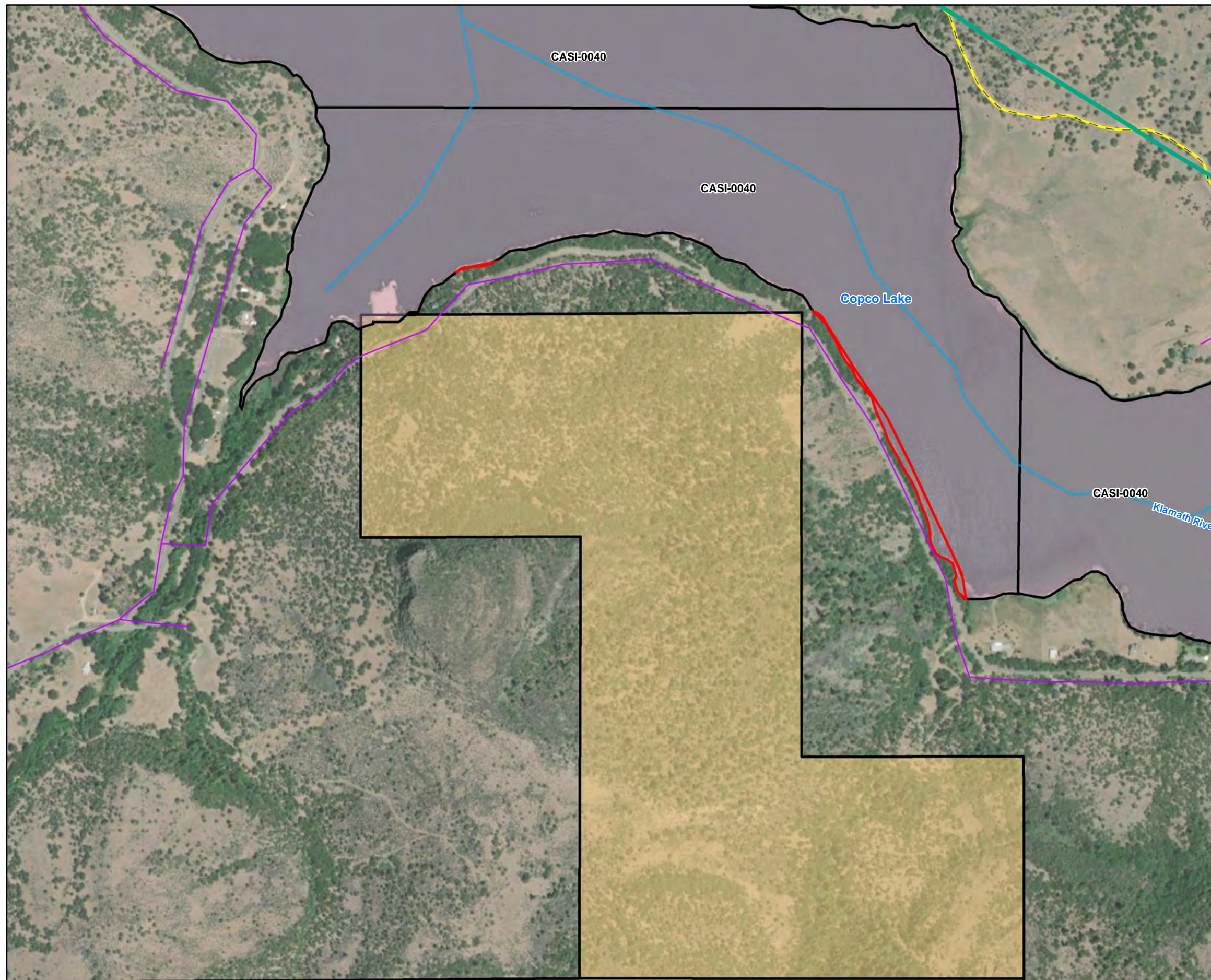


FIGURE 2-3
Sheet 7 of 9
Retained Easement
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



- LEGEND
- Parcel B Lands
 - PacifiCorp Ownership
 - BLM
 - USFS
 - Retained Easements (~ 320 Acres, 74,630 Linear Ft)
 - Access Roads
 - River/Creek
 - Distribution Line (Retain)
 - Transmission Line (Retain)

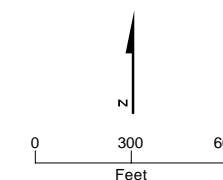
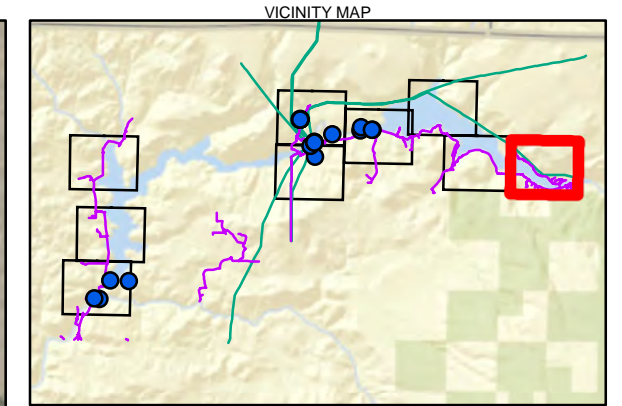
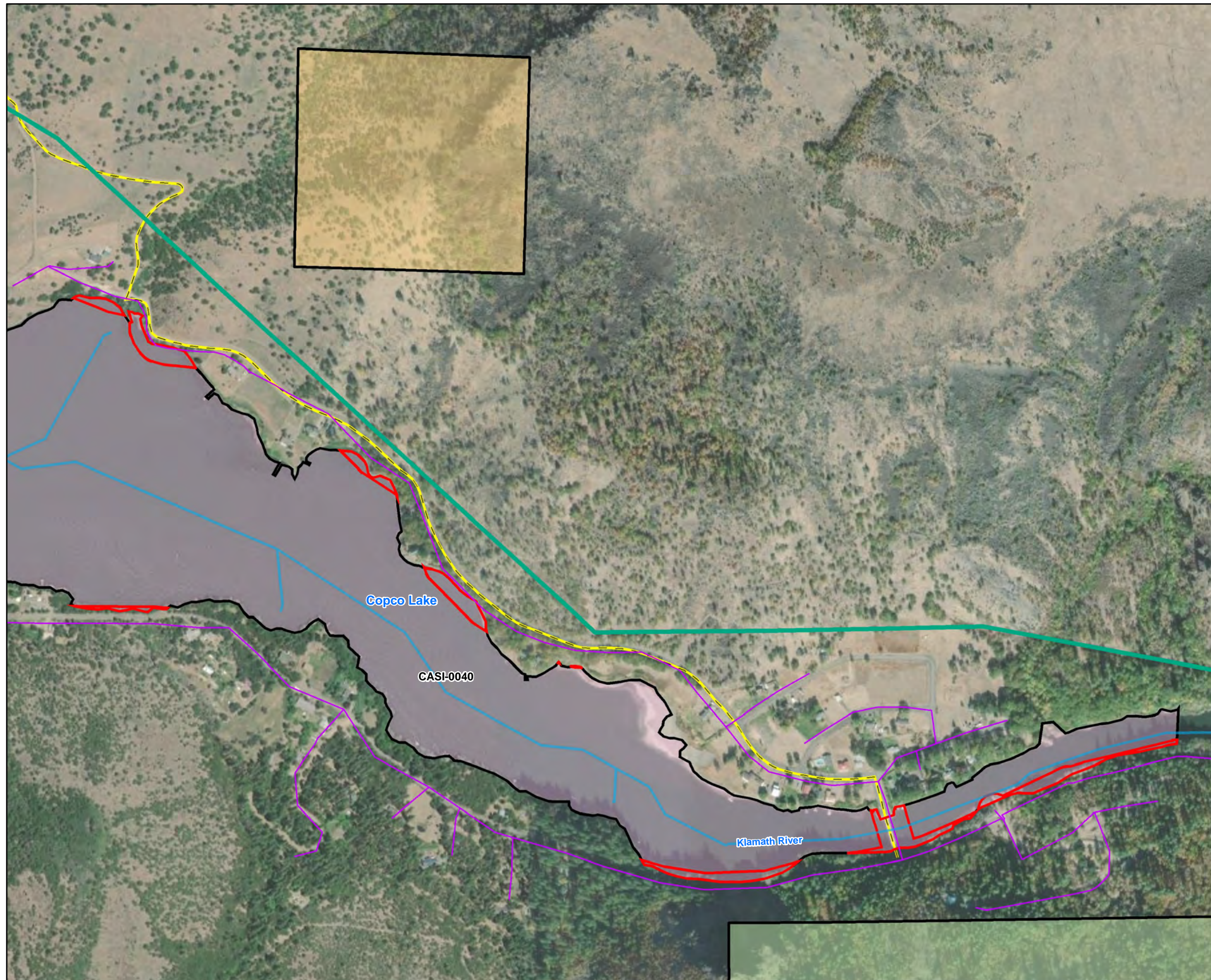


FIGURE 2-3
Sheet 8 of 9
Retained Easement
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



- LEGEND**
- Parcel B Lands
 - PacifiCorp Ownership
 - BLM
 - USFS
 - Retained Easements (~ 320 Acres, 74,630 Linear Ft)
 - Access Roads
 - River/Creek
 - Distribution Line (Retain)
 - Transmission Line (Retain)

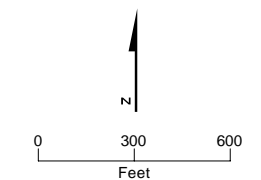


FIGURE 2-3
Sheet 9 of 9
Retained Easement
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project

Appendix
Consolidated Comment Matrix

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
<i>California Department of Water Resources / California Department of Fish and Wildlife - Office of Spill Prevention and Response (Comments on the California Site Investigation Work Plan Supplement)</i>					
CA-General	KT	General		CDFW-OSPR would like to conduct a site visit during the fieldwork, which PacifiCorp/Jacobs indicates will occur in the fall and winter of 2022-23. CDFW-OSPR requests PacifiCorp/Jacobs provide a schedule for fieldwork to be conducted, which will allow CDFW-OSPR to determine appropriate dates for a site visit to observe fieldwork activities and assess the effectiveness of avoidance and minimization measures that have been implemented.	If CDFW-OSPR staff are available when the PacifiCorp team is conducting this work, a site visit can be arranged. The implementation schedule has not been set, but once it is there will be limited flexibility.
CA-1	KT	High-Voltage Switchyards (REC 8)	Section 2.1, page 2-1	High Voltage Switchyards (REC 8). CDFW would like additional documentation of PacifiCorp's obligation to assess conditions prior to extinguishing the easement or otherwise terminating the use. Perhaps include text in the REC closure form and include text in the retained easement.	In the Property Transfer Agreement (Agreement) Section 3.5(a) requires that PacifiCorp resolve all pre-existing environmental conditions at its sole cost and expense to the reasonable satisfaction of the KRRC in consultation with the respective State. The sites PacifiCorp will not be able to address at closing will all have to be in the Post-Closing Environmental Resolution Agreement as a Retained Environmental Obligation (per Agreement Exhibit F). Section 2.2 of the Post-Closing Environmental Resolution Agreement repeats Agreement Section 3.5(a). Additionally, Agreement Exhibit H-1, Section B.1 states that "Grantor shall, at its sole cost and expense, maintain the Substation Easement Areas and the Retained Substation Facilities in an orderly and safe condition and comply with all laws, including all regulatory, environmental, and safety requirements, applicable to Grantor and its activities under the Substation Easement including the use and management of the Retained Substation Facilities and the Substation Easement Areas." PacifiCorp interprets this as requiring PacifiCorp to do the necessary investigation and clean-up if an easement is released. No edits to Supplement No. 1 are necessary.
CA-2	KT		Section 2.1.2 Sampling Plan and Table 2-1, Page 2-2	The Supplement #1 states: "The COPCs for the switchyards are PCBs and transformer oil." Filtering is not considered appropriate for water samples to be analyzed for PCBs because contaminants that sorb to particulates are removed when filtered. We recommend that PacifiCorp/Jacobs perform a risk assessment using unfiltered data.	Section 2.1.2 of Supplement No. 1 has been modified to state the following: "If groundwater is encountered when collecting soil samples at the switchyards, unfiltered grab groundwater samples will be collected for submittal to the analytical laboratory." The groundwater samples will be analyzed for the same COPCs as the soil samples.
CA-3	KT		Section 2.1.2 Sampling Plan, Page 2-2	The Supplement #1 states: "Consequently, soil samples will be analyzed for PCBs by U.S. Environmental Protection Agency (EPA) Method SW846 8082A..." CDFW-OSPR strongly recommends that homologue analysis be used to estimate total PCBs concentrations in soil and groundwater samples. It is unclear if Aroclor-based methods or PCB congener-specific and PCB homologue methods will be used in analytical testing services for samples. The analytical method described in Valoppi et al. (2000) should be used for assessing risk of the 28 PCB congeners that exhibit dioxin-like toxicity.	The methods in Supplement No. 1 reflect current guidance from EPA and DTSC. Specifically, as recommended by DTSC in HERO guidance, Human Health Risk Assessment Note Number 8: Recommendations for Evaluating Polychlorinated Biphenyls (PCBs) at Contaminated Sites in California (DTSC/HERO 2020) and the PCB Evaluation Quick Reference Guide (DTSC 2023), soil samples will be analyzed for PCBs per EPA Method SW846 8082A. The PCB Evaluation Quick Reference Guide specifically states, "DTSC and U.S. EPA require Method 8082 for PCB analysis, and recommend Method 1668 or 680 on select samples to provide a detailed specification of PCBs in certain situations." Section 2.1.2 of Supplement No. 1 has been modified to state the following: "Should PCBs be detected in soil samples, EPA Method 1668 (PCB homologue method) with EPA Extraction Method SW846 3540C may be performed on select soil samples." This edit has also been made to OR Supplement No. 1.

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
CA-4	KT		Section 2.4.2 Assessment Process, Page 2-4	Please verify the assessment process can be accomplished without interfering with dam removal. For example, some of the bulleted actions could affect schedule (e.g. acquiring a removal permit from the CUPA [Certified Unified Program Agency]) and we're wondering if dam removal activities can proceed while the assessment process is implemented.	Whether dam removal activities could proceed should an undocumented UST (or other issue) be discovered will depend on the location and size of the UST and how quickly the CUPA would respond with issuance of a UST Removal Permit, approval of the UST Removal Work Plan, and concurrence with planned removal schedule. PacifiCorp presumes that the UST would minimally be cordoned with temporary fencing, etc., and that dam removal activities would resume while permitting and the approvals process for UST removal proceeds. Per discussion with the CUPA on October 5, 2022, the turnaround time for UST removal upon discovery and under purview by the CUPA is approximately 1 week from submittal of a proper UST removal permit application with proper UST removal work plan. No edits to Supplement No. 1 are necessary.
CA-5	KT		Section 2.5 Undiscovered Impacted Soil and Groundwater (RECs 5, 9, and 17), Page 2-4	The Supplement #1 indicates: <i>"The objective for the RECs presented in this California Supplement is to establish a process whereby impacted soil and groundwater within the RECs can be addressed if such impacts are encountered."</i> CDFW-OSPR requires PacifiCorp/Jacobs ensure contaminants which may enter State waters are not at levels deleterious to fish, mammals, plant life or bird life (Fish and Game Code section 5650). The California Fish and Game Code identifies "Fish" as <i>"a wild fish, mollusk, crustacean, invertebrate, amphibian, or part, spawn, or ovum of any of these animals."</i> CDFW-OSPR suggests that the PacifiCorp/Jacobs continue to monitor contaminant concentrations in surface water if PacifiCorp/Jacobs detects concentrations over the project action limit in ground water.	PacifiCorp is currently not required to monitor contaminant concentrations in surface water within the dam developments as they exist now. Before performing such monitoring, impacted soil or groundwater would first have to be encountered within features associated with REC 5, 9, or 17. Section 2.5.1 of Supplement No. 1 has been modified to read as follows: "If impacted soil or groundwater is encountered within these areas, PacifiCorp will establish whether the impacted soil and groundwater is localized or representative of a contaminant plume. PacifiCorp will then determine if there is a complete migration pathway for the contaminant to a surface water; dilution factors will additionally be assessed on a case-by-case basis if potential contamination is identified. Upon completion of a site investigation, evaluation of analytical results, and a risk assessment, PacifiCorp will determine if there is a requirement to implement some type of clean-up, containment, or monitoring program for the REC." This same edit has been made to OR Supplement No. 1.
CA-6	KT		Section 2.5 Undiscovered Impacted Soil and Groundwater (RECs 5, 9, and 17), Page 2-4	Once potential contamination is identified, please provide dilution factors for transport between groundwater and surface water. If sufficient validation is not available for a specific dilution factor, please make the conservative assumption that there is no dilution of contaminants between ground and surface waters.	Please see the response to CA-5.
CA-7	KT		Section 2.5.2 Assessment Process, Page 2-5	Same comment as #4 [CA-4] above. CDFW notes that PacifiCorp acknowledge in the Supplement that assessment and evaluation of impacted soil or groundwater may delay ongoing dam removal work at some locations. Is there other contingency planning that could occur with KRRC?	PacifiCorp is fully aware of the potential implications from any discovered issues to affect the overall project schedule. Item 3 on page 2-5 indicates that PacifiCorp may proceed directly to clean-up of a suspect location, stockpile the material, and then do the assessment and evaluation necessary to determine the scope of the issue, if any. Rapid removal in close coordination with the KRRC team is the best way to minimize potential effects on the dam removal work schedule. PacifiCorp has confirmed that the KRRC will have a plan to address this issue should it occur (Morton D. McMillen, McMillen Jacobs Associates, to Demian Ebert, PacifiCorp, on October 31, 2022, at 6:19 AM). Section 2.5.2 of Supplement No. 1 has been modified to read as follows: "The stepwise approach will be formalized in a contingency plan to be developed by KRRC and PacifiCorp in advance of construction. The stepwise approach will be used when managing the undiscovered PECs, as follows:..."

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
CA-8	KT		Section 2.5.2 (1) Identification of Potential Contamination, Page 2-5	Please confirm PacifiCorp's assumption is correct that KRRC will have environmental staff onsite that can identify hazardous materials.	<p>McMillan Jacobs Associates is the KRRC's representative for removal. McMillan Jacobs Associates confirmed that they will have environmental staff onsite during all removal work and a contractual relationship with a firm qualified to collect samples and do a site-specific assessment (Morton D. McMillen, McMillen Jacobs Associates, to Demian Ebert, PacifiCorp, on October 31, 2022, at 6:19 AM).</p> <p>Section 2.5.2 (1) of Supplement No. 1 has been modified to read as follows: "The KRRC will have qualified environmental staff onsite during dam removal activities. Such staff will be qualified to collect environmental samples and perform site-specific assessments."</p>
CA-9	KT		Section 2.5.2 (3) Remediation and Removal of Impacted Media, Page 2-5	Please confirm that KRRC has identified an approved waste staging area. If possible, please also confirm that the waste staging area can accommodate the potential materials that could be discovered. Please also determine if RES intends to use a certain amount of soil for restoration such that any contaminated soil that can't be reused would impact restoration plans. We're wondering what sort of adjustments, if any, RES (or the team) would need to make if all the soil can't be reused onsite.	<p>Because these particular RECs are currently unknown and unknowable, clean-up actions cannot be developed, and selection of specific stockpile locations or potential uses of excess material have not been developed. However, PacifiCorp expects that development of a detailed contingency plan (see response to CA-7) will be developed before the start of construction. That plan would be coordinated with the KRRC's team to identify waste staging areas, stockpile management, soil reuse, backfill and compaction, and offsite disposal requirements all with an eye toward reducing potential conflicts and schedule impacts on the dam removal project.</p> <p>Section 2.5.2 (3) of Supplement No. 1 has been modified to read as follows: "Removal action in advance of testing means that PacifiCorp would manage impacted materials as outlined in the contingency plan. Potentially impacted soil or groundwater will be excavated and hauled to an approved waste staging area identified by the KRRC and as outlined in the contingency plan."</p> <p>The corresponding edit has been made to OR Supplement No. 1.</p>
CA-10	KT		Section 2.5.2 (4) Site Investigation Report and PEC Closure, Page 2-6	CDFW requests that RECs not be closed by default. Instead, PacifiCorp should acquire CDFW's and KRRC's concurrence prior to closing the REC.	Section 2.5.2 (4) of Supplement No. 1 has been modified to read as follows: "If impacted soil and groundwater are not observed at completion of facilities removal for RECs 5 and 9 (dams and powerhouses) and at the completion of restoration for REC 17, then the RECs will be recommended for closure by PacifiCorp per the terms of the Agreement and the process developed with the KRRC and the State of California."

* KT = Kevin Takei

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
<i>Klamath River Renewal Corporation (Comments on the California and Oregon Site Investigation Work Plan Supplements)</i>					
KRRC-General	LL			I should add, as a general matter, that KRRC incorporates the States' comments.	Acknowledged.
KRRC-1	LL	CA Supplement	Section 1.2, last paragraph	Please rephrase as "The RECs identified in this California Supplement will be assessed by following the same processes, procedures, and standards provided for in the California SIWP."	The KRRC and State of California approvals of the California SIWP are recommended in the document in order to establish precedence for use of the same processes, procedures, and standards when assessing the RECs identified in the California Supplement. The last sentence of the first paragraph in Section 1.1 in Supplement No. 1 now reads as follows: "This California Supplement incorporates the California SIWP by reference and provides specific information necessary to address remaining RECs in accordance with the California SIWP, which was approved by the KRRC (Lowy, pers. comm. 2021) and the State of California and which was implemented when assessing the various RECs within the Copco No. 1, Copco No. 2, and Iron Gate developments (Jacobs 2021a)." The last paragraph of Section 1.2 in Supplement No. 1 now reads as follows: "The RECs identified in this California Supplement will be assessed by following the same processes, procedures, and standards that were approved for the California SIWP."
KRRC-2	LL	CA Supplement	Section 1.4	Please add the following at the beginning of the first sentence: "“Notwithstanding any specific process or procedure identified in this California Supplement, ...”	This text has been incorporated into the document.
KRRC-3	LL	CA Supplement	Section 1.4, Table 1-1	What was the basis for determining the future uses of the different areas? For example, I question whether it's correct to refer to the future uses of all of the retained easements as industrial – certainly some areas are but outside of the exclusive easement areas I'm not sure that's the case.	The future uses listed in Table 1-1 were confirmed by the State of California on November 7, 2022 (Kevin Takei, State of California, to Demian Ebert, PacifiCorp, November 8, 2022, at 12:10 p.m.) and have been incorporated into Supplement No. 1.
KRRC-4	LL	CA Supplement	Section 2.1	Please state the methodology for quantity of samples and grid spacing etc. KRRC suggests the EPA methodology (40 CFR Part 761, Subpart N) for characterizing the media.	Section 2.1.2 of Supplement No. 1 has been modified to read as follows: "Of note is that there are no records of spills or releases at the switchyards. The environmental sampling activities are being performed to confirm the presence or absence of PCBs within the switchyards. If analytical results from the initial sampling event indicate the presence of PCBs, then additional sampling at the Copco No. 1 or Iron Gate switchyards may be performed within identified areas of concern as per 40 Code of Federal Regulations Part 761, Subpart N. Concrete sampling will additionally be performed for PCBs at the switchyards, and the analytical results will be used to help determine disposal options for concrete."
KRRC-5	LL	CA Supplement	Section 2.1, second paragraph	The assertion that the retained easement areas in the high-voltage switchyards will not be assessed at this time is not something that, as far as I know, has been discussed previously with KRRC. I understand the rationale and don't necessarily object but that discussion should take place. If that is, in fact, where we end up, then PacifiCorp's obligation to assess and remediate these easement areas at a much later date will need to be expressly identified in the Post-Closing Environmental Resolution Agreement and the reservation of easements, and carved out of any closure of any other retained easement areas.	Please see the response to CA-1.

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
KRRC-6	LL	CA Supplement	Section 2.1.2, penultimate (second-to-last) paragraph	The likely future use of the switchyard areas should be determined at the relevant time in consultation with California and, if applicable, KRRC rather than being assumed by PacifiCorp.	Please see the response to KRRC-3.
KRRC-7	LL	CA Supplement	Section 2.2.1, second paragraph	I believe this acknowledges that the easement area extends 100 feet on each side of the transmission and distribution facilities – please confirm or rephrase accordingly.	The text of the California Supplement correctly states that the retained easements for the transmission and distribution system is the location of existing structures buffered by 100 feet on either side of the line. No edits to Supplement No. 1 are necessary.
KRRC-8	LL	CA Supplement	Section 2.4.2, second bullet	The likely future use of the areas within UST footprints should not be determined by PacifiCorp but rather by KRRC and California.	Please see the response to KRRC-3.
KRRC-9	LL	CA Supplement	Section 2.5.2, paragraph 1	There should be a discussion regarding the extent to which KRRC will have environmental staff onsite during dam removal and the process should be tailored around that.	Please see the response to CA-8.
KRRC-10	LL	CA Supplement	Section 2.5.2, paragraph 3	I'm not sure what "PacifiCorp's discretion in coordination with KRRC" means in this context; a decision to proceed to remediation without investigation should not be made by PacifiCorp without first consulting KRRC; same for deciding which soil stockpiles are to be reused or disposed of onsite.	The goal of this entire item is to reduce the potential for the overall dam removal project to be delayed by the need to investigate, analyze, and then clean-up a newly discovered potential contamination site. Instead, if contamination is identified as potentially present, PacifiCorp may at its discretion, and in consultation with the KRRC, proceed to clean-up a suspected site simply to expedite the overall removal project. Management of soil would be detailed in a contingency plan (see response to CA-9). Section 2.5.2 (3) of Supplement No. 1 has been modified to read as follows: "Because of this potential for delay, at PacifiCorp's discretion and in coordination with the KRRC, PacifiCorp may proceed directly to site remediation to minimize impacts on dam removal activities and progress."
KRRC-11	LL	OR Supplement	Section 1.2, last paragraph	Please rephrase as "The RECs identified in this Oregon Supplement will be assessed by following the same processes, procedures, and standards provided for in the Oregon SIWP."	The KRRC and State of Oregon approvals of the Oregon SIWP are recommended in the document in order to establish precedence for use of the same processes, procedures, and standards when assessing the RECs identified in the Oregon Supplement. The last sentence of the first paragraph in Section 1.1 of Supplement No. 1 now reads as follows: "This Oregon Supplement incorporates the Oregon SIWP by reference and provides specific information necessary to address remaining RECs in accordance with the Oregon SIWP, which was approved by the KRRC (Lowy, pers. comm. 2021) and the State of Oregon (Matthews, pers. comm. 2021) and which was implemented when assessing J.C. Boyle Dispersed Recreation Area - 2 (Jacobs 2021a)." The last paragraph of Section 1.2 in Supplement No. 1 now reads as follows: "The RECs identified in this Oregon Supplement will be assessed by following the same processes, procedures, and standards that were approved for the Oregon SIWP."

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
KRRC-12	LL	OR Supplement	Section 1.4, first paragraph	Please add the following at the beginning of the first sentence: ""Notwithstanding any specific process or procedure identified in this Oregon Supplement, ..."	This text has been incorporated into the document.
KRRC-13	LL	OR Supplement	Section 1.4, Table 1-1	What was the basis for determining the future uses of the different areas? For example, I question whether it's correct to refer to the future uses of the retained easements as industrial as there are not any exclusive easement areas in Oregon.	The future uses listed in Table 1-1 were based on the uses for various areas as established in the SIWP. The review process for the draft Final Supplement was intended to ensure that future uses conformed with Oregon's ultimate vision for these locations. Per Oregon's recommendation, the future use for retained easements has been changed to Active Recreation per Oregon's comment (see Comment OR-1).
KRRC-14	LL	OR Supplement	Section 2.1	The Oregon Supplement only indicates sampling of the sub-surface soil. KRRC believes PacifiCorp should also sample the gravel and the concrete, as it will be relocated or disposed of.	Soil beneath gravel would be expected to be impacted by potential PCB or dielectric fluid spills. If PCBs were present in potential spills, the PCBs would have been washed through the gravel and attached to the fines in the soil. The gravel is not expected to contain much fine material and those fine materials are needed to run the analytical tests. The following text has been added to Section 2.1 of Supplement No. 1: "Concrete sampling will additionally be performed for PCBs at the switchyard, and the analytical results will be used to help determine disposal options for concrete."
KRRC-15	LL	OR Supplement	Section 2.2.2, third bullet	Again, future uses of that portion of the property should be determined by consulting KRRC and Oregon.	The future site uses as shown in Table 1-1 have been approved by the KRRC and Oregon. The second sentence of this bullet has been modified to read: "For newly identified PECs within the retained easements, determine the potential COPCs for the PEC(s), perform a site assessment(s) according to the Oregon SIWP (Jacobs 2021a), and evaluate the analytical results against the screening levels for the future uses and exposure pathways established in Table 1-1." The corresponding edit has been made to CA Supplement No. 1.
KRRC-16	LL	OR Supplement	Section 2.4.2, second bullet	Same comment as 2.2.2 [KRRC-15].	The future site uses as shown in Table 1-1 have been approved by the KRRC and Oregon. The text of this bullet has been modified to read: "PacifiCorp will determine the potential COPCs for the UST, perform a site assessment according to the Oregon SIWP (Jacobs 2021a), and evaluate the analytical results against the screening levels for the future uses and exposure pathways established in Table 1-1." The corresponding edit has been made to CA Supplement No. 1.
KRRC-17	LL	OR Supplement	Section 2.5.2, paragraph 1	There should be a discussion regarding the extent to which KRRC will have environmental staff onsite during dam removal and the process should be tailored around that.	Please see the response to CA-8. The corresponding edit has been made to Oregon Supplement No. 1.
KRRC-18	LL	OR Supplement	Section 2.5.2, paragraph 3	A decision to proceed to remediation without investigation should not be made by PacifiCorp without first consulting KRRC; same for deciding which soil stockpiles are to be reused or disposed of onsite	Please see the response to KRRC-10. The corresponding edit has been made to Oregon Supplement No. 1.

* LL = Lloyd Lowy

COMMENT MATRIX for the External Review Draft Dated August 2022
Lower Klamath Hydroelectric Project Site Investigation Work Plan Supplement No. 1
FERC No. P-14803
January 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No.	Comment	Response to Comment
<i>Oregon Department of Justice (Comments on the Site Investigation Work Plan Supplements)</i>					
OR-1	CM		General	Oregon joins in the comments by KRRRC and the Golden State. Our only specific comment is that we believe the future uses described for the retained easement areas in Oregon are incorrect – the land is not “industrial” as the likely exposure pathway will actually be “active recreation” (as none of the areas are exclusively for use by PacifiCorp – these are transmission line easements). Therefore those areas will need to be remediated (as necessary) to the higher standard.	The future use for the retained easements has been changed to Active Recreation. Also, please see the response to KRRRC-13.

* CM = Chris Matthews

References

- California Department of Toxic Substances Control (DTSC). 2023. *Polychlorinated Biphenyl (PCB) Evaluation Quick Reference Guide*. <https://dtsc.ca.gov/brownfields/polychlorinated-biphenyl-pcb-evaluation-quick-reference-guide/>.
- California Department of Toxic Substances Control Human and Ecological Risk Office (DTSC HERO). 2020. *Human Health Risk Assessment Note Number 8: Recommendations for Evaluating Polychlorinated Biphenyls (PCBs) at Contaminated Sites in California*. June.
- Valoppi, L., M. Petreas, R. M. Donohoe, L. Sullivan, and C.A. Callahan. 2000. "Use of PCB Congener and Homologue Analysis in Ecological Risk Assessment." *Environmental Toxicology and Risk Assessment: Recent Achievements in Environmental Fate and Transport*. Ninth Volume, ASTM STP 1381, F. T. Price, K. V. Brix, and N. K. Lane, Eds., American Society for Testing and Materials, West Conshohochen, PA. 9:147-160.

Attachment B

Site Investigation Reports for Oregon and California (March 2023)



**Lower Klamath Hydroelectric Project
(FERC No. P-14803)**

Oregon Site Investigation Report

Final

March 2023



Lower Klamath Hydroelectric Project (FERC No. P-14803)

Project No: D3514100
Document Title: Oregon Site Investigation Report
Document No.: PPS0913221558PDX
Revision: Final
Date: March 2023
Client Name: PacifiCorp, Demian Ebert, Klamath Program Manager, 503-813-6625
Project Manager: Emilio Candanoza, Jacobs, 541-768-3509

Jacobs Engineering Group Inc.

2020 SW Fourth Avenue
Suite 300
Portland, Oregon
United States
T +1.503.235.5000
www.jacobs.com

© Copyright 2023 Jacobs Engineering Group Inc. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.

Limitation: This document has been prepared on behalf of, and for the exclusive use of Jacobs' client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Contents

Acronyms and Abbreviations.....	iii
1. Introduction	1-1
1.1 Background	1-1
1.2 Objectives.....	1-2
1.3 Investigative Standard and Future Site Uses.....	1-2
1.4 Report Organization.....	1-2
2. Field Activities	2-1
2.1 Waste Management	2-1
2.2 Sample Collection and Management.....	2-2
3. Risk Assessment Approach	3-1
3.1 Human Health Risk Assessment.....	3-1
3.1.1 Data Evaluation	3-1
3.1.2 Exposure Assessment	3-2
3.1.3 Toxicity Assessment	3-3
3.1.4 Risk Characterization	3-3
3.2 Leaching to Groundwater Evaluation Approach	3-3
3.3 Ecological Risk Assessment	3-3
3.3.1 Ecological Conceptual Site Model	3-5
3.3.2 Step 1 – Screening Evaluation.....	3-6
3.3.3 Step 2 – Refined Evaluation	3-6
3.3.4 Step 3 – Site-Specific Evaluation.....	3-7
3.3.5 Step 4 – Weight of Evidence Evaluation	3-10
4. J.C. Boyle Dispersed Recreation Area – 2.....	4-1
4.1 Background	4-1
4.2 Field Activities	4-2
4.3 Analytical Results.....	4-2
4.4 Site-Specific Human Health Risk Assessment.....	4-3
4.4.1 Data Evaluation	4-3
4.4.2 Exposure Assessment	4-3
4.4.3 Toxicity Evaluation	4-3
4.4.4 Human Health Risk Assessment Results	4-3
4.4.5 Uncertainty Discussion.....	4-3
4.4.6 Human Health Risk Assessment Conclusions	4-4
4.5 Leaching to Groundwater Evaluation.....	4-4
4.5.1 Lead	4-4
4.5.2 Naphthalene.....	4-4
4.5.3 Leaching to Groundwater Evaluation Conclusions.....	4-4
4.6 Ecological Risk Assessment	4-4
4.6.1 Soil Exposure Pathways	4-4
4.6.2 Groundwater Exposure Pathways	4-5
4.7 Recommended Actions.....	4-6

5.	Summary of Recommendations	5-1
6.	References.....	6-1

Appendixes

A	Boring Logs
B	Waste Manifests
C	Analytical Laboratory Results
D	Data Quality Evaluation Report
E	Human Health and Leaching to Groundwater Risk Evaluation Tables
F	Ecological Risk Evaluation Tables
G	Consolidated Comment Matrix

Tables

1-1	Constituents of Potential Concern, Future Site Uses, and Exposure Pathways.....	1-2
4-1	J.C. Boyle Dispersed Recreation Area – 2 Borehole Summary	4-2
4-2	J.C. Boyle Dispersed Recreation Area – 2 Boreholes with Compounds that Exceed Screening Levels.....	4-2
4-3	Human Health Risk Evaluation for COPCs in Soil at J.C. Boyle Dispersed Recreation Area – 2.....	4-7
4-4	Shallow Groundwater Evaluation for COPCs in Soil at J.C. Boyle Dispersed Recreation Area – 2..	4-8
4-5	Soil Leaching Evaluation for COPCs in Soil at the J.C. Boyle Dispersed Recreation Area – 2.....	4-9
4-6	Weight of Evidence for Ecological Receptors at J.C. Boyle Dispersed Recreation Area – 2: Soil Exposure Pathways.....	4-10
4-7	Weight of Evidence for Ecological Receptors at J.C. Boyle Dispersed Recreation Area – 2: Groundwater Exposure Pathways.....	4-11

Figures

1-1	J.C. Boyle Dam Recognized Environmental Condition.....	1-4
1-2	Flowchart of Possible Next Steps.....	1-5
3-1	Ecological Risk Assessment Process	3-5
4-1	J.C. Boyle Dispersed Recreation Area – 2.....	4-13
4-2	J.C. Boyle Dispersed Recreation Area – 2 Excavation Area	4-14

Acronyms and Abbreviations

µg/L	microgram(s) per liter
2,3,7,8-TCDD TEQ	2,3,7,8-Tetrachlorodibenzo-P-dioxin toxic equivalent
AECOM	AECOM Technical Services, Inc.
Agreement	Property Transfer Agreement entered into by PacifiCorp and Klamath River Renewal Corporation
AUF	area use factor
BAF	bioaccumulation factor
bgs	below ground surface
B _i	concentration of chemical in biota type (i)
BTV	background threshold value
COPC	constituent(s) of potential concern
EcoPRG	ecological preliminary remedial goal
EcoSSL	ecological soil screening level
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
ERA	ecological risk assessment
ESA	environmental site assessment
ESL	ecological screening level
FERC	Federal Energy Regulatory Commission
FIR	food ingestion rate
GPS	Global Positioning System
HA	hand auger
HHRA	human health risk assessment
HQ	hazard quotient
J	estimated value that is less than the reporting limit but greater than the method detection limit
Jacobs	Jacobs Engineering Group Inc.
KRRC	Klamath River Renewal Corporation
LANL	Los Alamos National Laboratory
LOAEL	lowest observed adverse effect
MDC	maximum detected concentration
mg/kg	milligram(s) per kilogram(s)
NOAEL	no observed adverse effect

Oregon Site Investigation Report

ODEQ	Oregon Department of Environmental Quality
Oregon SI Report	<i>Oregon Site Investigation Report</i>
Oregon SIWP	<i>Oregon Site Investigation Work Plan</i>
P _i	proportion of receptors diet that is biota type (i)
Project	Lower Klamath Hydroelectric Project
P _s	proportion of diet that is soil (unitless)
RBC	risk-based concentration
RSL	regional screening level
SL	screening level
TEF	toxicity equivalency factor
TEQ	toxic equivalent
TRV	toxicity reference value
UN	United Nations
VOC	volatile organic compound

1. Introduction

PacifiCorp retained Jacobs Engineering Group Inc. (Jacobs) to prepare this *Oregon Site Investigation Report* (Oregon SI Report) for the Lower Klamath Hydroelectric Project (Project). The purpose of the Oregon SI Report is to document the environmental sampling activities performed at the location of one pre-existing environmental condition, the J.C. Boyle Dispersed Recreational Area – 2 (site), within the J.C. Boyle Development in Oregon. The site was identified during a Phase I environmental site assessment (Phase I ESA) conducted by AECOM Technical Services, Inc. (AECOM) on behalf of the Klamath River Renewal Corporation (KRRC) and was subsequently identified in Exhibit C of a Property Transfer Agreement (Agreement) between PacifiCorp and the KRRC.

The environmental sampling activities were performed according to the *Oregon Site Investigation Work Plan* (Oregon SIWP) (Jacobs 2021a) to confirm the presence or absence of constituents of potential concern (COPCs) at the site (Figure 1-1).

The Oregon SIWP was approved by the KRRC (Lowy, pers. comm. 2021) and the State of Oregon (Matthews, pers. comm. 2021). A separate *California Site Investigation Work Plan* (California SIWP) was developed for Exhibit C sites located within the Copco No. 1, Copco No. 2, and Iron Gate developments (Jacobs 2021b). PacifiCorp has prepared a *California Site Investigation Report* (Jacobs 2023) in accordance with Section 4 of the California SIWP.

1.1 Background

The Oregon SIWP provides detailed backgrounds of the J.C. Boyle Development and a discussion of the site, surrounding lands, local geology, and historical practices (Jacobs 2021a). This information is incorporated into the Oregon SI Report by reference.

Also pertinent to the site are two Phase I ESAs conducted for the Oregon and California hydroelectric developments (AECOM 2018, 2020a).

Of importance to note regarding the site and the development of each SIWP are the following:

- There were no records of spills/releases at the site, and the actual site conditions were not known.
- The sampling plan for the site was developed consistent with industry standards and was based on assumed conditions at the site.
- The site-specific sampling plan was developed to determine if the COPCs (summarized in Table 1-1) are present at concentrations that exceed the screening levels.
- The COPCs and screening levels for the site were selected based on the most conservative (i.e., lowest) residential, ecological, and leaching to groundwater screening levels and on the understood future site use, as agreed upon by the KRRC and the State of Oregon.

The J.C. Boyle Dam and associated powerhouse have been and continue to be operated to generate and distribute electricity. Hazardous materials that have been used onsite include diesel fuel, leaded and unleaded gasoline, non-polychlorinated biphenyls, and governor, transformer, and motor oils. Battery banks and oils are stored within secondary containment systems. As noted in the Phase I ESA conducted by AECOM, the powerhouses appeared to be in good operating condition, with proper housekeeping and hazardous materials management practices (AECOM 2018).

1.2 Objectives

The primary objective of this Oregon SI Report is to document the field activities and analytical results. Those analytical results support one of the following recommended actions for the site:

- No further action and site closure
- Additional assessment through field sampling
- Development of a remedial action plan

Recommended next steps are provided for the site based on the results of the risk evaluation. Recommended next steps consist of a request for site closure, collection of additional environmental samples, or a soil removal action (Figure 1-2). If risk evaluation of the analytical results indicates acceptable risk, PacifiCorp will request closure of the site. As used in this report, site closure refers to a closure action agreed upon by PacifiCorp, KRRRC, and Oregon and documented in a Memorandum of Resolution. If analytical results of COPCs indicate the risk is unacceptable, PacifiCorp will either propose advancement of step-out borings to collect additional samples according to the sampling plan established for the site or develop a remediation plan based on the field and analytical data already collected.

1.3 Investigative Standard and Future Site Uses

The COPCs for the site (Table 1-1) were determined based on the Investigative Standard, as defined in Section 1.5 of the Oregon SIWP (Jacobs 2021a), on expectations for the type of site identified. All fieldwork and data evaluations were carried out in accordance with the Investigative Standard. The COPCs, intended future site uses, and exposure pathways for the site (Table 1-1) were identified in the Oregon SIWP and approved by KRRRC and the State of Oregon. The exposure pathways were used to determine the screening levels developed in Section 3.3 of the Oregon SIWP and utilized when evaluating the analytical results in Section 4.

Table 1-1. Constituents of Potential Concern, Future Site Uses, and Exposure Pathways

Site	Constituents of Potential Concern	Future Site Uses	Exposure Pathways
J.C. Boyle Dispersed Recreation Area – 2	Title 22 metals, VOCs SVOCs, dioxins and furans	Passive recreation/natural habitat	Residential/Ecological/Leaching to Groundwater

Notes:

SVOCs = semivolatile organic compounds

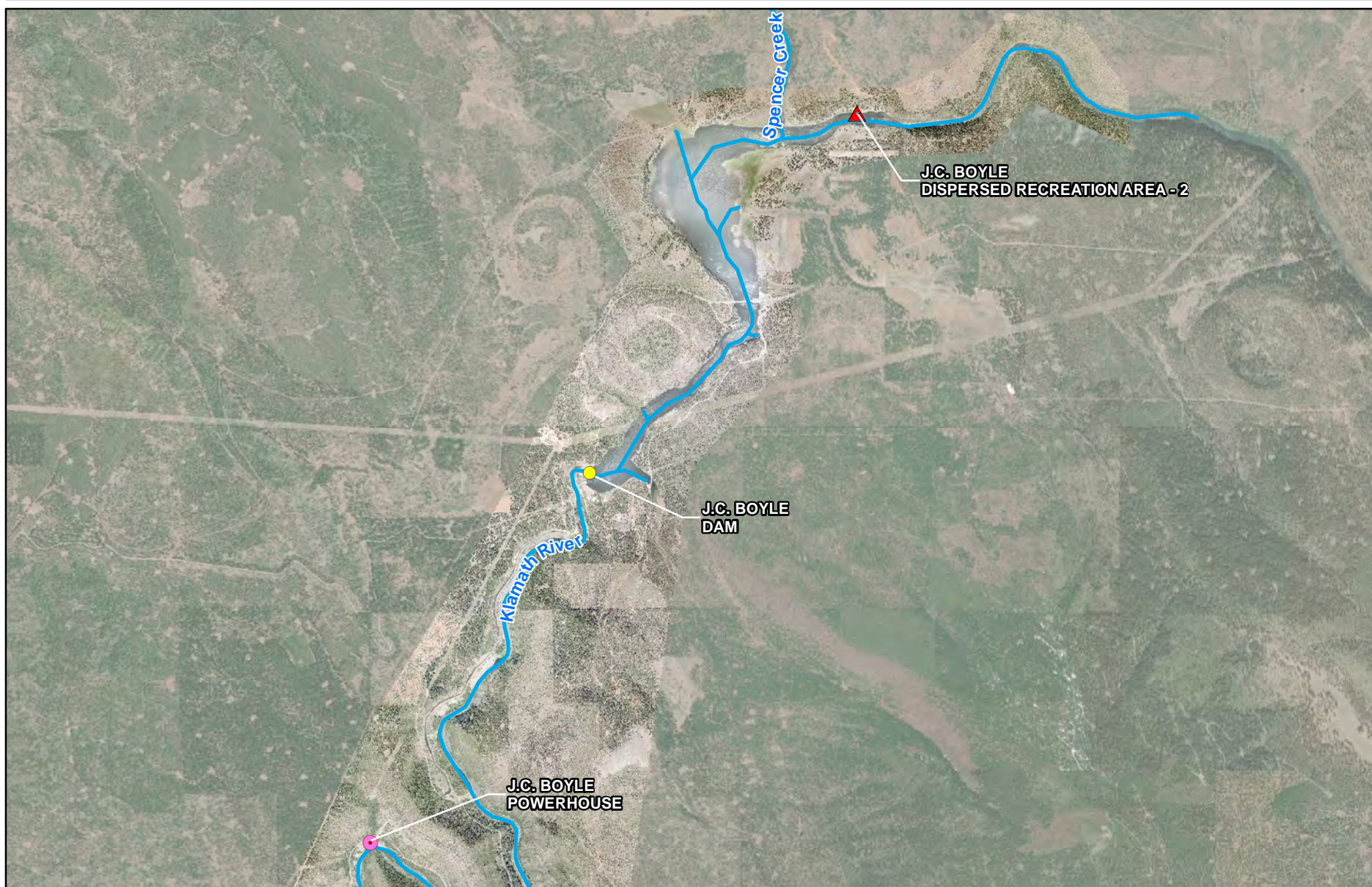
VOCs = volatile organic compounds

1.4 Report Organization

The Oregon SI Report contains the following section and appendixes:

- **Section 1 – Introduction:** Describes the Oregon SI Report purpose, provides background information on the evolution of the site, objectives of the Oregon SI Report, the Investigative Standard utilized, future uses, applicable receptor pathways, and COPCs for the site.
- **Section 2 – Field Activities:** Provides a general overview of the field activities performed during Oregon SIWP implementation.
- **Section 3 – Risk Assessment Approach:** Describes the general risk assessment approach used to evaluate human health risk, leaching to groundwater, and ecological risk from COPCs.

- **Section 4 – J.C. Boyle Dispersed Recreation Area – 2:** Describes the site-specific field activities, analytical results, risk assessment, and recommended actions.
- **Section 5 – Summary of Recommendations:** Summarizes the recommendations for further action at the site.
- **Section 6 – References:** Provides a bibliographic listing of documents cited in the report.
- **Appendix A – Boring Logs:** Provides coordinates for borehole locations based on Global Positioning System (GPS) surveys, borehole logs, and photographs of borehole locations at the site.
- **Appendix B – Waste Manifests:** Contains the waste manifests used for transport and disposal of the generated wastes.
- **Appendix C – Analytical Laboratory Results:** Provides the analytical laboratory results of all samples collected from each of the boreholes and highlights results that exceeded a screening level.
- **Appendix D – Data Quality Evaluation Report:** Assesses the data quality of the analytical results for soil and water samples collected at the site.
- **Appendix E – Human Health and Leaching to Groundwater Evaluation Tables:** Provides the supporting tables of calculations for the human health risk evaluation and leaching to groundwater evaluation for the site.
- **Appendix F – Ecological Risk Evaluation Tables:** Provides the supporting tables of calculations for the site ecological risk evaluation.
- **Appendix G – Consolidated Comment Matrix:** Contains consolidated review comments and responses from California, KRRRC, and Oregon on the stakeholder review draft dated October 2022 as well as supplemental comments received and discussed following the initial round of comments.



LEGEND

- Dam to be Removed
- ▲ Recognized Environmental Condition
- Powerhouse
- Klamath River

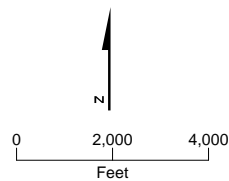


FIGURE 1-1
J.C. Boyle Dam
Recognized Environmental Condition
Lower Klamath Hydroelectric Project

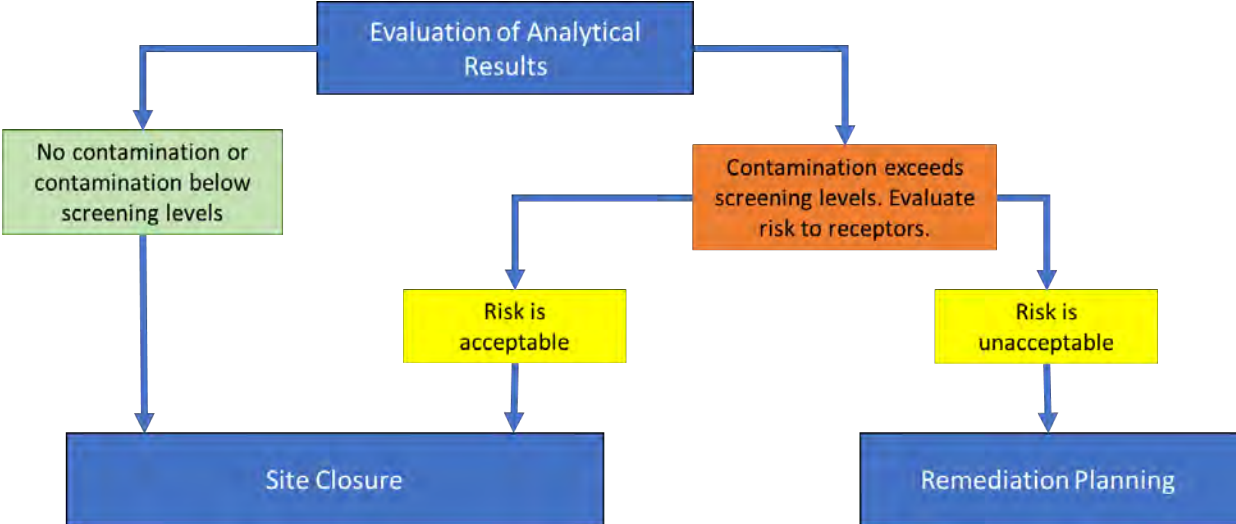


Figure 1-2. Flowchart of Possible Next Steps

2. Field Activities

The Oregon SIWP was implemented under a single mobilization that was performed in May 2022. Field activities were documented daily in field logbooks and on tablets. The scope of work specific to the site was implemented as outlined in the SIWP. Field activities primarily included the following:

- Soil borings were marked based on their planned coordinates from the Oregon SIWP.
- The marked soil borings were cleared for the presence of subsurface utilities by a subcontracted utility locator service and were moved if subsurface utilities were identified, or as required based on field conditions.
- A hand auger was used to advance each cleared soil boring.
- Soil samples were collected at specified sample intervals, for headspace analysis with a photo-ionization detector, and for borehole logging purposes.
- Collection of soil samples for analysis of site-specific COPCs was conducted as identified in the Oregon SIWP. Soil sampling was performed in accordance with Oregon SIWP Appendix A (Sampling and Analysis Plan).
- Grab groundwater samples were collected with disposable bailers and from temporary wells constructed with 3/4-inch-diameter Schedule 40 polyvinyl chloride blank casing and 5 feet of slot screen. Upon collecting the groundwater samples, the temporary well casing was removed so that the soil boring could be abandoned.
- All soil borings were surveyed with a hand-held GPS unit. The final survey coordinates and the boring logs for each soil boring are presented in Appendix A of this Oregon SI Report.
- Upon completion of sampling activities, each soil boring was abandoned with hydrated bentonite pellets.
- Waste soil and water samples were collected for waste characterization and profiling purposes prior to offsite disposal according to applicable state and federal requirements and Section 2.1.

Details of the specific soil sampling activities for this site are summarized in Sections 4.

2.1 Waste Management

Wastes generated from soil sampling activities included general refuse, soil cuttings from hand auguring, and rinsate water from decontamination of equipment. General refuse was disposed of in trash bins used by PacifiCorp. Soil cuttings and rinsate water were segregated by waste type and were contained in labeled, United Nations (UN)-approved 5-gallon buckets staged within a secured area.

Waste samples were collected for waste profiling purposes. Upon waste characterization and acceptance by the landfill operator, Waste Management, waste soil was consolidated in UN-approved 55-gallon drums for transport by the waste transporter, EnviroServe, Inc., and disposal as nonhazardous waste at Waste Management's Hillsboro Landfill in Hillsboro, Oregon. Upon waste acceptance by the oil recycler, Oil Re-Refining, wastewater was consolidated in a UN-approved 55-gallon drum for transport and disposal as nonhazardous wastewater by EnviroServe, Inc. at Oil Re-Refining in Portland, Oregon. Waste manifests and bills of lading are compiled in Appendix B.

2.2 Sample Collection and Management

The soil samples were collected in glass jars or TerraCore kits provided by the analytical laboratory and in accordance with the Sampling and Analysis Plan (Appendix A of the Oregon SIWP). The soil samples were labeled, placed in resealable plastic bags, and stored in an insulated cooler that was chilled to maintain a shipping temperature of about 4 degrees Celsius. The sample cooler contained a temperature blank used for recording the temperature of samples in the cooler upon arrival at the laboratory. For coolers containing volatile organic compound (VOC) samples, a trip blank was used to assess the possibility of cross-contamination when transporting the samples to the laboratory. A chain-of-custody form was completed in the field and accompanied all soil samples during transport to the analytical laboratory, Eurofins Seattle, in Tacoma, Washington (Appendix C). All laboratory analyses were performed in accordance with current U.S. Environmental Protection Agency (EPA) procedures and by a laboratory certified by the Oregon Environmental Laboratory Accreditation Program.

3. Risk Assessment Approach

This section describes the general risk assessment approach used to evaluate human health risk, leaching to groundwater, and ecological risk from COPCs in soil and water at J.C. Boyle Dispersed Recreation Area - 2. Risk managers used the results of this analysis to support risk management decisions for the site.

3.1 Human Health Risk Assessment

A streamlined human health risk assessment (HHRA) was conducted to evaluate human health risk to applicable receptors from exposure to contaminants in soil. The HHRA provides information that can support risk-management decision making, including the need for further action.

A screening-level HHRA was conducted for the J.C. Boyle Dispersed Recreation Area - 2 by comparing COPC concentrations in soil and shallow groundwater to the Oregon Department of Environmental Quality (ODEQ) *Risk-Based Concentrations for Individual Chemicals in Soil* (ODEQ 2018).

The risk evaluation approach is based on Oregon environmental cleanup regulations, which require a risk-based approach for assessing and managing environmental contamination from releases of hazardous substances under the state's hazardous substance remedial action rules (Oregon Administrative Rules 340-122-0100 through 340-122-0115). The risk evaluation was conducted in accordance with *Risk-Based Decision Making for the Remediation of Contaminated Sites* (ODEQ 2017).

The HHRA framework generally consists of the following four basic steps (EPA 1989):

- 1) **Data Evaluation:** The first step consists of reviewing and evaluating available data, identifying COPCs in site media.
- 2) **Exposure Assessment:** The second step involves evaluating potential exposure pathways for COPCs and the potential human populations that could be exposed to them, either now or in the future. Exposure point concentrations (EPCs) are estimated from measured or modeled concentrations, and pathway-specific exposure parameters and assumptions are evaluated.
- 3) **Toxicity Assessment:** The third step considers the toxicity values that characterize potential adverse health effects from exposure to COPCs.
- 4) **Risk Characterization:** The fourth step combines the results of the previous three steps to characterize potential risks to human health associated with exposure to COPCs.

These steps are described in the following sections.

3.1.1 Data Evaluation

Before conducting the risk assessment, the analytical results from sampling (Appendix C) were validated in a data quality evaluation report (Appendix D). The suitability of the analytical results was then evaluated for use in the risk assessment. The following data reduction steps were taken:

- Estimated values (flagged with "J" qualifiers) were treated as detected concentrations.
- For naphthalene analysis, where Methods SW8270C and SW8260B were both used, the greater detected result was retained. If there were two nondetections, the result having the lower detection limit was retained.
- Native and duplicate (field duplicates) sample pairs were reduced as follows:
 - If there were two detections, the greater of the two concentrations was used.

- If there was one detection and one nondetection, the detected value was used.
- If there were two nondetections, the result having the lower detection limit was used.

The data evaluation step includes the selection of human health COPCs that were included in the HHRA. Human health COPCs were identified based on an initial screening evaluation through which maximum detected concentrations (MDCs) for each analyte were compared to conservative screening levels for soil and groundwater. The risk-based screening levels used to select human health COPCs are the most conservative ODEQ soil and groundwater risk-based concentrations (RBCs) (ODEQ 2018) for a residential exposure scenario. If no ODEQ RBCs are available, the EPA (2022) residential soil regional screening level (RSL) or tapwater (drinking water) RSL was used. Background values are used for soil if available and if greater than RSLs.

The COPCs in the HHRA (Appendix E) include analytes that exceed the ODEQ residential RBCs and exceed background values, if available.

3.1.2 Exposure Assessment

Potential future receptors are recreational users and construction workers. Although not considered to be a potential future land use, a hypothetical residential scenario was considered for risk management purposes (i.e., unrestricted land use)

Potential risks to human health for future recreational and construction worker exposure scenarios and the hypothetical future residential scenario were evaluated, and assume that the following pathways are potentially complete:

- Future recreational users could potentially be exposed to surface soil, defined as 0 to 2 feet below ground surface (bgs), and mixed-zone soils (0 foot to 10 feet bgs) if subsurface soil is brought to the surface in the future. Potentially complete routes of exposure to surface or mixed-zone soil include incidental ingestion, dermal contact, and inhalation of suspended soil particulates (dust) and vapors volatilizing from the soil surface to air.
- Future construction workers could potentially be exposed during construction activities (e.g., excavation) to surface soil and mixed-zone soils through incidental ingestion, dermal contact, and inhalation of suspended soil particulates (dust) and vapors volatilizing from the soil surface to air. Future construction workers could potentially be exposed during construction activities to shallow water through direct contact.
- Hypothetical future residents could potentially be exposed to surface soil and mixed-zone soils. Potentially complete routes of exposure to soil include incidental ingestion, dermal contact, and inhalation of suspended soil particulates (dust) and vapors volatilizing from the soil surface to air. Shallow groundwater samples collected at approximately 2 to 3 feet bgs are not considered to be applicable for future use of groundwater for drinking water.

An exposure area describes a location or area where humans might encounter one or more contaminated environmental media on a regular basis. Because of the small size of the site, it was evaluated as one exposure area.

3.1.2.1 Exposure Point Concentrations

EPCs for soil were calculated for each COPC and depth interval (surface soil and mixed zone soil) evaluated. The data from a depth interval were grouped to calculate an upper-bound average concentration for each COPC, which was used in the risk calculations as the EPC. For data sets that have a sufficient number of data points, a 95 percent upper confidence limit (UCL) on the mean was calculated for each COPC in soil using the latest version of EPA's ProUCL software, version 5.2 (EPA 2022b, 2022c).

Treatment of nondetections in the derivation of the EPC were addressed using ProUCL software. ProUCL input and output are provided in Appendix E.

Maximum concentrations are used as the EPCs where the data exhibit high variance, the sample size is fewer than five, there are fewer than four detected values, or the 95 percent UCL is greater than the maximum concentration. In cases where there are fewer than four detected values, the mean value may be selected in accordance with EPA (2016) guidance regarding EPCs.

3.1.2.2 Exposure Parameters

Default exposure parameters used to develop the RBCs are provided in ODEQ guidance (ODEQ 2017). The RBCs are provided in Section 4 tables.

3.1.3 Toxicity Assessment

The toxicological data used to develop the RBCs are provided in ODEQ guidance (ODEQ 2017). The RBCs are provided in Section 4 tables.

3.1.4 Risk Characterization

EPCs of COPCs in soil were compared with the ODEQ RBCs for residential and construction worker exposure scenarios. The conservative residential RBCs were used to evaluate risk to both the future recreational user and the hypothetical future resident.

Maximum detected concentrations of COPCs in shallow groundwater were compared with the ODEQ RBCs for construction and excavation workers.

3.2 Leaching to Groundwater Evaluation Approach

The leaching to groundwater evaluation predicts the attenuation that will occur as constituents leach from vadose zone soil into groundwater. COPCs for the potential leaching to groundwater pathway are the chemicals in soil with MDCs exceeding the ODEQ residential leaching to groundwater RBCs (ODEQ 2018). The RBCs are provided in Section 4 (Table 4-5). The potential for a complete migration to groundwater pathway is also evaluated by considering whether COPCs have migrated from historical surface releases, if contamination is delineated laterally and vertically, and how contaminant depths compare with estimated or measured depths to groundwater.

3.3 Ecological Risk Assessment

A streamlined ecological risk assessment (ERA) was completed for the site to evaluate potential risks to ecological receptors from contaminants in soils under current and potential future land use conditions. The results of the streamlined ERA will be used in conjunction with the human health risk assessment and leaching to groundwater evaluation to provide risk managers with information needed to support risk management decisions for the site.

The streamlined ERA was performed in general accordance with EPA and ODEQ guidance as follows:

- *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments* (EPA 2001)
- *Guidelines for Ecological Risk Assessment* (EPA 1998)

- *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final* (EPA 1997)
- *Conducting Ecological Risk Assessments* (ODEQ 2020)

The streamlined ERA was conducted in a phased approach as follows (Figure 3-1):

- **Step 1 – Screening Evaluation:** The screening evaluation consists of a very conservative (i.e., protective of the most sensitive ecological receptors) screen of sample-specific detected results for the site compared to available background threshold values (BTVs) and the No Effect Ecological Screening Level (No Effect ESLs). No Effect ESLs are based on no observed adverse effect levels for plants and wildlife and chronic effects for aquatic life. Chemicals with observed concentrations that do not exceed the No Effect ESLs are considered to not pose a potential risk to ecological receptors and are eliminated from further evaluation. Chemicals with detected concentrations exceeding the No Effect ESLs are carried forward to Step 2 (Refined Evaluation).
- **Step 2 – Refined Evaluation:** The refined evaluation consists of a comparison of sample-specific results against a Low Effect ESL that is based on a lowest observed adverse effect level (LOAEL) for wildlife or the acute effects for aquatic life. The chemicals with observed concentrations that do not exceed the Low Effect ESLs are considered to not pose a significant risk to ecological receptors. Chemicals with detections exceeding the Low Effect ESLs for soil are carried forward to Step 3 (Site-Specific Evaluation). Chemical with detections exceeding the Low Effect ESLs for groundwater exposures are carried forward to Step 4 (Weight of Evidence Evaluation).
- **Step 3 – Site-Specific Evaluation:** The site-specific evaluation consists of a comparison of sample-specific detected results against site-specific ecological preliminary remedial goals (EcoPRGs) for soil that are developed for avian and mammalian receptors that may potentially be found at the site (see Section 3.1.3.4 for details). Chemicals with observed concentrations exceeding the EcoPRGs are carried forward to Step 4 (Weight of Evidence Evaluation)
- **Step 4 – Weight of Evidence Evaluation:** This evaluation looks at multiple lines of qualitative and quantitative evidence to place the potential risks into context of site-specific conditions. These lines of evidence include the results from Steps 1 through 3, comparisons to regional background concentrations, potential for ecological receptors to use the site, available habitat, and expected future use of the site. The results of the evaluation are used to inform risk managers of chemicals considered to pose a potential risk to ecological receptors so that remedial decisions can be made for the site.

The streamlined ERA was conducted under the following assumptions and constraints. These are typical for ERAs performed for both public and private entities:

- Evaluation of current exposures is derived from existing conditions.
- Soils are the abiotic medium of primary ecological concern. Groundwater is considered a minor medium of potential concern, but it is evaluated as it may be encountered within 4 feet of ground surface.
- Measured chemical concentrations are assumed to be at steady-state levels.
- Chemicals never detected or not analyzed for in soil or groundwater samples are not evaluated.
- Each chemical measured in collected samples is considered to have similar bioavailability as the chemical form used in the toxicity studies that are used to estimate potential for risk.
- Toxicological information used represents information currently available from literature and database searches.

3.3.1 Ecological Conceptual Site Model

The ecological conceptual site model combines information on potential sources of contaminants, ecological exposure pathways, and potential ecological receptors to provide an overall picture of site-related exposures and to focus the evaluation of chemical constituents in this streamlined ERA.

The known site history of the site, physical setting, and biological resources are presented in the Oregon SIWP (Jacobs 2021a) along with the potential future uses of the site and potential exposure pathways.

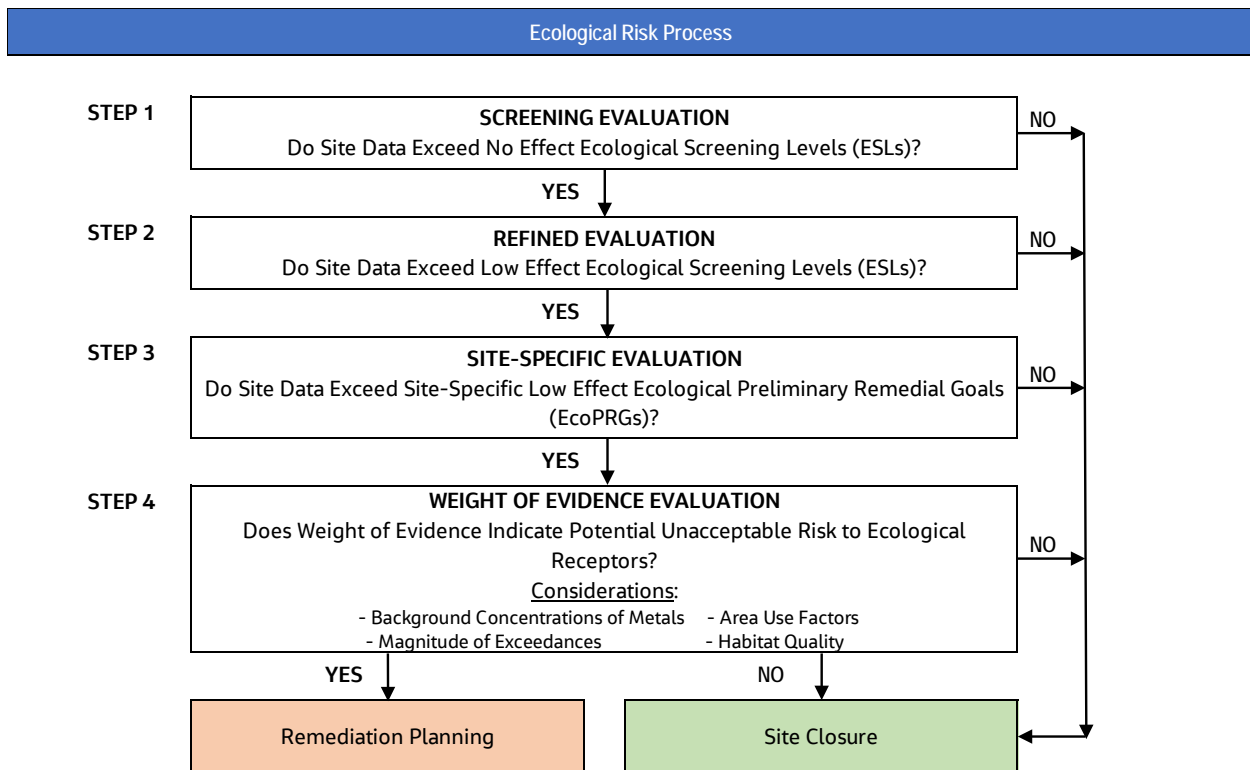


Figure 3-1. Ecological Risk Assessment Process

Potential contaminants include metals, dioxin/furans, SVOCs, and VOCs. The primary impacted media are soils. Release and transport mechanisms may include erosion and surface runoff; infiltration and leaching to groundwater; volatilization, weathering, and/or erosion into soil vapor and ambient air.

Based on review of existing information, the following exposure pathways are considered potentially complete and are evaluated quantitatively under current or potential future land uses.

- Potential exposure to soil from 0 to 1 foot bgs is considered a potentially complete exposure pathway for terrestrial receptors, including terrestrial plants, soil invertebrates, birds, and mammals.
- Potential exposure to soil from 0 foot to 6 feet bgs is considered a potentially complete exposure pathway for burrowing wildlife.
- Potential exposure to onsite groundwater is considered potentially complete as depth to groundwater is less than 4 feet bgs at some locations. Potentially exposed receptors may include deeper rooted plants or birds and mammal if there is potential for the groundwater to reach the surface. Even though the potential for exposure by aquatic organisms is considered very low, this pathway was evaluated.

Receptor groups that have the potential for exposure at the site include terrestrial plants, soil invertebrates, birds and mammals, and aquatic organisms (plants, invertebrates). For purposes of the streamlined ERA, the site is evaluated as a single exposure area. Implicit in the exposure area concept is the assumption that the receptor has equal likelihood of exposure to contamination at any individual location within the identified exposure area.

Site data evaluated for potential risks to ecological receptors are provided in Appendix F. Data evaluated consist of soils (0 foot to 6 feet bgs) and groundwater data collected in 2022 that met data validation requirements including both native and field duplicates. All evaluations in the streamlined ERA are completed on a sample-by-sample basis.

3.3.2 Step 1 – Screening Evaluation

The Screening Evaluation is a very conservative estimate of potential risks. The exposure assumptions are the most conservative because risk estimates are completed on a sample-by-sample basis, it is assumed that ecological receptors spend 100 percent of their time (area use factor [AUF] of 1) at that location, and comparison against the most conservative (i.e., lowest) toxicity criteria as well as regional background concentrations.

The ESLs used in the screening evaluation are based on no effect levels, are intended to be protective of all ecological receptors exposed to soil, and are widely accepted values available from agencies or peer-reviewed literature sources. No Effect ESLs used in the Screening Evaluation (Step 1) were selected from the following sources in hierarchical order.

- 1) ODEQ Table 1a Risk-Based Concentrations for Plants, Invertebrates, and Wildlife Exposed to Soil (ODEQ 2020)
- 2) ODEQ Table 1b Risk-Based Concentrations for Wildlife Ingestion of Surface Water (ODEQ 2020)
- 3) ODEQ Table 2 Risk-Based Concentrations for Aquatic Life (ODEQ 2021)
- 4) EPA ecological soil screening levels (EcoSSLs) (EPA 2008)
- 5) Los Alamos National Laboratory (LANL 2020)
- 6) EPA Region 4 soil screening values (EPA 2018)
- 7) No effect levels for plants exposed to solutions (Efroymsen et al. 1997)

For the sources listed above that include ESLs for plants, soil invertebrates, birds, and mammals, the most conservative (i.e., lowest) ESL from among these terrestrial receptor groups is selected from that source where it appears in the overall hierarchy. The selected No Effect ESLs are summarized in Appendix F, Table F-1 for detected analytes in soil and Appendix F, Table F-2 for detected analytes in groundwater.

Analytes were retained for further evaluation in the Refined Evaluation (Step 2) if at least one detected concentration exceeded the No Effect ESL. In addition, all analytes retained for further evaluation in Step 2 are also included in the Weight of Evidence Evaluation (Step 4). Because of the conservative assumptions used in this analysis, if the detected concentration does not exceed the No Effect ESL, there is a high degree of confidence that the risks to ecological receptors are acceptable.

3.3.3 Step 2 – Refined Evaluation

The Refined Evaluation provides additional information on potential risks for ecological receptors. The refined evaluation remains an overly conservative evaluation because it is still conducted on a sample-by-

sample basis assuming 100 percent site use. The only difference from the Step 1 Screening Evaluation is that a Low Effect ESL is used instead of the No Effect ESL.

The Low Effect ESLs for soil exposures are limited to birds and mammals because risk management decisions are made on these receptor groups. Low Effect ESLs for soil are based on LOAELs for plants and wildlife and are indicative of a level above which potential adverse effects may be observed in some local populations of wildlife (birds and mammals). The soil Low Effect ESLs for wildlife were obtained from LANL (2020) and are generally the most conservative value between birds and mammals across all feeding guilds including herbivores, insectivores, omnivores, and carnivores. The Low Effect ESLs for soil exposures are presented in Appendix F, Table F-1.

Low Effect ESLs for groundwater exposures include acute RBCs for aquatic life (ODEQ Table 2 values) (ODEQ 2021), low effect levels for plants exposed to solutions (Efroymson et al. 1997), and RBCs for direct ingestion of water for birds and mammals (ODEQ Table 1b values) (ODEQ 2020). The Low Effect ESLs for groundwater exposures are presented in Appendix F, Table F-2.

Analytes with detected concentrations in soil exceeding the Low Effect ESL were retained for further evaluation in Step 3. Analytes with detected concentrations in groundwater exceeding the Low Effect ESL were carried forward to Step 4 (Weight of Evidence Evaluation). Because of the conservative assumptions used in this analysis, if the detected concentration does not exceed the Low Effect RSL, there is a high degree of confidence that the risks to ecological receptors are acceptable. Regardless of the risk conclusion in this step, all analytes evaluated in Step 2 are included in the weight of evidence evaluation (Step 4) so that both qualitative and quantitative information can be considered in the recommendations for risk management.

3.3.4 Step 3 – Site-Specific Evaluation

The Site-Specific Evaluation includes multiple refinements to further evaluate potential risks to terrestrial receptors and reduce uncertainties. Analytes retained after Step 2 were evaluated with one or more of these refinements depending on the analytes and results of previous steps:

- Representative species indicative of the ecological setting around the J.C. Boyle Dispersed Recreation Area – 2 are identified and species-specific life history parameters are used to calculate site-specific EcoPRGs.
- Low Effect EcoPRGs are developed for birds and mammals to provide a range of potential risk estimates.
- Risk estimates are completed in a stepwise manner so that contributions from soil versus diet are more readily observed and exposure pathways that may be driving risk can be identified.
- Species-specific home ranges may be used to calculate an AUF for the site that is then applied to the risk estimate to provide a more realistic estimate of potential exposure.
- Site data for metals are compared to regional BTVs to estimate the potential risk resulting from site activity versus natural background levels.
- All analytes evaluated in Step 3 are carried forward to Step 4 (Weight of Evidence Evaluation).

Specific representative species were not identified in Step 1 or Step 2; instead, all functional groups were evaluated (i.e., terrestrial plants, soil invertebrates, birds, and mammals) together using the most conservative assumptions for all receptors. To evaluate ecological exposure for smaller subsets of wildlife, representative species are selected for the primary functional feeding guilds that may have potentially complete exposure pathways. Consistent with *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final* (EPA 1997), representative

species are preferably those that have ecological relevance, are of societal value, and are susceptible to chemical stressors at the site. These factors were used to select representative species that have been observed or are expected to occur at the site and meet one or more of the following criteria:

- Receptor occurs in the general area and habitat is available onsite to support the receptor.
- Receptor has a small home range.
- Receptor is representative of a feeding guild.

Representative species identified for the site include the following:

- Herbivores: Mourning dove (*Zenaida macroura*), deer mouse (*Peromyscus maniculatus*)
- Invertivore: Hermit thrush (*Catharus guttatus*), vagrant shrew (*Sorex vagrans*)
- Carnivores: Red-tailed hawk (*Buteo jamaicensis*), coyote (*Canis latrans*)

3.3.4.1 Derivation of Site-Specific EcoPRGs

EcoPRGs are species specific RBCs of chemicals in soil that correspond to reported effect levels for a given species and are reported in milligrams per kilogram (mg/kg). The EcoPRGs were derived for each of the selected representative species using a food-chain uptake model that accounts for the transfer of chemicals to upper trophic levels (birds and mammals) through the incidental ingestion of soil and ingestion of food (forage or prey) that has accumulated chemicals from the site. The derivation model for EcoPRGs follows the generalized food chain uptake model from Suter et al. (2000) and is shown below. The major inputs to the equation are described following the derivation model and include toxicity reference values (TRVs), food ingestion rates (FIR), dietary composition (Pi), and proportion of diet that is soil (Ps). Supporting tables and calculations are included in Appendix F.

$$EcoPRG = \frac{TRV}{[P_s \cdot FIR] + [\sum_{i=1}^N B_i \cdot P_i \cdot FIR]}$$

Where:

$$B_i = [Soil] \cdot BAF$$

Where:

EcoPRG	=	ecological preliminary remedial goal in soil (mg/kg)
TRV	=	no effect or low effect toxicity reference value (mg/kg body weight per day)
P _s	=	proportion of diet that is soil (unitless)
FIR	=	food ingestion rate normalized to body weight (kg/kg body weight per day)
B _i	=	concentration of chemical in biota type (i) (mg/kg)
P _i	=	proportion of diet that is biota type (i)
BAF	=	bioaccumulation factor (dry weight)
[Soil]	=	concentration of the analyte in soil

Toxicity Reference Values (TRVs) – TRVs for birds and mammals are represented as a dosage (the amount of an analyte per unit body weight per day) that has been reported to result in an adverse effect. The TRVs for birds and mammals were selected using the following hierarchy of sources and are presented in Appendix F, Table F-3 (birds) and Table F-4 (mammals) for chemicals retained for further evaluation in the site-specific evaluation:

1. Recommended no observed adverse effect level (NOAEL) TRVs and derived LOAEL-based TRVs from the EPA EcoSSL documentation (EPA 2005a, 2005b, 2005c; EPA 2007b, 2007c, 2007d, 2007e)
2. Toxicological benchmarks for wildlife (Sample et al. 1996)

3. NOAEL and LOAEL TRVs from LANL (2020)
4. Other peer-reviewed literature (cited as appropriate)

TRVs are classified into two categories: No Effect TRVs and Low Effect TRVs. The No Effect TRVs are based on the chronic NOAEL and reflect the highest exposure that has been demonstrated to exert no adverse effect. The Low Effect TRVs are based on the chronic LOAEL and reflect exposure that has been demonstrated to exert an adverse effect.

For analytes with information in EPA's EcoSSL documentation (source in item 1 above), the NOAEL TRV that was used to derive the final EcoSSL was selected if it had the highest level of confidence over other available values. In addition, LOAEL toxicity results for growth and reproduction studies were used to derive a geometric mean LOAEL TRV.

For analytes without EPA EcoSSLs (source in item 1 above), appropriate toxicity studies from peer-reviewed literature were selected based on several criteria. Specifically, toxicity studies were selected for use if exposure was chronic or during reproduction (a critical life stage), the dosing regime was sufficient to identify both a NOAEL and a LOAEL, and the study considered ecologically relevant effects (for example, growth or reproduction). Literature-derived TRVs are adjusted through use of uncertainty factors (where applicable) to derive a final chronic No Effect TRV and chronic Low Effect TRV.

Receptor Exposure Factors – Species-specific life history factors are used to estimate the exposure to chemicals for each of the representative species selected for the site. These include body weight; food ingestion rate (FIR); proportions of the receptors diet (P_i) composed of plants, invertebrates, or mammals; and fraction of diet composed of incidental soil ingestion (P_s). Exposure factors and allometric equations to estimate FIRs were obtained from the literature.

Bioaccumulation Factors (BAFs) – The measurement or estimation of concentrations of chemicals in wildlife food is necessary to evaluate how much of a receptor's exposure is through food versus direct uptake of contaminated media. Although the preferred data are direct measurements of concentrations in biota samples collected from the site, such data were not available for the Project. Therefore, literature-reported values or uptake models are used to estimate bioaccumulation. BAFs and regression models were obtained from the EcoSSL documentation (EPA 2007a), Sample et al. (1998), LANL (2020), and Baes et al. (1984). A default BAF of 1 was used in the absence of reliable values. BAFs and regression models for analytes retained for further evaluation in the site-specific evaluation are presented in Appendix F, Table F-5.

EcoPRGs – No Effect EcoPRGs and Low Effect PRGs were developed for those analytes that had exceedances of the Low Effect RSL in Step 2 and are presented in Appendix F, Table F-6. The most conservative EcoPRG for birds and the most conservative EcoPRG for mammals were used to estimate potential risks in the site-specific evaluation and are shown in the screening-level summary table (Appendix F, Table F-1).

3.3.4.2 Site-Specific Risk Estimation

The site-specific risk estimates were calculated using the No Effect and Low Effect EcoPRGs as follows:

$$HQ = \frac{[Soil]}{EcoPRG} \times AUF$$

Where:

HQ	=	hazard quotient (unitless)
[Soil]	=	sample-specific concentration of analyte in soil (mg/kg)
EcoPRG	=	ecological preliminary remedial goal in soil (mg/kg)
AUF	=	area use factor

EcoPRG – The most conservative bird and mammalian No Effect EcoPRG or Low Effect EcoPRG. All EcoPRGs are presented in Appendix F, Table F-6 and the most conservative values that are used in the risk estimation are summarized in Appendix F, Table F-1.

Area Use Factors – Many wildlife species are highly mobile, covering relatively large areas in search of food, water, and shelter. As such, the exposure that individual receptors experience depends on the amount of time they spend in the exposure area. The species-specific AUF is calculated by dividing the exposure area (acres) by the foraging range (acres) of the receptor. If the foraging range is smaller than the exposure area, the AUF defaults to 1. The AUFs for each receptor for the site are presented in Appendix F, Table F-7.

The site-specific risk estimates were calculated using the Low Effect EcoPRGs and AUFs for hermit thrush and vagrant shrew as these were the receptors with the most conservative EcoPRGs for the analytes retained for further evaluation in Step 3. The risk estimates were completed both with and without the application of the receptor/site-specific AUFs.

3.3.5 Step 4 – Weight of Evidence Evaluation

Not all the site risk estimates with HQs exceeding 1 are ultimately ecologically meaningful. The weight of evidence component (Step 4 of the streamlined ERA) is an evaluation of the lines of evidence supporting or refuting the risk estimates and an interpretation of the significance of the adverse effects on the identified assessment endpoints. To provide confidence in any decision making regarding risk to ecological resources at a site, potential effects to ecological receptor is assessed using an approach that considers multiple lines of evidence collectively, in accordance with EPA guidance in *Guidelines for Ecological Risk Assessment* (EPA 1998).

The following lines of evidence are considered where applicable for each exposure area and exposure media.

- Site risk estimates for soil and groundwater exposures at the No Effect ESL and Low Effect ESL
- Site risk estimates for soil exposures using the No Effect EcoPRG and Low Effect EcoPRG (with and without application of the AUF)
- Comparison of site concentrations of metals to background concentrations
- Area use factors for wildlife
- Current and potential future land use and habitat quality
- Potential receptors/presence of federal or state threatened and endangered species
- Uncertainties and limitations

Results of Step 4 are used to provide recommendations for risk management or no further evaluation for ecological receptors. The results of Step 4 are summarized in in tabular format for soil and groundwater exposure pathways. Each chemical that was retained after Step 1 is presented in the respective summary table along with a listing of the number of samples exceeding the No Effect ESL, Low Effect RSL, bird EcoPRG, mammal EcoPRG, and background concentrations. The weight of evidence is summarized into a

letter code for all chemicals with the same rationale to reduce redundancy in the text. The codes focus primarily on the quantitative elements however, the qualitative lines of evidence are also considered and are discussed as needed where they impact the final recommendation. Uncertainties and limitations that are standard in the practice of risk assessment are summarized in Appendix F, Table F-8.

4. J.C. Boyle Dispersed Recreation Area – 2

This section summarizes the field activities and analytical laboratory results and provides the risk assessments and recommended next steps for closure of the J.C. Boyle Dispersed Recreation Area – 2 site. A data quality evaluation was performed on the analytical laboratory results (Appendix C), and the conclusions of that evaluation are provided in Appendix D.

4.1 Background

A burn pit, surrounded by stressed vegetation and located on the north bank of the J.C. Boyle Reservoir approximately 0.4 mile east of Spencer Creek, was documented in the *Draft Phase I Environmental Site Assessment of the Parcel B Lands* (AECOM 2020b). A review of the photographs in AECOM (2020b) indicates this is a human-made fire ring that may have been spread out after use (Photograph 4-1). The original fire ring appears to have been 4 or 5 feet in diameter and the disturbed area was approximately 10 feet by 10 feet, containing ash, charred wood, broken glass, and other debris. Soil within the J.C. Boyle Dispersed Recreation Area – 2 site is generally classified as Bly-Royst complex (USDA 2021).



Photograph 4-1. J.C. Boyle Dispersed Recreation Area – 2 looking west at Burn Pit (Jacobs 2021a)

4.2 Field Activities

On May 4, 2022, the three planned soil borings (JBRA-01 to JBRA-03) for the site were marked and cleared for utilities, and the visually impacted areas were delineated with a GPS unit (Figure 4-1).

Soil boring JBRA-02 was moved several feet to the center of the fire pit and soil boring JBRA-03 was moved 10 feet south to the edge of the visually impacted area. The three soil borings were advanced by hand auger to depths of 2.5 or 3.5 feet bgs. Soil samples were collected from discrete intervals at varying depths to the bottom of the boreholes (Table 4-1). Groundwater was observed at a depth of approximately 3.5 feet in soil borings JBRA-02 and JBRA-03. Consequently, a disposable bailer was used to collect a groundwater sample from soil boring JBRA-02.

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
JBRA-01	0-0.5, 1-1.5, 2-3, 3-3.5	3.5	HA	North edge of fire pit.
JBRA-02	0-0.5, 1-1.5, 3-3.5	3.5	HA	Center of fire pit. Depth to water at 3.5 feet bgs.
JBRA-03	0-0.5, 1-1.5, 1.5-2.5	3.5	HA	South edge of fire pit. Depth to water at 3.5 feet bgs.

Notes:

bgs = below ground surface

HA = hand auger

4.3 Analytical Results

The analytical results were compared to the site-specific screening levels (Appendix C) established in the Oregon SIWP. Human health screening levels were exceeded for antimony, cobalt, and lead at soil boring JBRA-02. Screening levels for leaching to groundwater were exceeded for naphthalene and lead at soil boring JBRA-02. Ecological screening levels were exceeded for dioxins, cobalt, and selenium at all three soil borings, and for antimony, boron, cadmium, copper, lead, and zinc at soil boring JBRA-02. Screening levels for groundwater were exceeded for dioxins and arsenic at soil boring JBRA-02 (Table 4-2, Figure 4-1).

Table 4-2. J.C. Boyle Dispersed Recreation Area – 2 Boreholes with Compounds that Exceed Screening Levels

Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs	Groundwater SLs
JBRA-01	<SLs	<SLs	Dioxins, Cobalt, Selenium	Not Applicable
JBRA-02	Antimony, Cobalt, Lead	Naphthalene, Lead	Dioxins, Antimony, Boron, Cadmium, Cobalt, Copper, Lead, Selenium, Zinc	Dioxins, Arsenic
JBRA-03	<SLs	<SLs	Dioxins, Cobalt, Selenium	Not Applicable

Note:

SLs = screening levels

<SLs = does not exceed screening levels

The COPCs carried forward into the risk assessments are based on the risk assessment screening criteria discussed in Sections 3.1 (human health), 3.2 (soil leaching to groundwater), and 3.3 (ecological).

4.4 Site-Specific Human Health Risk Assessment

4.4.1 Data Evaluation

The human health COPCs in soil at the site are antimony, cobalt, and lead (Appendix E). Dioxins and arsenic are the human health COPCs in groundwater (Appendix E).

4.4.2 Exposure Assessment

Default exposure parameters (ODEQ 2017) were used to develop the RBCs in soil and groundwater. Because groundwater was encountered at a depth of 3.5 feet bgs during the site investigation, the shallow groundwater is not considered potable water and potential future exposure to shallow groundwater through drinking water use was not evaluated. Shallow groundwater was evaluated for potential risk to construction and excavation workers through direct contact exposure.

4.4.3 Toxicity Evaluation

Concentrations of dioxins and dioxin-like compounds were evaluated using dioxin toxicity equivalency factors (TEFs) to calculate a 2,3,7,8-Tetrachlorodibenzo-P-dioxin (2,3,7,8-TCDD) toxic equivalent (TEQ) concentration. The RBCs for 2,3,7,8-TCDD were used for the calculated 2,3,7,8-TCDD TEQ concentrations.

4.4.4 Human Health Risk Assessment Results

4.4.4.1 Soil

Concentrations of antimony and cobalt in soil are considered to be naturally occurring (Table 4-3). There are no ODEQ RBCs for these analytes (ODEQ 2018). Therefore, risk from exposure to antimony and cobalt in soil is not considered in this analysis. The EPC of lead in surface soil (970 mg/kg) exceeds the ODEQ RBCs for the residential and construction worker exposure scenarios (400 mg/kg and 800 mg/kg, respectively). Therefore, risk from exposure to lead in surface soil exceeds target risk criteria. The EPC of lead in mixed-zone soil (285.9 mg/kg) is less than the residential and construction worker RBCs.

4.4.4.2 Shallow Groundwater

Concentrations of arsenic (3.7 micrograms per liter [$\mu\text{g/L}$]) and 2,3,7,8-TCDD TEQ ($2.5\text{E-}07$) in shallow groundwater are less than the ODEQ RBCs ($6,300 \mu\text{g/L}$ and $4.5\text{E-}04 \mu\text{g/L}$, respectively) for a construction worker who might encounter groundwater (Table 4-4). Therefore, risk from exposure to arsenic and 2,3,7,8-TCDD TEQ in shallow groundwater does not exceed target risk criteria.

4.4.5 Uncertainty Discussion

In general, the numbers and locations of soil and groundwater samples are considered adequate for risk assessment purposes, and the types of COPCs identified are considered representative of potential releases within the site. The EPC of lead in surface soil is the maximum detected concentration (970 mg/kg), which likely overestimates the site risks. The maximum detected concentration is the only sample that exceeds the ODEQ RBCs, and the mean concentration in surface soil is 147 mg/kg, which is below the RBCs. However, the maximum detected concentration was conservatively used as the EPC in surface soil, rather than the mean, to address the lead hot spot.

4.4.6 Human Health Risk Assessment Conclusions

The EPC for lead in soil (maximum detected concentration) exceeds ODEQ RBCs. Although the maximum detected concentration is the only result greater than the residential and construction worker ODEQ RBCs, lead is considered a contaminant of concern in soil.

4.5 Leaching to Groundwater Evaluation

The soil leaching COPCs at the site are lead and naphthalene (Table 4-5, Appendix E). Groundwater was encountered at 3.5 feet bgs during the site investigation. The J.C. Boyle Reservoir on the Klamath River is located approximately 30 feet south of the site and has a water surface elevation that is approximately 3 to 4 feet lower than this site.

4.5.1 Lead

Lead was detected at concentrations exceeding the soil leaching RBC of 34 mg/kg in two of 10 samples (JBRA-02 at 970 mg/kg at 0 to 0.5 foot bgs and at 64 mg/kg at 3 to 3.5 feet bgs). Lead did not exceed the soil leaching RBC in samples collected at locations JBRA-01 and JBRA-03. Lead was also detected in shallow groundwater at a concentration of 12 J µg/L (where "J" indicates an estimated value). Therefore, the migration to groundwater pathway is considered complete and concentrations of lead in soil pose a potential threat to groundwater.

4.5.2 Naphthalene

Naphthalene was detected at a concentration exceeding the soil leaching RBC of 0.077 mg/kg in only 1 of 10 samples (JBRA-02 at an estimated 0.29 mg/kg from 0 to 0.5 foot bgs). Naphthalene did not exceed the soil leaching RBC in deeper soil samples collected at 1 foot to 1.5 feet bgs and 3 to 3.5 feet bgs at JBRA-02, indicating leaching is not occurring. Naphthalene did not exceed the soil leaching RBC in samples collected at locations JBRA-01 and JBRA-03. In addition, naphthalene was not detected in shallow groundwater. Therefore, the migration to groundwater pathway is considered incomplete.

4.5.3 Leaching to Groundwater Evaluation Conclusions

Concentrations of lead exceed soil leaching RBCs at location JBRA-02 and could potentially migrate to groundwater.

4.6 Ecological Risk Assessment

The streamlined ERA completed for the site was conducted on a sample-by-sample basis for soil and groundwater and the results are summarized in the following subsections.

4.6.1 Soil Exposure Pathways

Potential risks to terrestrial ecological receptors exposed to chemicals in soil were evaluated on a sample-specific basis. Risk estimates are presented in Appendix F, Table F-9. The results are summarized in Table 4-6.

Several metals, dioxins, and SVOCs exceeded their respective No Effect ESLs (Step 1). Metals and 2,3,7,8-TCDD TEQ mammal also exceeded their Low Effect ESLs (Step 2). Lead, vanadium, and zinc exceeded the bird EcoPRG and boron exceeded the mammal EcoPRG. However, all AUF-adjusted HQs were less than 1. There were no analytes in soils retained for risk management based on potential risks to ecological receptors. The weight of evidence rationale for each analyte is summarized as follows:

- Weight of Evidence Code "A" – Chemical is not retained for risk management for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs for birds or mammals. In addition, there were no exceedances of the BTV for metals. This weight of evidence code applies to the following:
 - Metals: arsenic, barium, chromium, cobalt, manganese, and thallium
 - Dioxins: 2,3,7,8-TCDD TEQ Bird
 - Semivolatile Organics: bis (2-ethylhexyl) phthalate
- Weight of Evidence Code "B" – Chemical is not retained for risk management for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs for birds or mammals. This weight of evidence rationale applies to cadmium.
- Weight of Evidence Code "C" – Chemical is not retained for risk management for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect ESL, however none of the results exceeded the site-specific EcoPRGs for birds or mammals (100 percent site use). This weight of evidence rationale applies to the following analytes.
 - Metals: antimony, copper, nickel, and selenium
 - Dioxins: 2,3,7,8-TCDD TEQ Mammal
- Weight of Evidence Code "D" – Chemical is not retained for risk management for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect ESL as well as the Bird or Mammal EcoPRG assuming 100 percent site use, however there were no exceedances of the AUF-adjusted EcoPRGs and there were no exceedances of the BTVs. This weight of evidence rationale applies to boron and vanadium.
- Weight of Evidence Code "E" – Chemical is not retained for risk management for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect ESL as well as the Bird or Mammal EcoPRG assuming 100 percent site use; however, there were no exceedances of the AUF-adjusted EcoPRGs and there were no exceedances of the BTVs. This weight of evidence rationale applies to lead and zinc.

4.6.2 Groundwater Exposure Pathways

Depth to groundwater at the site is less than 4 feet bgs. The only direct exposure pathway to groundwater is root uptake by deeper rooted plants. In the unlikely event that groundwater reaches the surface, then potential exposure pathways would include direct contact by aquatic organisms (aquatic plants and invertebrates), root uptake by shallow-rooted terrestrial plants, and direct ingestion by birds and mammals. Sample-specific risk estimates for Step 1 (No Effect ESLs) and Step 2 (Low Effect ESLs) are presented in Appendix F, Table F-10. The overall results and weight of evidence are presented in Table 4-7 and summarized as follows:

- Weight of Evidence Code "A" – Chemical is not retained for risk management for ecological receptors. Individual sample results exceeded the Chronic Aquatic Life benchmarks. However, none of the samples exceeded the Acute Aquatic Life benchmark, the No Effect ESLs for Plants and Wildlife, or the Low Effect ESLs for Plants and Wildlife. This weight of evidence rationale applies to the following:
 - Metals – cadmium, lead, manganese, vanadium, and zinc
 - Dioxins – 2,3,7,8-TCDD TEQ Bird and 2,3,7,8-TCDD TEQ Mammal
- Weight of Evidence Code "B" – Chemical is not retained for risk management for ecological receptors. Individual results from one sample exceeded the Chronic and Acute Aquatic Life benchmarks. However, neither sample exceeded the No Effect or Low Effect ESLs for Plant or Wildlife. This weight of evidence rationale applies to copper.

- Weight of Evidence Code "C" – Chemical is not retained for risk management for ecological receptors. Individual results from one sample exceeded the Chronic Aquatic Life benchmark, the No Effect ESL for Plants, or both. However, none of the detected samples exceeded the Acute Aquatic Life benchmarks or the Low Effect ESLs Plants or Wildlife. This weight of evidence rationale applies to arsenic and iron.

4.7 Recommended Actions

Human health risk in shallow groundwater does not exceed target risk criteria, but concentrations of lead in soil exceed the ODEQ target RBCs. Concentrations of lead exceed the leaching to groundwater RBC for soil at boring JBRA-02. The ERA indicated that potential risks to ecological receptors from soil or groundwater exposure pathways are limited. No chemicals were retained for risk management purposes for ecological receptors.

It is recommended that the visually impacted soil at the site be excavated to a depth of 4 feet bgs or to groundwater, whichever is encountered first (Figure 4-2). Soil samples will be collected from the floor and sidewalls of the excavation to confirm that lead concentrations do not exceed background concentrations (34 mg/kg).

Table 4-3. Human Health Risk Evaluation for COPCs in Soil at J.C. Boyle Dispersed Recreation Area – 2

Analytic Method	Contaminant of Interest ^a	CAS	Maximum Detected Concentration (mg/kg)	EPC (mg/kg)	EPC Basis	Background Related (Yes/No)	RBC, Residential ^a (mg/kg)	EPC Exceeds Residential RBC?	RBC, Construction Worker ^a (mg/kg)	EPC Exceeds Construction Worker RBC?
Surface Soils (0 to 2 feet below ground surface)										
SW6020	Antimony	7440-36-0	44	44	MDC	Yes	--	No	--	No
SW6020	Cobalt	7440-48-4	47	29.62	95% UCL	Yes	--	No	--	No
SW6020	Lead	7439-92-1	970	970	MDC	No	400	Yes	800	Yes
Mixed-Zone Soils (0 to 10 feet below ground surface)										
SW6020	Antimony	7440-36-0	44	12.77	95% UCL	Yes	--	No	--	No
SW6020	Cobalt	7440-48-4	47	26.17	95% UCL	Yes	--	No	--	No
SW6020	Lead	7439-92-1	970	285.9	95% UCL	No	400	No	800	No

Notes:

Bold indicates analyte exceeds RBC.

^a Risk-based concentrations from ODEQ. May 2018. <https://www.oregon.gov/deq/Hazards-and-Cleanup/env-cleanup/Pages/Risk-Based-Decision-Making.aspx>. RBCs for ingestion, direct contact, and inhalation.

-- = not applicable

bgs = below ground surface

CAS = Chemical Abstract Service

COPC = constituent of potential concern

EPC = exposure point concentration

MDC = maximum detected concentration

mg/kg = milligram(s) per kilogram

ODEQ = Oregon Department of Environmental Quality

RBC = risk-based concentration

UCL = upper confidence limit

Table 4-4. Shallow Groundwater Evaluation for COPCs in Soil at J.C. Boyle Dispersed Recreation Area – 2

Table 4-4. Shallow Groundwater Evaluation for COPCs in Soil at J.C. Boyle Dispersed Recreation Area – 2								
Analytic Method	Contaminant of Interest ^a	CAS	Maximum Detected Concentration (µg/L)	EPC (µg/L)	EPC Basis	Background Related (Yes/No)	RBC, Shallow Groundwater ^a (µg/L)	EPC Exceeds Groundwater RBC?
CALC	2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal (ND=0)	TEQ-M0	2.5E-07	2.5E-07	MDC	No	4.5E-04	No
SW6020	Arsenic	7440-38-2	3.7	3.7	MDC	Yes	6300	No
Notes:								
^a Risk-based concentrations from ODEQ. May 2018. https://www.oregon.gov/deq/Hazards-and-Cleanup/env-cleanup/Pages/Risk-Based-Decision-Making.aspx . RBCs for groundwater in excavation.								
µg/L = micrograms per liter								
2,3,7,8-TCDD TEQ, 2,3,7,8-Tetrachlorodibenzo-P-dioxin toxic equivalent								
CAS = Chemical Abstract Service								
COPC = constituent of potential concern								
EPC = exposure point concentration								
MDC = maximum detected concentration								
ND=0 - nondetected results were set to zero in the 2,3,7,8-TCDD TEQ calculation								
ODEQ = Oregon Department of Environmental Quality								
RBC = risk-based concentration								

Table 4-5. Soil Leaching Evaluation for COPCs in Soil at the J.C. Boyle Dispersed Recreation Area – 2

Analytic Method	Contaminant of Interest ^a	CAS	Maximum Detected Concentration (mg/kg)	EPC (mg/kg)	EPC Basis	Background Related (Yes/No)	RBC, Soil Leaching ^a (mg/kg)	EPC Exceeds Soil Leaching RBC?
SW6020	Lead	7439-92-1	970	285.9	95% UCL	No	30	Yes
SW8270C	Naphthalene	91-20-3	0.29	0.29	MDC	No	0.077	Yes
Notes:								
Bold indicates analyte exceeds RBC.								
^a Risk-based concentrations from ODEQ. May 2018. https://www.oregon.gov/deq/Hazards-and-Cleanup/env-cleanup/Pages/Risk-Based-Decision-Making.aspx . RBCs for leaching to groundwater, residential scenario.								
CAS = Chemical Abstract Service								
COPC = constituent of potential concern								
EPC = exposure point concentration								
MDC = maximum detected concentration								
mg/kg = milligram(s) per kilogram								
ODEQ = Oregon Department of Environmental Quality								
RBC = risk-based concentration								
UCL = upper confidence limit								

Table 4-6. Weight of Evidence for Ecological Receptors at J.C. Boyle Dispersed Recreation Area – 2: Soil Exposure Pathways

REC Name	Class	Detected Analytes	Background Comparison	Step 1 Screening Evaluation	Step 2 Refined Evaluation	Step 3 Site-Specific Evaluation				Step 4 Weight of Evidence	
			Background HQ>1	No Effect HQ>1	Low Effect HQ>1	Bird EcoPRG HQ>1	Mammal EcoPRG HQ>1	Bird AUF Adjusted HQ>1	Mammal AUF Adjusted HQ>1	Retain for Risk Management?	Rationale
			J.C. Boyle Dispersed Recreation Area 2	Metal	Antimony	3	6	1	--	--	--
J.C. Boyle Dispersed Recreation Area 2	Metal	Arsenic	--	1	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	Metal	Barium	--	11	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	Metal	Boron	--	3	1	--	1	--	--	No	D
J.C. Boyle Dispersed Recreation Area 2	Metal	Cadmium	1	1	--	--	--	--	--	No	B
J.C. Boyle Dispersed Recreation Area 2	Metal	Chromium	--	11	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	Metal	Cobalt	--	9	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	Metal	Copper	1	12	1	--	--	--	--	No	C
J.C. Boyle Dispersed Recreation Area 2	Metal	Lead	2	5	2	1	--	--	--	No	E
J.C. Boyle Dispersed Recreation Area 2	Metal	Manganese	--	12	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	Metal	Nickel	--	12	11	--	--	--	--	No	C
J.C. Boyle Dispersed Recreation Area 2	Metal	Selenium	12	12	12	--	--	--	--	No	C
J.C. Boyle Dispersed Recreation Area 2	Metal	Thallium	--	10	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	Metal	Vanadium	--	12	12	9	--	--	--	No	D
J.C. Boyle Dispersed Recreation Area 2	Metal	Zinc	1	8	4	1	--	--	--	No	E
J.C. Boyle Dispersed Recreation Area 2	DXN	2,3,7,8-TCDD TEQ Bird	--	1	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	DXN	2,3,7,8-TCDD TEQ Mammal	--	6	4	--	--	--	--	No	C
J.C. Boyle Dispersed Recreation Area 2	SVOC	Bis (2-ethylhexyl) phthalate	--	2	--	--	--	--	--	No	A

Notes:

Number presented under each step identifies the number of samples collected from 0 to 6 feet bgs that exceeded the indicated screening level or EcoPRG.

-- = No samples had exceedances; analyte not retained for further evaluation

2,3,7,8-TCDD TEQ = 2,3,7,8-Tetrachlorodibenzo-P-dioxin toxic equivalent

AUF = area use factor

bgs = below ground surface

BTV = background threshold value

DXN = dioxin, furan

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient

REC = recognized environmental condition

SVOC = semivolatile organic compound

Weight of Evidence Rationale Codes:

A = Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs for birds or mammals. In addition, there were no exceedances of the BTV (metals).

B = Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs for birds or mammals.

C = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect ESL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals (100 percent site use).

D = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect ESL as well as the Bird or Mammal EcoPRG assuming 100 percent site use; however, there were no exceedances of the AUF-adjusted EcoPRGs and there were no exceedances of the BTVs.

E = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect ESL as well as the Bird or Mammal EcoPRG assuming 100 percent site use; however, there were no exceedances of the AUF-adjusted EcoPRGs and there were no exceedances of the BTVs.

Table 4-7. Weight of Evidence for Ecological Receptors at J.C. Boyle Dispersed Recreation Area – 2: Groundwater Exposure Pathways

REC Name	Class	Detected Analytes	Step 1			Step 2			Step 4	
			Screening Evaluation			Refined Evaluation			Weight of Evidence	
			Chronic Aquatic HQ>1	No Effect Plant HQ>1	No Effect Wildlife HQ>1	Acute Aquatic HQ>1	Low Effect Plant HQ>1	Low Effect Wildlife HQ>1	Retain for Risk Management?	Rationale
J.C. Boyle Dispersed Recreation Area 2	Metal	Arsenic	--	2	--	--	--	--	No	C
J.C. Boyle Dispersed Recreation Area 2	Metal	Cadmium	2	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	Metal	Copper	2	--	--	2	--	--	No	B
J.C. Boyle Dispersed Recreation Area 2	Metal	Iron	2	2	--	--	--	--	No	C
J.C. Boyle Dispersed Recreation Area 2	Metal	Lead	2	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	Metal	Manganese	1	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	Metal	Vanadium	2	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	Metal	Zinc	2	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	DXN	2,3,7,8-TCDD TEQ Bird	1	--	--	--	--	--	No	A
J.C. Boyle Dispersed Recreation Area 2	DXN	2,3,7,8-TCDD TEQ Mammal	1	--	--	--	--	--	No	A

Notes:

Number presented under each step identifies the number of samples collected from 0 to 6 feet bgs that exceeded the indicated screening level or EcoPRG.

-- = No samples had exceedances; analyte not retained for further evaluation.

2,3,7,8-TCDD TEQ = 2,3,7,8-Tetrachlorodibenzo-P-dioxin toxic equivalent

bgs = below ground surface

DXN = dioxin, furan

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient

REC = recognized environmental condition

REC = recognized environmental condition

Weight of Evidence Rationale Codes:

A = Chemical is not retained for risk management analysis for ecological receptors. Individual sample results exceeded the Chronic Aquatic Life benchmarks. However, none of the samples exceeded the Acute Aquatic Life benchmark, the No Effect ESLs for Plants and Wildlife, or the Low Effect ESLs for Plants and Wildlife.

B = Chemical is not retained for risk management analysis for ecological receptors. Individual sample results from one well exceeded the Chronic and Acute Aquatic Life benchmarks. However, neither sample exceeded the No Effect or Low Effect ESLs for Plant or Wildlife.

C = Chemical is not retained for risk management analysis for ecological receptors. Individual sample results from one well exceeded the Chronic Aquatic Life benchmark and/or the No Effect ESL for Plants. However, none of the detected samples exceeded the Acute Aquatic Life benchmarks or the Low Effect ESLs Plants or Wildlife.



LEGEND

▭ Limits of SIWP

▭ Approximate Limits of Visually Impacted Area

● Soil Boring with SL Exceedance

— Klamath River

Borehole: JBRA-01
Analytes: METALS, DIOXINS

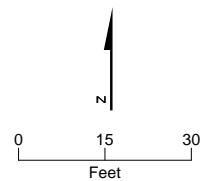



FIGURE 4-1
J.C. Boyle Dispersed Recreation Area - 2
Lower Klamath Hydroelectric Project



LEGEND

 Approximate Limits of Visually Impacted Area

 Excavation Area

 Klamath River

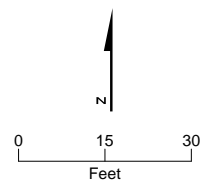


FIGURE 4-2
J.C. Boyle Dispersed Recreation Area - 2 Excavation Area
Lower Klamath Hydroelectric Project

5. Summary of Recommendations

This section summarizes the recommendations for further action at the J.C. Boyle Dispersed Recreation Area – 2, which was assessed according to the Oregon SIWP in May 2022.

Based on the analytical results and the results of the risk assessments, it is recommended that site soil and burnt materials be removed. PacifiCorp will prepare a removal action plan for excavation and offsite disposal of visually impacted soil and burnt material within the immediate vicinity of the burn pit and to a depth of 4 feet bgs or groundwater, whichever is encountered first (Figure 4-2). The removal action plan will, at a minimum, address proper excavation techniques, confirmation sampling for excavation floors and sidewalls, waste management and disposal of soil, and backfill and compaction requirements. Soil samples will be collected to confirm that lead concentrations do not exceed the background concentration for lead (34 mg/kg).

A soil removal action and closeout report will be prepared upon completion of the removal actions. The report will contain a summary of the remedial activities performed, waste manifests that document proper transport and disposal of excavated soil, and tables and figures of the analytical results from confirmation sampling for the contaminants of concern at each site.

6. References

- AECOM Technical Services, Inc. (AECOM). 2018. *J.C. Boyle Dam, Copco No. 1 Dam, Copco No. 2 Dam, Iron Gate Dam, and Iron Gate Fish Hatchery Phase I Environmental Site Assessments*. Prepared for Klamath River Renewal Corporation. November.
- AECOM Technical Services, Inc. (AECOM). 2020a. *Draft Phase I Environmental Site Assessment of the Parcel B Lands*. Prepared for Klamath River Renewal Corporation. March.
- AECOM Technical Services, Inc. (AECOM). 2020b. *Draft Wood-Stave Penstock and Soil Investigation*. Prepared for Klamath River Renewal Corporation. January.
- Baes, C. F., III, R. C. Sharp, A. L. Sjoren, and R. W. Shor. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture*. Oak Ridge National Laboratory, Oak Ridge, TN. ORNL-5786.
- Efroymsen, R. A., M. E. Will, G. W. Suter II, and A. C. Wooten. 1997. *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Terrestrial Plants: 1997 Revision*, ES/ER/TM-85/R3. Oak Ridge National Laboratory, Oak Ridge, TN.
- Jacobs Engineering Group Inc. (Jacobs). 2021a. *Oregon Site Investigation Work Plan*. Prepared for PacifiCorp. November.
- Jacobs Engineering Group Inc. (Jacobs). 2021b. *California Site Investigation Work Plan*. Prepared for PacifiCorp. November.
- Jacobs Engineering Group Inc. (Jacobs). 2023. *California Site Investigation Report*. Prepared for PacifiCorp. February.
- Los Alamos National Laboratory (LANL). 2020. EcoRisk Database Release 4.2. Available online at <https://www.intellusnm.com/documents/documents.cfm>.
- Lowy, Lloyd, Klamath River Renewal Corporation. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.
- Matthews, Chris, Oregon Department of Justice. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.
- Oregon Department of Environmental Quality (ODEQ). 2017. *Risk-Based Decision Making for the Remediation of Contaminated Sites*.
- Oregon Department of Environmental Quality (ODEQ). 2018. *Risk-Based Concentrations for Individual Chemicals in Soil*.
- Oregon Department of Environmental Quality (ODEQ). 2020. *Conducting Ecological Risk Assessments*. September 14.
- Oregon Department of Environmental Quality (ODEQ). 2021. Applicable Water Screening Level Values - Table 2 Excel Version 1. Updated April 23, 2021. <https://www.oregon.gov/deq/hazards-and-cleanup/env-cleanup/pages/era.aspx>.

Sample, B. E., D. M. Opresko, and G. W. Suter II. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*. Oak Ridge National Laboratory, Oak Ridge, Tennessee. ES/ER/TM-86/R3.

Sample, B., J. J. Beauchamp, R. A. Efroymsen, G. W. Suter, and T. L. Ashwood. 1998. *Development and Validation of Bioaccumulation Models for Earthworms*. February.

Suter II, G. W., R. A. Efroymsen, B. E. Sample, and D. S. Jones. 2000. *Ecological Risk Assessment for Contaminated Sites*. Boca Raton, FL: CRC Press LLC, Lewis Publishers.

U.S. Department of Agriculture (USDA). 2021. *Natural Resources Conservation Services Web Soil Survey*. Accessed August 2021. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.

U.S. Environmental Protection Agency (EPA). 1989. *Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual (Part A)*. EPA Office of Emergency and Remedial Response. Interim Final. EPA/540/1-89/002.

U.S. Environmental Protection Agency (EPA). 1997. *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments*. Interim Final.

U.S. Environmental Protection Agency (EPA). 1998. *Final Guidelines for Ecological Risk Assessment*. Risk Assessment Forum, EPA, Washington D.C. EPA/630/R-95/002F. April.

U.S. Environmental Protection Agency (EPA). 2001. *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments*. Office of Solid Waste and Emergency Response – EcoUpdate. EPA 540/ F-01/014. June.

U.S. Environmental Protection Agency (EPA). 2005a. *Ecological Soil Screening Levels for Antimony*. Interim Final. OSWER Directive 9285.7. Office of Solid Waste and Emergency Response. November.

U.S. Environmental Protection Agency (EPA). 2005b. *Ecological Soil Screening Levels for Arsenic*. Interim Final. OSWER Directive 9285.7-62, Revised. Office of Solid Waste and Emergency Response. March.

U.S. Environmental Protection Agency (EPA). 2005c. *Ecological Soil Screening Levels for Cadmium*. Interim Final. OSWER Directive 9285.7-65, Revised. Office of Solid Waste and Emergency Response. March.

U.S. Environmental Protection Agency (EPA). 2007a. *Guidance for Developing Ecological Soil Screening Levels (Eco-SSLs)*. OSWER Directive 9285.7-55, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Issued November 2003, Revised April.

U.S. Environmental Protection Agency (EPA). 2007b. *Ecological Soil Screening Levels for Copper*. Interim Final. OSWER Directive 9285.7-68, Revised. Office of Solid Waste and Emergency Response. February.

U.S. Environmental Protection Agency (EPA). 2007c. *Ecological Soil Screening Levels for Manganese*. Interim Final. OSWER Directive 9285.7-71, Revised. Office of Solid Waste and Emergency Response. April.

U.S. Environmental Protection Agency (EPA). 2007d. *Ecological Soil Screening Levels for Selenium*. Interim Final. OSWER Directive 9285.7-72, Revised. Office of Solid Waste and Emergency Response. April.

U.S. Environmental Protection Agency (EPA). 2007e. *Ecological Soil Screening Levels for Zinc*. Interim Final. OSWER Directive 9285.7-73, Revised. Office of Solid Waste and Emergency Response. June.

U.S. Environmental Protection Agency (EPA). 2008. *Ecological Soil Screening Levels (EcoSSLs)*. OSWER Directive 9285.7-55 as updated from 2003-2008. <http://www.epa.gov/ecotox/ecossl/SOPs.htm>.

U.S. Environmental Protection Agency (EPA). 2016. *ProUCL Version 5.1.002 Technical Guide. Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations*. May.

U.S. Environmental Protection Agency (EPA). 2018. *Supplemental Guidance to ERAGS: Region 4, Ecological Risk Assessment*. March 2018 Update. Scientific Support Section Superfund Division.

U.S. Environmental Protection Agency (EPA). 2022a. *Regional Screening Levels (RSLs) – Generic Tables*. May. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>.

U.S. Environmental Protection Agency (EPA). 2022b. *Regional Screening Levels (RSLs) – User's Guide*. November. May. <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide>.

U.S. Environmental Protection Agency (EPA). 2022c. *RSL Calculator*. Accessed July 2022. https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search.

Appendix A Boring Logs

Klamath Hydro - Boring Locations (05-19-2022)

Project Name	Label	X (Decimal Degrees)	Y (Decimal Degrees)	X_(NAD_1983_StatePlane_California_I_FIPS_0401_Feet)	Y_(NAD_1983_StatePlane_California_I_FIPS_0401_Feet)	state	county	apn	apn_acres	township	range	section
J.C. Boyle Dispersed Recreation Area - 2	JBRA-01	-122.02001983600	42.15087644070	6556236.89397000000	2666937.68431000000	OR	Klamath	3907-00000-01800	59.09860000000	39S	7E	29
J.C. Boyle Dispersed Recreation Area - 2	JBRA-02	-122.02002848300	42.15084133490	6556234.54576000000	2666924.88945000000	OR	Klamath	3907-00000-01800	59.09860000000	39S	7E	29
J.C. Boyle Dispersed Recreation Area - 2	JBRA-03	-122.02003921300	42.15081469720	6556231.63325000000	2666915.18117000000	OR	Klamath	3907-00000-01800	59.09860000000	39S	7E	29



PROJECT NUMBER: D3514100	BORING NUMBER: JBRA-02	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : - J.C. Boyle Dispersed Recreation Area - 2

COORDINATES : N 42.150854 ft, E -122.020031 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : 3.5 ft bgs Start : 5/4/2022 END : 5/4/2022 LOGGER : D.Lubell,J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		SM (SM) Loose Fine Grained Subangular, Few Silt	PID = 0.1 (ppm)
	0.5	-		CL (CL) Black (2.5Y 2.5/1) Moist, Soft, Trace Silt	PID = 0.1 (ppm)
	1.3	-			PID = 0.2 (ppm)
	0.5	-		CL (CL) Dark Olive Brown (2.5Y 3/3), Dry to Moist	PID = 1.1 (ppm)
	0.5	-		CL (CL) Dark Olive Brown (2.5Y 3/3) Wet	PID = 1.2 (ppm)
Boring terminated at 4 ft bgs.					
5					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 8/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: JBRA-03	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : - J.C. Boyle Dispersed Recreation Area - 2

COORDINATES : N 42.150841 ft, E -122.020023 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : 3.5 ft bgs Start : 5/4/2022 END : 5/4/2022 LOGGER : D.Lubell,J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		ML (ML) Very Dark Brown (10YR 2/2), Dry to Moist, Trace Clay	PID = 0.9 (ppm)
	0.5	-			PID = 5.8 (ppm)
	0.5	-			PID = 2.9 (ppm)
	0.5	-			
				CL (CL) Very Dark Brown (10YR 2/2), Moist to Wet	PID = 1.6 (ppm)
					PID = 2.1 (ppm)
Boring terminated at 3.5 ft bgs.					
5					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 8/22/22

Appendix B
Waste Manifests

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number NOT REQUIRED

2. Page 1 of 1
3. Emergency Response Phone 800 488-0910

4. Waste Tracking Number VC100283

5. Generator's Name and Mailing Address: PACIFICORP, 825 NE Multnomah Blvd, Ste 1800, Portland, OR 97232, ATTN: Demian Ebert
Generator's Site Address (if different than mailing address): IRONGATE DAM, 8678 LAKEVIEW ROAD, HORN BROOK, CA 96044
Generator's Phone: 503 813-6625

6. Transporter 1 Company Name: ENVIROSERVE, INC. U.S. EPA ID Number: OH0000333336

7. Transporter 2 Company Name U.S. EPA ID Number

8. Designated Facility Name and Site Address: WASTE MANagements HILLSBORO LANDFILL, 3205 SE MINTER BRIDGE ROAD, HILLSBORO, OR 97123
Facility's Phone: 866 909-4458 U.S. EPA ID Number: NOT REQUIRED

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	No.	Type		
1. NON-HAZARDOUS SOIL AND DEBRIS	991	DM	250	P
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information: WASTE MANAGEMENT PROFILE NO.: 138103OR ENVIROSERVE PROJECT NO.: VC100283

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Officer's Printed/Typed Name: Mark Bos/Jacobs on behalf Pacific Corp Signature: [Signature] Month: 07 Day: 20 Year: 22

15. International Shipments Import to U.S. Export from U.S. Port of entry/exit: Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JEFF MIUTENBERGER Signature: [Signature] Month: 07 Day: 20 Year: 22
Transporter 2 Printed/Typed Name Signature: [Signature] Month: Day: Year:

17. Discrepancy
17a. Discrepancy Indication Space Quantity Type Residue Partial Rejection Full Rejection

17b. Alternate Facility (or Generator) Manifest Reference Number: U.S. EPA ID Number:

Facility's Phone:
17c. Signature of Alternate Facility (or Generator) Month: Day: Year:

18. Designated Facility Owner or Operator. Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Michele Lawrence Signature: [Signature] Month: 08 Day: 20 Year: 22



Hillsboro Landfill, Inc
 3205 SE Minter Bridge
 Hillsboro, OR, 97123
 Ph: (503)-640-9427

Original
 Ticket# 1652302

Customer Name ENVIROSERVE INC SUNPRO SERVIC Carrier ENVIRO SERVE
 Ticket Date 08/02/2022 Vehicle# 1998 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver VINCENT
 Hauling Ticket# Check#
 Route Billing # 0004730
 State Waste Code Gen EPA ID
 Manifest VC100283 Grid
 Destination
 PO VC100283
 Profile 138103OR (Non-Hazardous Soil/Debris)
 Generator 168-PACIFICORP HORN BROOK 19305 PACIFICORP 19305 DAGGET RD HORN BROOK CA 96044

	Time	Scale	Operator	Inbound	Gross	
In	08/02/2022 10:59:13	Inbound 1	mlawren4		16880 lb	
Out	08/02/2022 11:24:13	Outbound	AMARTI22		15500 lb	
					Net	1380 lb
					Tons	0.69

Comments

Consumer Comments? We want to know. Please call.

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Each-	100	3.00	Each				Siskiyou
2 EVF-P-Standard Env	100		%				
3 FUEL-Fuel Surcharg	100		%				

Total Tax
 Total Ticket

Driver's Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NOT REQUIRED
 2. Page 1 of: 1
 3. Emergency Response Phone: 800 488-0910
 4. Waste Tracking Number: VC100283 ← 01

5. Generator's Name and Mailing Address: PACIFICORP
 825 NE Multnomah Blvd, Ste 1800
 Portland, OR 97232
 ATTN: Demian Ebert

Generator's Site Address (if different than mailing address): COPCO 2 POWERHOUSE
 19305 DAGGETT ROAD
 HORN BROOK, CA 96044

Generator's Phone: 503 813-6625

6. Transporter 1 Company Name: ENVIROSERVE, INC.
 U.S. EPA ID Number: OH0000333336

7. Transporter 2 Company Name: _____
 U.S. EPA ID Number: _____

8. Designated Facility Name and Site Address: WASTE MANagements HILLSBORO LANDFILL
 3205 SE MINTER BRIDGE ROAD
 HILLSBORO, OR 97123

Facility's Phone: 866 909-4458

U.S. EPA ID Number: NOT REQUIRED

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	No.	Type		
1. NON-HAZARDOUS SOIL AND DEBRIS	002	DM	1000	P
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information: WASTE MANAGEMENT PROFILE NO.: 138103OR
 ENVIROSERVE PROJECT NO.: VC100283

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offoror's Printed/Typed Name: Mark Bos / Jacobs, on behalf of Pacificorp
 Signature: [Signature]
 Month: 07, Day: 20, Year: 22

15. International Shipments: Import to U.S. Export from U.S.
 Part of entry/exit: _____
 Date leaving U.S.: _____

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JEFF MILTENBERGER
 Signature: [Signature]
 Month: 07, Day: 20, Year: 22

Transporter 2 Printed/Typed Name: _____
 Signature: _____
 Month: _____, Day: _____, Year: _____

17. Discrepancy

17a. Discrepancy Indication Space: Quantity Type Residue Partial Rejection Full Rejection

Manifest Reference Number: _____

17b. Alternate Facility (or Generator): _____
 U.S. EPA ID Number: _____

Facility's Phone: _____

17c. Signature of Alternate Facility (or Generator): _____
 Month: _____, Day: _____, Year: _____

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Michelle Lawrence
 Signature: [Signature]
 Month: 07, Day: 20, Year: 22

GENERATOR
INTL
TRANSPORTER
DESIGNATED FACILITY



Hillsboro Landfill, Inc
 3205 SE Minter Bridge
 Hillsboro, OR, 97123
 Ph: (503)-640-9427

Original
 Ticket# 1652302

Customer Name ENVIROSERVE INC SUNPRO SERVIC Carrier ENVIRO SERVE
 Ticket Date 08/02/2022 Vehicle# 1998 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver VINCENT
 Hauling Ticket# Check#
 Route Billing # 0004730
 State Waste Code Gen EPA ID
 Manifest VC100283
 Destination Grid
 PO VC100283
 Profile 138103OR (Non-Hazardous Soil/Debris)
 Generator 168-PACIFICORP HORNBROOK 19305 PACIFICORP 19305 DAGGET RD HORNBROOK CA 96044

	Time	Scale	Operator	Inbound	Gross	
In	08/02/2022 10:59:13	Inbound 1	mLawren4		16880 lb	
Out	08/02/2022 11:24:13	Outbound	AMARTI22		15500 lb	
					Net	1380 lb
					Tons	0.69

Comments

Consumer Comments? We want to know. Please call.

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Each-	100	3.00	Each				Siskiyou
2 EVF-P-Standard Env	100		%				
3 FUEL-Fuel Surcharg	100		%				

Total Tax
 Total Ticket

Driver's Signature

BILL OF LADING MATERIAL MANIFEST		1. Generator ID Number NOT REQUIRED	2. Page 1 of 1	3. Emergency Response Phone 800 488-0910	Document Number VC100283-02
4. Generator's Name and Mailing Address PACIFICORP 825 NE Multnomah Blvd, Ste. 1800 Portland, OR 97232 ATTN: DEMIAN EBERT Klamath Program Manager		Generator's Site Address (if different than mailing address) Copco 2 Powerhouse 19305 Daggett Road Hornbrook, CA 96044			
Generator's Phone 503 813-6625		6. US EPA ID Number OH0 000 333 336		A. Transporter's Phone 800 488-0910	
5. Transporter 1 Company Name EnviroServe, Inc.		7. Transporter 2 Company Name		8. US EPA ID Number	
9. Designated Facility Name and Site Address OIL RE-REFINING 4150 SUTTLE ROAD PORTLAND, OR 97217		10. US EPA ID Number ORD980975692		C. Facility's Phone 503 286-8352	
11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			12. Containers	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZARDOUS IDW WATER			No. 001	Type DM	35 (35)
b.					
c.					
d.					
e.					
15. Special Handling Instructions and Additional Information ORRCO PROFILE NO.: ENVIROSERVE PROJECT NO.: VC100283					
16. GENERATOR CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.					
Printed/Typed Name Mark Bob/Jarvis on behalf of Pacific Corp			Signature 		Month Day Year 07 20 22
17. Transporter 1 Acknowledgement of Receipt of Materials			Printed/Typed Name JEFF MILTENBERGER		Signature 
18. Transporter 2 Acknowledgement of Receipt of Materials			Printed/Typed Name		Signature
19. Discrepancy			Manifest Reference Number:		
19a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection			US EPA ID Number		
19b. Alternate Facility (or Generator)			Facility's Phone:		
19c. Signature of Alternate Facility (or Generator)			Signature		Month Day Year
20. Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in item 19a					
Printed/Typed Name H. Calica			Signature 		Month Day Year 08 02 22

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

ORIGINAL - RETURN TO GENERATOR



RECEIVING RECORD

Head Office
 4150 N. Suttle Rd.
 Portland, OR 97217
 1-800-367-8894

R 01-22-0802-003

Received From:
 EnviroServe
 7503 NE 101st Street
 Vancouver WA 98662
 EPA#
 Phone: 360-991-3328
 Customer ID# **32760**
 Driver: JEFF

Receiving Location: Plant # 1
 FPI
 4150 N. Suttle Road
 Portland, OR 97217
 Phone: 503-286-8352
 EPA# ORD980975692

Date	Terms	Written By	Sales Rep.	Page
08/02/22	-0-	Calica		1 of 1

Line	Qty.	Unit	Item	%H2O	Manifest #	B/L#	Net Qty
1	1	Brl.	Oil Clean Up Material Generator ID# 32760 EnviroServe PROFILE ATTACHED - COSTCO 0642 CLOVERISK 3E COMPANY CARLSBAD CA 92010		RR1585720		
			Total Brl.				1.
2	2	Each	Barrel Handling Generator ID# 32760 EnviroServe (2) 55GAL DRUMS				
3	1	Each	XRF Analysis Testing Generator ID# 32760 EnviroServe				
			Total Each				3.
4	35	Gal.	Emulsified Oil & Water Generator ID# 32760 EnviroServe PROFILE ATTACHED - PACIFICORP 825 NE MULTNOMAH BLVD PORTLAND OR 97232		VC100283-02		
			Total Gal.				35.

Customer warrants that the waste petroleum products being received do not contain any contaminants including, without limitation, pesticides, chlorinated solvents at total concentrations greater than 1000 PPM, PCB's greater than 2 PPM, or any other material classified as hazardous waste by 40 CFR part 261, Subparts C and D (implementing the Federal Resource Conservation and Recovery Act) or by any other state or local hazardous waste classification program. Should Laboratory tests find this product not in compliance with 40 CFR part 261 customer agrees to pay all disposal costs incurred.

Signed X _____ DATE: 08/02/22

Appendix C

Analytical Laboratory Results

Appendix C1

Lab Results

Table C-1 J.C. Boyle Dispersed Recreation Area - 2 Analytical Soil Results

						Location	JBRA-01	JBRA-01	JBRA-01	JBRA-01	JBRA-02	JBRA-02	JBRA-02	JBRA-02	JBRA-03	JBRA-03	JBRA-03	JBRA-03	
						Sample Date	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022
						Depth Interval	0 - 0.5	1 - 1.5	2 - 3	3 - 3.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 3.5	0 - 0.5	0 - 0.5	1 - 1.5	1.5 - 2.5	
						Sample Type	N	N	N	N	N	N	FD	N	N	FD	N	N	
Analyte	CAS	Unit	Ecological Receptors	Human Health	Leaching to Groundwater														
CALC																			
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	mg/kg				3.124E-07	2E-09	3E-10	2.96E-07	4.938E-06	1.6E-09	1.5E-09	1.4E-08	1.646E-07	6.5E-09	0 U	1.6E-07		
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	mg/kg				3.718E-07	1.73E-08	8E-10	2.848E-07	4.483E-06	1.6E-08	1.5E-08	4.2E-09	2.971E-07	4.95E-08	0 U	1.6E-07		
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0.00539	0 U	0 U	0.00019	0 U	0 U	0 U	0 U	0 U	0 U	0.0017	0 U		
SW6010B																			
Boron	7440-42-8	mg/kg	2	16000		130 U	110 U	120 U	110 U	65 J	8.1 J	7.5 J	100 U	120 U	83 U	110 U	90 U		
SW6020																			
Antimony	7440-36-0	mg/kg	0.67	31		0.29 J	0.11 J	0.088 J	0.15 J	44	1.5 J	0.56 J	1.1	0.14 J	0.33	0.081 J	0.068 J		
Arsenic	7440-38-2	mg/kg	19	19		3.7	3.9	3.7	4	8.6	3.9	3.6	3.6	1.8 J	3.8 J	3.8	2.1		
Barium	7440-39-3	mg/kg	630	15000		200 J	200 J	140	140	230	160	180	120	84 J	160 J	170	110		
Beryllium	7440-41-7	mg/kg	2.5	160		0.6	0.59	0.43	0.46	0.37	0.41 J	0.51 J	0.39	0.24	0.43	0.42	0.32		
Cadmium	7440-43-9	mg/kg	0.54	78		0.11 J	0.069 J	0.046 J	0.055 J	0.58	0.069 J	0.072 J	0.15 J	0.041 J	0.08 J	0.059 J	0.032 J		
Chromium	7440-47-3	mg/kg	200	120000		50	49	35	40	53	38	42	35	19 J	36 J	34	26		
Cobalt	7440-48-4	mg/kg	13	23		20	20	14	14	47	13	15	11	7.2 J	14 J	19	9		
Copper	7440-50-8	mg/kg	73	3100		39	36	28	32	150	30	32	42	18 J	30 J	26	23		
Iron	7439-89-6	mg/kg		55000		31000 J	30000 J	23000	25000	40000	23000	25000	26000	13000 J	24000 J	22000	18000		
Lead	7439-92-1	mg/kg	34	400	34	18	5.4	4	8.2	970	18 J	7.4 J	64	5.4 J	11 J	3.7	2.8		
Manganese	7439-96-5	mg/kg	2100	2100		770 J	670 J	430	420	850	420 J	520 J	400	280 J	520 J	820	270		
Molybdenum	7439-98-7	mg/kg	2.6	390		0.83	0.61	0.29	0.31	1.4	0.67	0.67	0.34	0.29	0.62	0.29	0.13 J		
Nickel	7440-02-0	mg/kg	110	1500		35 J	34 J	27	29	29	26	28	28	13 J	24 J	31	21		
Selenium	7782-49-2	mg/kg	0.52	390		2.4	3	2.2	2.5	1.5	1.8	2.4	1.7	1.1	1.9	1.6	1.4		
Silver	7440-22-4	mg/kg	2.6	390		0.029 J	0.033 J	0.028 J	0.029 J	0.16	0.035 J	0.028 J	0.032 J	0.016 J	0.023 J	0.028 J	0.021 J		
Thallium	7440-28-0	mg/kg	77	2.8		0.094 J	0.11 J	0.068 J	0.067 J	0.069 J	0.074 J	0.081 J	0.06 J	0.028 J	0.066 J	0.16 J	0.037 J		
Vanadium	7440-62-2	mg/kg	280	390		98 J	95	70	79	61	64	75	66	37 J	70 J	59	48		
Zinc	7440-66-6	mg/kg	170	23000		130 J	55 J	38	50	3600	130 J	64 J	140	37 J	70 J	33	23		
SW7471A																			
Mercury	7439-97-6	mg/kg	0.24	23		0.01 J	0.031 U	0.033 U	0.037 U	0.038 U	0.01 J	0.03 U	0.034 U	0.01 J	0.01 J	0.0095 J	0.0098 J		
SW8011																			
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0051		0.00033 U	0.00036 U	0.00035 U	0.00036 U	0.00044 UJ	0.00036 U	0.00033 U	0.00038 U	0.00035 U	0.00033 U	0.00033 U	0.00036 U		
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0053		5.5E-05 U	6E-05 U	5.9E-05 U	6E-05 U	7.3E-05 UJ	6E-05 U	5.5E-05 U	6.4E-05 U	5.8E-05 U	5.5E-05 U	5.5E-05 U	6E-05 U		
1,2-Dibromoethane	106-93-4	mg/kg		0.15	0.00012	5.5E-05 U	6E-05 U	5.9E-05 U	6E-05 U	7.3E-05 UJ	6E-05 U	5.5E-05 U	6.4E-05 U	5.8E-05 U	5.5E-05 U	5.5E-05 U	6E-05 U		
SW8260B																			
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2		0.0043 UJ	0.0038 UJ	0.0042 U	0.0035 UJ	0.0052 UJ	0.0035 UJ	0.0031 UJ	0.0035 UJ	0.0038 UJ	0.0038 U	0.0037 U	0.0037 U		
1,1,1-Trichloroethane	71-55-6	mg/kg	260	53000	190	0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U		
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.127	0.6		0.0057 UJ	0.005 UJ	0.0055 U	0.0047 UJ	0.007 UJ	0.0047 UJ	0.0042 UJ	0.0047 UJ	0.0051 UJ	0.005 U	0.005 U	0.005 U		
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		400000		0.0043 UJ	0.0038 UJ	0.0042 U	0.0035 UJ	0.0052 UJ	0.0035 UJ	0.0031 UJ	0.0035 UJ	0.0038 UJ	0.0038 U	0.0037 U	0.0037 U		
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	3.2	0.0063	0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U		
1,1-Dichloroethane	75-34-3	mg/kg	210	56	0.044	0.0014 U	0.0013 UJ	0.0014 U	0.0012 UJ	0.0017 UJ	0.0012 UJ	0.001 UJ	0.0012 UJ	0.0013 UJ	0.0013 U	0.0012 U	0.0012 U		
1,1-Dichloroethene	75-35-4	mg/kg	11	1800	6.7	0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U		
1,1-Dichloropropene	563-58-6	mg/kg				0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U		
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	63		0.0043 UJ	0.0038 UJ	0.0042 U	0.0035 UJ	0.0052 UJ	0.0035 UJ	0.0031 UJ	0.0035 UJ	0.0038 UJ	0.0038 U	0.0037 U	0.0037 U		
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0051		0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U		
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	24		0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U		
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	430	10	0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U		

Table C-1 J.C. Boyle Dispersed Recreation Area - 2 Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors	Human Health	Leaching to Groundwater	Location	JBRA-01	JBRA-01	JBRA-01	JBRA-01	JBRA-02	JBRA-02	JBRA-02	JBRA-02	JBRA-03	JBRA-03	JBRA-03	JBRA-03
						Sample Date	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022
Depth Interval						0 - 0.5	1 - 1.5	2 - 3	3 - 3.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 3.5	0 - 0.5	0 - 0.5	1 - 1.5	1.5 - 2.5	
Sample Type						N	N	N	N	N	N	N	FD	N	N	FD	N	N
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0053		0.014 UJ	0.013 UJ	0.014 U	0.012 UJ	0.017 UJ	0.012 UJ	0.01 UJ	0.012 UJ	0.013 UJ	0.013 U	0.012 U	0.012 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.15	0.00012	0.0014 UJ	0.0013 UJ	0.0014 U	0.0012 UJ	0.0017 UJ	0.0012 UJ	0.001 UJ	0.0012 UJ	0.0013 UJ	0.0013 U	0.0012 U	0.0012 U	
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	2200	36	0.014 UJ	0.013 UJ	0.014 U	0.012 UJ	0.017 UJ	0.012 UJ	0.01 UJ	0.012 UJ	0.013 UJ	0.013 U	0.012 U	0.012 U	
1,2-Dichloroethane	107-06-2	mg/kg	0.85	3.4	0.0028	0.0014 U	0.0013 UJ	0.0014 U	0.0012 UJ	0.0017 UJ	0.0012 UJ	0.001 UJ	0.0012 UJ	0.0013 UJ	0.0013 U	0.0012 U	0.0012 U	
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5		0.0029 U	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	430	11	0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U	
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08			0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U	
1,3-Dichloropropane	142-28-9	mg/kg		1600		0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	8.1	0.057	0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U	
2,2-Dichloropropane	594-20-7	mg/kg				0.0071 U	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U	
2-Butanone	78-93-3	mg/kg	2700	27000		0.057 U	0.05 UJ	0.055 U	0.047 UJ	0.07 UJ	0.047 UJ	0.042 UJ	0.047 UJ	0.051 UJ	0.05 U	0.05 U	0.05 U	
2-Chlorotoluene	95-49-8	mg/kg		1600		0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U	
2-Hexanone	591-78-6	mg/kg	0.36	200		0.029 U	0.025 UJ	0.028 U	0.023 UJ	0.035 UJ	0.023 UJ	0.021 UJ	0.023 UJ	0.025 UJ	0.025 U	0.025 U	0.025 U	
4-Chlorotoluene	106-43-4	mg/kg		1600		0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U	
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000		0.043 U	0.038 UJ	0.042 U	0.035 UJ	0.052 UJ	0.035 UJ	0.031 UJ	0.035 UJ	0.038 UJ	0.038 U	0.037 U	0.037 U	
Acetone	67-64-1	mg/kg	1.2	61000		0.21 U	0.19 UJ	0.051 J	0.18 UJ	0.26 UJ	0.18 UJ	0.16 UJ	0.17 UJ	0.19 UJ	0.19 U	0.19 U	0.19 U	
Benzene	71-43-2	mg/kg	24	8.2	0.023	0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Bromobenzene	108-86-1	mg/kg		290		0.014 UJ	0.013 UJ	0.014 U	0.012 UJ	0.017 UJ	0.012 UJ	0.01 UJ	0.012 UJ	0.013 UJ	0.013 U	0.012 U	0.012 U	
Bromochloromethane	74-97-5	mg/kg		150		0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Bromodichloromethane	75-27-4	mg/kg		2.4	0.002	0.0014 UJ	0.0013 UJ	0.0014 U	0.0012 UJ	0.0017 UJ	0.0012 UJ	0.001 UJ	0.0012 UJ	0.0013 UJ	0.0013 U	0.0012 U	0.0012 U	
Bromoform	75-25-2	mg/kg		57	0.046	0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U	
Bromomethane	74-83-9	mg/kg		46	0.083	0.001 J	0.0013 UJ	0.0014 UJ	0.0012 UJ	0.001 J	0.0012 UJ	0.001 U	0.0012 UJ	0.0013 UJ	0.0013 UJ	0.0012 UJ	0.0012 UJ	
Carbon Disulfide	75-15-0	mg/kg	0.81	770		0.0014 UJ	0.0013 UJ	0.0014 U	0.0012 UJ	0.0017 UJ	0.0012 UJ	0.001 UJ	0.0012 UJ	0.0013 UJ	0.0013 U	0.0012 U	0.0012 U	
Carbon tetrachloride	56-23-5	mg/kg	2	7.5	0.013	0.0029 U	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Chlorobenzene	108-90-7	mg/kg	43	530	5.8	0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Chlorodibromomethane	124-48-1	mg/kg		3.3	0.0024	0.0021 UJ	0.0019 UJ	0.0021 U	0.0018 UJ	0.0026 UJ	0.0018 UJ	0.0016 UJ	0.0017 UJ	0.0019 UJ	0.0019 U	0.0019 U	0.0019 U	
Chloroethane	75-00-3	mg/kg		160000	310	0.014 U	0.013 UJ	0.014 U	0.012 UJ	0.017 UJ	0.012 UJ	0.01 UJ	0.012 UJ	0.013 UJ	0.013 U	0.012 U	0.012 U	
Chloroform	67-66-3	mg/kg	8	3.9	0.0034	0.0029 U	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Chloromethane	74-87-3	mg/kg		1400	2.2	0.0071 U	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U	
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	160	0.63	0.0043 UJ	0.0038 UJ	0.0042 U	0.0035 UJ	0.0052 UJ	0.0035 UJ	0.0031 UJ	0.0035 UJ	0.0038 UJ	0.0038 U	0.0037 U	0.0037 U	
cis-1,3-Dichloropropene	10061-01-5	mg/kg				0.0014 UJ	0.0013 UJ	0.0014 U	0.0012 UJ	0.0017 UJ	0.0012 UJ	0.001 UJ	0.0012 UJ	0.0013 UJ	0.0013 U	0.0012 U	0.0012 U	
Dibromomethane	74-95-3	mg/kg		24		0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Dichlorodifluoromethane	75-71-8	mg/kg		87		0.001 J	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Dichloromethane	75-09-2	mg/kg	2.6	76	0.14	0.057 UJ	0.05 UJ	0.055 U	0.047 UJ	0.07 UJ	0.047 UJ	0.042 UJ	0.047 UJ	0.051 UJ	0.05 U	0.05 U	0.05 U	
Ethylbenzene	100-41-4	mg/kg	0.27	34	0.22	0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2		0.0043 UJ	0.0038 UJ	0.0042 U	0.0035 UJ	0.0052 UJ	0.0035 UJ	0.0031 UJ	0.0035 UJ	0.0038 UJ	0.0038 U	0.0037 U	0.0037 U	
Isopropylbenzene	98-82-8	mg/kg		3500	96	0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		250	0.11	0.0029 U	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Naphthalene	91-20-3	mg/kg	1	5.3	0.077	0.014 UJ	0.013 UJ	0.014 U	0.012 UJ	0.017 UJ	0.012 UJ	0.01 UJ	0.012 UJ	0.013 UJ	0.013 U	0.012 U	0.012 U	
n-Butylbenzene	104-51-8	mg/kg		3900		0.0043 UJ	0.0038 UJ	0.0042 U	0.0035 UJ	0.0052 UJ	0.0035 UJ	0.0031 UJ	0.0035 UJ	0.0038 UJ	0.0038 U	0.0037 U	0.0037 U	
n-Propylbenzene	103-65-1	mg/kg		3800		0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U	
p-Isopropyltoluene	99-87-6	mg/kg				0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
sec-Butylbenzene	135-98-8	mg/kg		7800		0.0043 UJ	0.0038 UJ	0.0042 U	0.0035 UJ	0.0052 UJ	0.0035 UJ	0.0031 UJ	0.0035 UJ	0.0038 UJ	0.0038 U	0.0037 U	0.0037 U	
Styrene	100-42-5	mg/kg	1.2	7900	170	0.0043 UJ	0.0038 UJ	0.0042 U	0.0035 UJ	0.0052 UJ	0.0035 UJ	0.0031 UJ	0.0035 UJ	0.0038 UJ	0.0038 U	0.0037 U	0.0037 U	

Table C-1 J.C. Boyle Dispersed Recreation Area - 2 Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors	Human Health	Leaching to Groundwater	Location	JBRA-01	JBRA-01	JBRA-01	JBRA-01	JBRA-02	JBRA-02	JBRA-02	JBRA-02	JBRA-03	JBRA-03	JBRA-03	JBRA-03
						Sample Date	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022
Depth Interval						0 - 0.5	1 - 1.5	2 - 3	3 - 3.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 3.5	0 - 0.5	0 - 0.5	1 - 1.5	1.5 - 2.5	
Sample Type						N	N	N	N	N	N	N	FD	N	N	FD	N	N
tert-Butylbenzene	98-06-6	mg/kg		7800		0.0043 UJ	0.0038 UJ	0.0042 U	0.0035 UJ	0.0052 UJ	0.0035 UJ	0.0031 UJ	0.0035 UJ	0.0038 UJ	0.0038 U	0.0037 U	0.0037 U	
Tetrachloroethene	127-18-4	mg/kg	0.18	220	0.46	0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Toluene	108-88-3	mg/kg	23	5800	83	0.014 UJ	0.013 UJ	0.014 U	0.012 UJ	0.017 UJ	0.012 UJ	0.01 UJ	0.012 UJ	0.013 UJ	0.013 U	0.012 U	0.012 U	
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	1600	7	0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
trans-1,3-Dichloropropene	10061-02-6	mg/kg				0.014 UJ	0.013 UJ	0.014 U	0.012 UJ	0.017 UJ	0.012 UJ	0.01 UJ	0.012 UJ	0.013 UJ	0.013 U	0.012 U	0.012 U	
Trichloroethylene	79-01-6	mg/kg	42	0.94		0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 UJ	0.0025 UJ	0.0025 UJ	
Trichlorofluoromethane	75-69-4	mg/kg	52	7600	61	0.0029 UJ	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Vinyl Acetate	108-05-4	mg/kg		910		0.014 UJ	0.013 UJ	0.014 U	0.012 UJ	0.017 UJ	0.012 UJ	0.01 UJ	0.012 UJ	0.013 UJ	0.013 U	0.012 U	0.012 U	
Vinyl Chloride	75-01-4	mg/kg	0.12	0.36	0.00057	0.0029 U	0.0025 UJ	0.0028 U	0.0023 UJ	0.0035 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ	0.0025 UJ	0.0025 U	0.0025 U	0.0025 U	
Xylene, o	95-47-6	mg/kg	1.4	650		0.0071 UJ	0.0063 UJ	0.0069 U	0.0059 UJ	0.0087 UJ	0.0059 UJ	0.0052 UJ	0.0058 UJ	0.0063 UJ	0.0063 U	0.0062 U	0.0062 U	
Xylenes, m & p	179601-23-1	mg/kg	1.4	550		0.014 UJ	0.013 UJ	0.014 U	0.012 UJ	0.017 UJ	0.012 UJ	0.01 UJ	0.012 UJ	0.013 UJ	0.013 U	0.012 U	0.012 U	
Xylenes, Total	1330-20-7	mg/kg	1.4	1400	23	0.014 UJ	0.013 UJ	0.014 U	0.012 UJ	0.017 UJ	0.012 UJ	0.01 UJ	0.012 UJ	0.013 UJ	0.013 U	0.012 U	0.012 U	
SW8270C																		
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	24		0.0059 U	0.0057 U	0.0059 U	0.006 U	0.0074 UJ	0.0059 U	0.0062 U	0.0061 U	0.0059 U	0.006 U	0.0058 U	0.0062 U	
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	2200	36	0.0059 U	0.0057 U	0.0059 U	0.006 U	0.0074 UJ	0.0059 U	0.0062 U	0.0061 U	0.0059 U	0.006 U	0.0058 U	0.0062 U	
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08			0.0059 U	0.0057 U	0.0059 U	0.006 U	0.0074 UJ	0.0059 U	0.0062 U	0.0061 U	0.0059 U	0.006 U	0.0058 U	0.0062 U	
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	8.1	0.057	0.0059 U	0.0057 U	0.0059 U	0.006 U	0.0074 UJ	0.0059 U	0.0062 U	0.0061 U	0.0059 U	0.006 U	0.0058 U	0.0062 U	
1-Methylnaphthalene	90-12-0	mg/kg		18		0.0014 J	0.0034 U	0.0036 U	0.00065 J	0.0085 J	0.00066 J	0.00065 J	0.0037 U	0.0035 U	0.0036 U	0.0035 U	0.0037 U	
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300		0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U	
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.94	49	2.4	0.018 U	0.017 U	0.018 U	0.018 U	0.022 UJ	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.017 U	0.019 U	
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190		0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U	
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300		0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U	
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130		0.23 U	0.23 U	0.24 U	0.24 U	0.3 UJ	0.24 U	0.25 U	0.24 U	0.23 U	0.24 U	0.23 U	0.25 U	
2,4-Dinitrotoluene	121-14-2	mg/kg	14	1.7		0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U	
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36	0.0089	0.018 U	0.017 U	0.018 U	0.018 U	0.022 UJ	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.017 U	0.019 U	
2-Chloronaphthalene	91-58-7	mg/kg		4800		0.0029 U	0.0029 U	0.003 U	0.003 U	0.0037 UJ	0.0029 U	0.0031 U	0.0031 U	0.0029 U	0.003 U	0.0029 U	0.0031 U	
2-Chlorophenol	95-57-8	mg/kg	0.39	390		0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U	
2-Methylnaphthalene	91-57-6	mg/kg	16	240		0.0027 J	0.0057 U	0.0059 U	0.0013 J	0.01 J	0.001 J	0.0062 U	0.0061 U	0.0059 U	0.006 U	0.0058 U	0.0062 U	
2-Methylphenol	95-48-7	mg/kg	0.67	3200		0.018 U	0.017 U	0.018 U	0.018 U	0.022 UJ	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.017 U	0.019 U	
2-Nitroaniline	88-74-4	mg/kg	5.3	630		0.012 U	0.011 U	0.012 U	0.012 U	0.015 UJ	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	
2-Nitrophenol	88-75-5	mg/kg				0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U	
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69			0.0036 J	0.023 U	0.002 J	0.024 U	0.043 J	0.0018 J	0.025 U	0.024 U	0.064	0.13	0.023 U	0.025 U	
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	1.2	0.17	0.047 UJ	0.046 U	0.047 U	0.048 U	0.059 UJ	0.047 U	0.05 U	0.049 U	0.047 U	0.048 U	0.046 U	0.049 U	
3-Nitroaniline	99-09-2	mg/kg				0.035 UJ	0.034 U	0.036 U	0.036 U	0.044 UJ	0.035 U	0.037 U	0.037 U	0.035 U	0.036 U	0.035 U	0.037 U	
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1		0.12 U	0.11 U	0.12 U	0.12 U	0.15 UJ	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg				0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U	
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300		0.018 U	0.017 U	0.018 U	0.018 U	0.022 UJ	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.017 U	0.019 U	
4-Chloroaniline	106-47-8	mg/kg	1	2.7		0.18 UJ	0.17 U	0.18 U	0.18 U	0.22 UJ	0.18 U	0.19 U	0.18 U	0.18 U	0.18 U	0.17 U	0.19 U	
4-Chlorophenyl Phenylether	7005-72-3	mg/kg				0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U	
4-Nitroaniline	100-01-6	mg/kg		27		0.018 UJ	0.017 U	0.018 U	0.018 U	0.022 UJ	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.017 U	0.019 U	
4-Nitrophenol	100-02-7	mg/kg				0.23 U	0.23 U	0.24 U	0.24 U	0.3 UJ	0.24 U	0.25 U	0.24 U	0.23 U	0.24 U	0.23 U	0.25 U	
Acenaphthene	83-32-9	mg/kg	0.25	4700		0.0047 U	0.0046 U	0.0047 U	0.0048 U	0.0059 UJ	0.0047 U	0.005 U	0.0049 U	0.0047 U	0.0048 U	0.0046 U	0.0049 U	
Acenaphthylene	208-96-8	mg/kg	120			0.0029 U	0.0029 U	0.003 U	0.003 U	0.0027 J	0.0029 U	0.0031 U	0.0031 U	0.0029 U	0.003 U	0.0029 U	0.0031 U	
Anthracene	120-12-7	mg/kg	6.8	23000		0.007 U	0.0069 U	0.0071 U	0.0072 U	0.0089 UJ	0.0071 U	0.0075 U	0.0073 U	0.007 U	0.0072 U	0.007 U	0.0074 U	

Table C-1 J.C. Boyle Dispersed Recreation Area - 2 Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors	Human Health	Leaching to Groundwater	Location	JBRA-01	JBRA-01	JBRA-01	JBRA-01	JBRA-02	JBRA-02	JBRA-02	JBRA-02	JBRA-03	JBRA-03	JBRA-03	JBRA-03
						Sample Date	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022
						Depth Interval	0 - 0.5	1 - 1.5	2 - 3	3 - 3.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 3.5	0 - 0.5	0 - 0.5	1 - 1.5	1.5 - 2.5
						Sample Type	N	N	N	N	N	N	FD	N	N	FD	N	N
Azobenzene	103-33-3	mg/kg		5.6			0.023 UJ	0.023 U	0.024 U	0.024 U	0.028 J	0.0019 J	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	1.6		0.0047 U	0.0046 U	0.0047 U	0.0048 U	0.0059 UJ	0.0047 U	0.005 U	0.0049 U	0.0047 U	0.0048 U	0.0046 U	0.0049 U
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	4.4		0.0043 J	0.0069 U	0.0071 U	0.0072 U	0.0089 UJ	0.0071 U	0.0075 U	0.0073 U	0.007 U	0.0072 U	0.007 U	0.0074 U
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1			0.0065	0.0046 U	0.0047 U	0.0019 J	0.0059 UJ	0.0047 U	0.005 U	0.0049 U	0.0047 U	0.0048 U	0.0046 U	0.0049 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25				0.007 U	0.0069 U	0.0071 U	0.0072 U	0.0089 UJ	0.0071 U	0.0075 U	0.0073 U	0.007 U	0.0072 U	0.007 U	0.0074 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11			0.007 U	0.0069 U	0.0071 U	0.0072 U	0.0089 UJ	0.0071 U	0.0075 U	0.0073 U	0.007 U	0.0072 U	0.007 U	0.0074 U
Benzoic Acid	65-85-0	mg/kg	1	250000			0.14 J	0.46 U	0.47 U	0.48 U	0.59 UJ	0.47 U	0.5 U	0.49 U	0.68	0.84	0.46 U	0.49 U
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.12 U	0.11 U	0.12 U	0.12 U	0.15 UJ	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.29	0.00019		0.012 U	0.011 U	0.012 U	0.012 U	0.015 UJ	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
bis (2-Chloroisopropyl) ether	39638-32-9	mg/kg		3100			0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39			0.013 J	0.069 U	0.071 U	0.072 U	0.089 UJ	0.071 U	0.075 U	0.073 U	0.029 J	0.027 J	0.07 U	0.074 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U
Carbazole	86-74-8	mg/kg					0.018 U	0.017 U	0.018 U	0.018 U	0.022 UJ	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.017 U	0.019 U
Chrysene	218-01-9	mg/kg	3.1	110			0.007 U	0.0069 U	0.0071 U	0.0072 U	0.0089 UJ	0.0071 U	0.0075 U	0.0073 U	0.007 U	0.0072 U	0.007 U	0.0074 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.11			0.0059 U	0.0057 U	0.0059 U	0.006 U	0.0074 UJ	0.0059 U	0.0062 U	0.0061 U	0.0059 U	0.006 U	0.0017 J	0.0062 U
Dibenzofuran	132-64-9	mg/kg	6.1	78			0.0012 J	0.017 U	0.018 U	0.018 U	0.077 J	0.0094 J	0.003 J	0.0014 J	0.0017 J	0.0021 J	0.017 U	0.019 U
Diethylphthalate	84-66-2	mg/kg	100	51000			0.0053 J	0.0027 J	0.0031 J	0.0028 J	0.059 UJ	0.047 U	0.0027 J	0.049 U	0.047 U	0.048 U	0.046 U	0.0039 J
Dimethylphthalate	131-11-3	mg/kg	10				0.018 U	0.017 U	0.018 U	0.018 U	0.0022 J	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.017 U	0.019 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.059 U	0.057 U	0.059 U	0.06 U	0.074 UJ	0.059 U	0.062 U	0.061 U	0.059 U	0.06 U	0.058 U	0.062 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.018 U	0.017 U	0.018 U	0.018 U	0.022 UJ	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.017 U	0.019 U
Fluoranthene	206-44-0	mg/kg	10	2400			0.0044 J	0.0046 U	0.0047 U	0.0048 U	0.0024 J	0.0047 U	0.005 U	0.0049 U	0.004 J	0.003 J	0.0046 U	0.0049 U
Fluorene	86-73-7	mg/kg	3.7	3100			0.0029 U	0.0029 U	0.003 U	0.003 U	0.0037 UJ	0.0029 U	0.0031 U	0.0031 U	0.0029 U	0.003 U	0.0029 U	0.0031 U
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.21	0.018		0.0059 U	0.0057 U	0.0059 U	0.006 U	0.0074 UJ	0.0059 U	0.0062 U	0.0061 U	0.0059 U	0.006 U	0.0058 U	0.0062 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2			0.0059 U	0.0057 U	0.0059 U	0.006 U	0.0074 UJ	0.0059 U	0.0062 U	0.0061 U	0.0059 U	0.006 U	0.0058 U	0.0062 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.012 U	0.011 U	0.012 U	0.012 U	0.015 UJ	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U
Hexachloroethane	67-72-1	mg/kg	0.024	7.4	0.022		0.018 U	0.017 U	0.018 U	0.018 U	0.022 UJ	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.017 U	0.019 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1			0.0044 J	0.0046 U	0.0047 U	0.0048 U	0.0059 UJ	0.0047 U	0.005 U	0.0049 U	0.0047 U	0.0048 U	0.0046 U	0.0049 U
Isophorone	78-59-1	mg/kg		570			0.018 U	0.017 U	0.018 U	0.018 U	0.022 UJ	0.018 U	0.019 U	0.018 U	0.018 U	0.018 U	0.017 U	0.019 U
Naphthalene	91-20-3	mg/kg	1	5.3	0.077		0.0029 U	0.0007 J	0.00065 J	0.0014 J	0.29 J	0.027 J	0.007 J	0.004	0.0029 U	0.003 U	0.0029 U	0.00091 J
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078	0.00094		0.023 U	0.023 U	0.024 U	0.024 U	0.03 UJ	0.024 U	0.025 U	0.024 U	0.023 U	0.024 U	0.023 U	0.025 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.545	110	10		0.0048 J	0.0069 U	0.0071 U	0.0072 U	0.0089 UJ	0.0071 U	0.0075 U	0.0073 U	0.007 U	0.0072 U	0.007 U	0.0074 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.066		0.047 U	0.046 U	0.047 U	0.048 U	0.059 UJ	0.047 U	0.05 U	0.049 U	0.047 U	0.048 U	0.046 U	0.049 U
Phenanthrene	85-01-8	mg/kg	5.5				0.0024 J	0.0069 U	0.0071 U	0.00075 J	0.022 J	0.003 J	0.0016 J	0.00084 J	0.0035 J	0.0034 J	0.007 U	0.0074 U
Phenol	108-95-2	mg/kg	0.79	19000			0.018 U	0.017 U	0.018 U	0.018 U	0.13	0.018 U	0.019 U	0.018 U	0.018 U	0.012 J	0.017 U	0.019 U
Pyrene	129-00-0	mg/kg	10	1800			0.0041 J	0.0069 U	0.0071 U	0.0072 U	0.0089 UJ	0.0071 U	0.0075 U	0.0073 U	0.007 U	0.0072 U	0.007 U	0.0074 U
Pyridine	110-86-1	mg/kg		78			0.12 UJ	0.11 UJ	0.12 UJ	0.12 UJ	0.15 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ
SW8290																		
1,2,3,4,6,7,8-HpCDD	35822-46-9	mg/kg	1E-06				4.1E-06 J	1.6E-06 J	6E-06 U	6.3E-06 U	7.4E-06 U	1.6E-06 J	1.5E-06 J	6.4E-06 UJ	4.8E-06 J	4.3E-06 J	5.9E-06 U	6.4E-06 U
1,2,3,4,6,7,8-HpCDF	67562-39-4	mg/kg	1.6E-06				5.9E-06 UJ	5.9E-06 UJ	6E-06 U	6.3E-06 UJ	7.4E-06 U	6.1E-06 U	6.2E-06 U	6.4E-06 UJ	6E-06 UJ	5.8E-06 UJ	5.9E-06 UJ	6.4E-06 UJ
1,2,3,4,7,8,9-HpCDF	55673-89-7	mg/kg	1.6E-06				5.9E-06 UJ	5.9E-06 UJ	6E-06 U	6.3E-06 UJ	7.4E-06 UJ	6.1E-06 U	6.2E-06 U	6.4E-06 U	6E-06 UJ	5.8E-06 U	5.9E-06 U	6.4E-06 U
1,2,3,4,7,8-HxCDD	39227-28-6	mg/kg	1.8E-07				5.9E-06 U	5.9E-06 UJ	6E-06 UJ	6.3E-06 U	7.4E-06 U	6.1E-06 U	6.2E-06 UJ	6.4E-06 U	6E-06 U	5.8E-06 UJ	5.9E-06 UJ	6.4E-06 U
1,2,3,4,7,8-HxCDF	70648-26-9	mg/kg	1.6E-07				5.9E-06 UJ	5.9E-06 U	6E-06 U	6.3E-06 U	5.2E-07 J	6.1E-06 U	6.2E-06 UJ	6.4E-06 U	6E-06 UJ	5.8E-06 U	5.9E-06 U	6.4E-06 U

Table C-1 J.C. Boyle Dispersed Recreation Area - 2 Analytical Soil Results

						Location	JBRA-01	JBRA-01	JBRA-01	JBRA-01	JBRA-02	JBRA-02	JBRA-02	JBRA-02	JBRA-03	JBRA-03	JBRA-03	JBRA-03
						Sample Date	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022	5/4/2022
						Depth Interval	0 - 0.5	1 - 1.5	2 - 3	3 - 3.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 3.5	0 - 0.5	0 - 0.5	1 - 1.5	1.5 - 2.5
						Sample Type	N	N	N	N	N	N	FD	N	N	FD	N	N
Analyte	CAS	Unit	Ecological Receptors	Human Health	Leaching to Groundwater													
1,2,3,6,7,8-HxCDD	57653-85-7	mg/kg	1.3E-07			3.8E-07 J	5.9E-06 U	6E-06 UJ	6.3E-06 UJ	7.4E-06 UJ	6.1E-06 U	6.2E-06 U	6.4E-06 U	9.4E-07 J	5.8E-06 UJ	5.9E-06 U	6.4E-06 U	
1,2,3,6,7,8-HxCDF	57117-44-9	mg/kg	1.6E-07			2.2E-07 J	5.9E-06 UJ	6E-06 U	6.3E-06 U	2.6E-07 J	6.1E-06 U	6.2E-06 U	6.4E-06 U	5E-07 J	5.8E-06 U	5.9E-06 U	6.4E-06 U	
1,2,3,7,8,9-HxCDD	19408-74-3	mg/kg	1.3E-07			5.9E-06 U	5.9E-06 UJ	6E-06 UJ	6.3E-06 UJ	7.4E-06 UJ	6.1E-06 U	6.2E-06 U	6.4E-06 U	9.8E-07 J	5.8E-06 UJ	5.9E-06 U	6.4E-06 U	
1,2,3,7,8,9-HxCDF	72918-21-9	mg/kg	2.1E-07			5.9E-06 U	5.9E-06 UJ	6E-06 UJ	6.3E-06 U	7.4E-06 U	6.1E-06 U	6.2E-06 UJ	6.4E-06 UJ	6E-06 U	5.8E-06 UJ	5.9E-06 U	6.4E-06 U	
1,2,3,7,8-PeCDD	40321-76-4	mg/kg	4.2E-08			5.9E-06 U	5.9E-06 U	6E-06 U	1.4E-07 J	3.1E-07 J	6.1E-06 UJ	6.2E-06 U	6.4E-06 U	6E-06 UJ	5.8E-06 U	5.9E-06 U	6.4E-06 U	
1,2,3,7,8-PeCDF	57117-41-6	mg/kg	9.7E-07			2.1E-07 J	5.9E-06 U	6E-06 U	1.6E-07 J	7.4E-06 UJ	6.1E-06 U	6.2E-06 U	1.4E-07 J	6E-06 UJ	5.8E-06 U	5.9E-06 U	6.4E-06 U	
2,3,4,6,7,8-HxCDF	60851-34-5	mg/kg	1.6E-07			5.9E-06 U	5.9E-06 U	6E-06 UJ	6.3E-06 UJ	7.4E-06 UJ	6.1E-06 U	6.2E-06 U	6.4E-06 U	6E-06 UJ	5.8E-06 UJ	5.9E-06 U	6.4E-06 U	
2,3,4,7,8-PeCDF	57117-31-4	mg/kg	9.7E-08			5.9E-06 U	5.9E-06 U	6E-06 U	6.3E-06 U	6.5E-07 J	6.1E-06 U	6.2E-06 U	6.4E-06 U	6E-06 U	5.8E-06 U	5.9E-06 U	6.4E-06 U	
2,3,7,8-TCDD	1746-01-6	mg/kg	3.7E-08	4.74411E-	6.81479E-06	1.2E-06 UJ	1.2E-06 UJ	1.2E-06 U	1.3E-06 UJ	1.5E-06 UJ	1.2E-06 U	1.2E-06 UJ	1.3E-06 U	1.2E-06 U	1.2E-06 UJ	1.2E-06 UJ	1.3E-06 UJ	
2,3,7,8-TCDF	51207-31-9	mg/kg	4.5E-07			2.6E-07 J	1.2E-06 UJ	1.2E-06 U	1.4E-07 J	3.9E-06	1.2E-06 U	1.2E-06 U	1.3E-06 UJ	1.2E-06 UJ	1.2E-06 UJ	1.2E-06 U	1.6E-07 J	
OCDD	3268-87-9	mg/kg	4.5E-05			1.5E-05	4.4E-06 J	2.5E-06 J	1.3E-05 UJ	1.5E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.3E-05 UJ	2E-05	1.9E-05	1.2E-05 UJ	1.3E-05 UJ	
OCDF	39001-02-0	mg/kg	3.3E-05			1.2E-05 U	1.2E-05 U	1.2E-05 U	1.3E-05 U	1.5E-05 U	1.2E-05 U	1.2E-05 U	1.3E-05 UJ	3.5E-06 J	2.7E-06 J	1.2E-05 U	1.3E-05 UJ	

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

mg/kg = milligram(s) per kilogram

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table C-2 J.C. Boyle Dispersed Recreation Area - 2 Analytical Water Results

			Location	JBRA-02	JBRA-02
			Sample Date	5/4/2022	5/4/2022
			Sample Type	N	FD
Analyte	CAS	Unit	Groundwater Screening Level		
CALC					
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	µg/L		2.5E-07	0 U
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	µg/L		2.5E-07	0 U
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	µg/L		0 U	0 U
SW6010B					
Boron	7440-42-8	µg/L	4000	500 U	500 U
SW6020					
Antimony	7440-36-0	µg/L	6	2.9	3.5
Arsenic	7440-38-2	µg/L	0.052	3.4	3.7
Barium	7440-39-3	µg/L	2000	59	67
Beryllium	7440-41-7	µg/L	4	0.28 J	0.31 J
Cadmium	7440-43-9	µg/L	5	0.16 J	0.2 J
Chromium	7440-47-3	µg/L	100	19	22
Cobalt	7440-48-4	µg/L	6	3.8	4.6
Copper	7440-50-8	µg/L	800	19	22
Iron	7439-89-6	µg/L	14000	12000	14000
Lead	7439-92-1	µg/L	15	9.6 J	12 J
Manganese	7439-96-5	µg/L	430	87 J	110 J
Molybdenum	7439-98-7	µg/L	100	0.58 J	0.57 J
Nickel	7440-02-0	µg/L	390	13	15
Selenium	7782-49-2	µg/L	50	8 U	8 U
Silver	7440-22-4	µg/L	94	0.029 J	0.025 J
Thallium	7440-28-0	µg/L	0.2	1 U	1 U
Vanadium	7440-62-2	µg/L	86	49	56
Zinc	7440-66-6	µg/L	6000	99	120
SW7470A					
Mercury	7439-97-6	µg/L	0.63	0.3 U	0.3 U
SW8011					
1,2,3-Trichloropropane	96-18-4	µg/L	0.00075	0.02 U	0.02 U
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.00033	0.01 U	0.01 U
1,2-Dibromoethane	106-93-4	µg/L	0.0075	0.01 U	0.01 U
SW8260B					
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	0.57	0.3 U	0.3 U
1,1,1-Trichloroethane	71-55-6	µg/L	200	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	0.076	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	µg/L	10000	0.5 U	0.5 U
1,1,2-Trichloroethane	79-00-5	µg/L	0.28	0.2 U	0.2 U
1,1-Dichloroethane	75-34-3	µg/L	2.8	0.2 U	0.2 U
1,1-Dichloroethene	75-35-4	µg/L	7	0.2 U	0.2 U
1,1-Dichloropropene	563-58-6	µg/L	0.47	0.2 U	0.2 U
1,2,3-Trichlorobenzene	87-61-6	µg/L	7	0.5 U	0.5 U
1,2,3-Trichloropropane	96-18-4	µg/L	0.00075	0.2 U	0.2 U
1,2,4-Trichlorobenzene	120-82-1	µg/L	1.2	0.5 U	0.5 U
1,2,4-Trimethylbenzene	95-63-6	µg/L	54	0.5 U	0.5 U
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.00033	2 U	2 U

Table C-2 J.C. Boyle Dispersed Recreation Area - 2 Analytical Water Results

Analyte	CAS	Unit	Groundwater Screening Level	Location	JBRA-02	JBRA-02
				Sample Date	5/4/2022	5/4/2022
				Sample Type	N	FD
1,2-Dibromoethane	106-93-4	µg/L	0.0075		0.1 U	0.1 U
1,2-Dichlorobenzene	95-50-1	µg/L	300		0.3 U	0.3 U
1,2-Dichloroethane	107-06-2	µg/L	0.17		0.2 U	0.2 U
1,2-Dichloropropane	78-87-5	µg/L	0.85		0.2 U	0.2 U
1,3,5-Trimethylbenzene	108-67-8	µg/L	59		0.5 U	0.5 U
1,3-Dichlorobenzene	541-73-1	µg/L	300		0.3 U	0.3 U
1,3-Dichloropropane	142-28-9	µg/L	370		0.2 U	0.2 U
1,4-Dichlorobenzene	106-46-7	µg/L	0.48		0.3 U	0.3 U
2,2-Dichloropropane	594-20-7	µg/L	0.85		0.5 U	0.5 U
2-Butanone	78-93-3	µg/L	5600		10 U	10 U
2-Chlorotoluene	95-49-8	µg/L	240		0.5 U	0.5 U
2-Hexanone	591-78-6	µg/L	38		3 U	3 U
4-Chlorotoluene	106-43-4	µg/L	250		0.3 U	0.3 U
4-Methyl-2-Pentanone	108-10-1	µg/L	6300		10 U	10 U
Acetone	67-64-1	µg/L	14000		10 U	10 U
Benzene	71-43-2	µg/L	0.46		0.2 U	0.2 U
Bromobenzene	108-86-1	µg/L	62		0.2 U	0.2 U
Bromochloromethane	74-97-5	µg/L	83		0.2 U	0.2 U
Bromodichloromethane	75-27-4	µg/L	0.13		0.2 U	0.2 U
Bromoform	75-25-2	µg/L	3.3		0.5 U	0.5 U
Bromomethane	74-83-9	µg/L	7.5		0.5 U	0.5 U
Carbon Disulfide	75-15-0	µg/L	810		0.3 U	0.3 U
Carbon tetrachloride	56-23-5	µg/L	0.46		0.2 U	0.2 U
Chlorobenzene	108-90-7	µg/L	77		0.2 U	0.2 U
Chlorodibromomethane	124-48-1	µg/L	0.17		0.2 U	0.2 U
Chloroethane	75-00-3	µg/L	21000		0.5 U	0.5 U
Chloroform	67-66-3	µg/L	0.22		0.2 U	0.2 U
Chloromethane	74-87-3	µg/L	190		0.5 U	0.5 U
cis-1,2-Dichloroethene	156-59-2	µg/L	36		0.2 U	0.2 U
cis-1,3-Dichloropropene	10061-01-5	µg/L	0.47		0.2 U	0.2 U
Dibromomethane	74-95-3	µg/L	8.3		0.2 U	0.2 U
Dichlorodifluoromethane	75-71-8	µg/L	200		0.4 U	0.4 U
Dichloromethane	75-09-2	µg/L	5		5 U	5 U
Ethylbenzene	100-41-4	µg/L	1.5		0.2 U	0.2 U
Hexachlorobutadiene	87-68-3	µg/L	0.14		0.5 U	0.5 U
Isopropylbenzene	98-82-8	µg/L	440		1 U	1 U
Methyl tert-butyl ether (MTBE)	1634-04-4	µg/L	14		0.3 U	0.3 U
Naphthalene	91-20-3	µg/L	0.12		1 U	1 U
n-Butylbenzene	104-51-8	µg/L	1000		1 U	1 U
n-Propylbenzene	103-65-1	µg/L	660		0.3 U	0.3 U
p-Isopropyltoluene	99-87-6	µg/L	410		0.5 U	0.5 U
sec-Butylbenzene	135-98-8	µg/L	2000		1 U	1 U
Styrene	100-42-5	µg/L	100		1 U	1 U
tert-Butylbenzene	98-06-6	µg/L	690		0.5 U	0.5 U
Tetrachloroethene	127-18-4	µg/L	5		0.5 U	0.5 U

Table C-2 J.C. Boyle Dispersed Recreation Area - 2 Analytical Water Results

Analyte	CAS	Unit	Groundwater Screening Level	Location	JBRA-02	JBRA-02
				Sample Date	5/4/2022	5/4/2022
				Sample Type	N	FD
Toluene	108-88-3	µg/L	1000		0.2 U	0.2 U
trans-1,2-Dichloroethene	156-60-5	µg/L	68		0.2 U	0.2 U
trans-1,3-Dichloropropene	10061-02-6	µg/L	410		0.2 U	0.2 U
Trichloroethylene	79-01-6	µg/L	0.49		0.2 U	0.2 U
Trichlorofluoromethane	75-69-4	µg/L	1100		0.5 U	0.5 U
Vinyl Acetate	108-05-4	µg/L	410		2 U	2 U
Vinyl Chloride	75-01-4	µg/L	0.019		0.02 U	0.02 U
Xylene, o	95-47-6	µg/L	190		0.5 U	0.5 U
Xylenes, m & p	179601-23-1	µg/L	190		0.5 U	0.5 U
Xylenes, Total	1330-20-7	µg/L	190		0.5 U	0.5 U
SW8270C						
1,2,4-Trichlorobenzene	120-82-1	µg/L	1.2		0.38 U	0.38 U
1,2-Dichlorobenzene	95-50-1	µg/L	300		0.38 U	0.38 U
1,3-Dichlorobenzene	541-73-1	µg/L	300		0.38 U	0.38 U
1,4-Dichlorobenzene	106-46-7	µg/L	0.48		0.38 U	0.38 U
1-Methylnaphthalene	90-12-0	µg/L	1.1		0.96 U	0.96 U
2,4,5-Trichlorophenol	95-95-4	µg/L	1200		0.38 U	0.38 U
2,4,6-Trichlorophenol	88-06-2	µg/L	4.1		0.58 U	0.58 U
2,4-Dichlorophenol	120-83-2	µg/L	46		0.96 U	0.96 U
2,4-Dimethylphenol	105-67-9	µg/L	360		3.8 U	3.8 U
2,4-Dinitrophenol	51-28-5	µg/L	39		4.8 U	4.8 U
2,4-Dinitrotoluene	121-14-2	µg/L	0.24		0.96 U	0.96 U
2,6-Dinitrotoluene	606-20-2	µg/L	0.049		0.38 U	0.38 U
2-Chloronaphthalene	91-58-7	µg/L	750		0.96 U	0.96 U
2-Chlorophenol	95-57-8	µg/L	91		0.96 U	0.96 U
2-Methylnaphthalene	91-57-6	µg/L	36		0.38 U	0.38 U
2-Methylphenol	95-48-7	µg/L	930		0.58 U	0.58 U
2-Nitroaniline	88-74-4	µg/L	190		0.96 U	0.96 U
2-Nitrophenol	88-75-5	µg/L	5800		0.96 U	0.96 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	µg/L	5800		0.58 U	0.58 U
3,3'-Dichlorobenzidine	91-94-1	µg/L	0.13		0.96 U	0.96 U
3-Nitroaniline	99-09-2	µg/L	13		2.9 U	2.9 U
4,6-Dinitro-2-methylphenol	534-52-1	µg/L	1.5		1.9 UJ	1.9 UJ
4-Bromophenyl Phenyl Ether	101-55-3	µg/L			0.58 U	0.58 U
4-Chloro-3-methylphenol	59-50-7	µg/L	1400		0.58 U	0.58 U
4-Chloroaniline	106-47-8	µg/L	0.37		1.9 U	1.9 U
4-Chlorophenyl Phenylether	7005-72-3	µg/L			0.58 U	0.58 U
4-Nitroaniline	100-01-6	µg/L	3.8		1.9 U	1.9 U
4-Nitrophenol	100-02-7	µg/L	5800		9.6 U	9.6 U
Acenaphthene	83-32-9	µg/L	510		0.38 U	0.38 U
Acenaphthylene	208-96-8	µg/L	81		0.96 U	0.96 U
Anthracene	120-12-7	µg/L	1800		0.96 U	0.96 U
Azobenzene	103-33-3	µg/L	0.12		1.9 U	1.9 U
Benzo(a)anthracene	56-55-3	µg/L	0.03		0.24 U	0.24 U
Benzo(a)pyrene	50-32-8	µg/L	0.025		0.24 U	0.24 U

Table C-2 J.C. Boyle Dispersed Recreation Area - 2 Analytical Water Results

Analyte	CAS	Unit	Groundwater Screening Level	Location	JBRA-02	JBRA-02
				Sample Date	5/4/2022	5/4/2022
				Sample Type	N	FD
Benzo(b)fluoranthene	205-99-2	µg/L	0.25		0.24 U	0.24 U
Benzo(g,h,i)perylene	191-24-2	µg/L	81		0.24 U	0.24 U
Benzo(k)fluoranthene	207-08-9	µg/L	2.5		0.24 U	0.24 U
Benzoic Acid	65-85-0	µg/L	75000		9.6 U	9.6 U
Benzyl Alcohol	100-51-6	µg/L	2000		4.8 U	4.8 U
Bis (2-chloroethoxy) methane	111-91-1	µg/L	59		0.58 U	0.58 U
Bis (2-chloroethyl) ether	111-44-4	µg/L	0.014		0.096 U	0.096 U
bis (2-Chloroisopropyl) ether	39638-32-9	µg/L	710		0.24 U	0.24 U
Bis (2-ethylhexyl) phthalate	117-81-7	µg/L	5.6		2.9 U	2.9 U
Butyl benzyl phthalate	85-68-7	µg/L	16		3.8 U	3.8 U
Carbazole	86-74-8	µg/L			0.58 U	0.58 U
Chrysene	218-01-9	µg/L	25		0.24 U	0.24 U
Dibenzo(a,h)anthracene	53-70-3	µg/L	0.025		0.24 U	0.24 U
Dibenzofuran	132-64-9	µg/L	7.9		0.38 U	0.38 U
Diethylphthalate	84-66-2	µg/L	15000		0.96 U	0.96 U
Dimethylphthalate	131-11-3	µg/L			0.58 U	0.58 U
Di-N-Butylphthalate	84-74-2	µg/L	900		9.6 U	9.6 U
Di-n-octyl phthalate	117-84-0	µg/L	200		0.96 U	0.96 U
Fluoranthene	206-44-0	µg/L	800		0.24 U	0.24 U
Fluorene	86-73-7	µg/L	280		0.24 U	0.24 U
Hexachlorobenzene	118-74-1	µg/L	0.0098		0.58 U	0.58 U
Hexachlorobutadiene	87-68-3	µg/L	0.14		0.96 U	0.96 U
Hexachlorocyclopentadiene	77-47-4	µg/L	0.41		0.96 UJ	0.96 UJ
Hexachloroethane	67-72-1	µg/L	0.33		0.96 U	0.96 U
Indeno(1,2,3-cd)pyrene	193-39-5	µg/L	0.25		0.38 U	0.38 U
Isophorone	78-59-1	µg/L	78		0.38 U	0.38 U
Naphthalene	91-20-3	µg/L	0.12		0.38 U	0.38 U
Nitrobenzene	98-95-3	µg/L	0.14		0.96 U	0.96 U
N-Nitrosodi-N-propylamine	621-64-7	µg/L	0.011		0.38 U	0.38 U
N-Nitrosodiphenylamine	86-30-6	µg/L	12		0.96 U	0.96 U
Pentachlorophenol	87-86-5	µg/L	0.041		4.8 U	4.8 U
Phenanthrene	85-01-8	µg/L	81		0.96 U	0.96 U
Phenol	108-95-2	µg/L	5800		0.96 U	0.96 U
Pyrene	129-00-0	µg/L	110		0.96 U	0.96 U
Pyridine	110-86-1	µg/L	20		9.6 U	9.6 U
SW8290						
1,2,3,4,6,7,8-HpCDD	35822-46-9	µg/L	9.1187E-06		4.8E-05 UJ	5.2E-05 U
1,2,3,4,6,7,8-HpCDF	67562-39-4	µg/L	9.1187E-06		4.8E-05 UJ	5.2E-05 U
1,2,3,4,7,8,9-HpCDF	55673-89-7	µg/L	9.1187E-06		4.8E-05 U	5.2E-05 U
1,2,3,4,7,8-HxCDD	39227-28-6	µg/L	9.1187E-07		4.8E-05 UJ	5.2E-05 U
1,2,3,4,7,8-HxCDF	70648-26-9	µg/L	9.1187E-07		1.4E-06 J	5.2E-05 U
1,2,3,6,7,8-HxCDD	57653-85-7	µg/L	9.1187E-07		4.8E-05 U	5.2E-05 U
1,2,3,6,7,8-HxCDF	57117-44-9	µg/L	9.1187E-07		1.1E-06 J	5.2E-05 U
1,2,3,7,8,9-HxCDD	19408-74-3	µg/L	9.1187E-07		4.8E-05 U	5.2E-05 U
1,2,3,7,8,9-HxCDF	72918-21-9	µg/L	9.1187E-07		4.8E-05 U	5.2E-05 UJ

Table C-2 J.C. Boyle Dispersed Recreation Area - 2 Analytical Water Results

				Location	JBRA-02	JBRA-02
				Sample Date	5/4/2022	5/4/2022
				Sample Type	N	FD
Analyte	CAS	Unit	Groundwater Screening Level			
1,2,3,7,8-PeCDD	40321-76-4	µg/L	9.1187E-08	4.8E-05 U	5.2E-05 U	
1,2,3,7,8-PeCDF	57117-41-6	µg/L	3.03957E-06	4.8E-05 U	5.2E-05 U	
2,3,4,6,7,8-HxCDF	60851-34-5	µg/L	9.1187E-07	4.8E-05 U	5.2E-05 U	
2,3,4,7,8-PeCDF	57117-31-4	µg/L	3.03957E-07	4.8E-05 U	5.2E-05 U	
2,3,7,8-TCDD	1746-01-6	µg/L	9.1187E-08	9.6E-06 U	1E-05 U	
2,3,7,8-TCDF	51207-31-9	µg/L	9.1187E-07	9.6E-06 U	1E-05 U	
OCDD	3268-87-9	µg/L	0.000303957	9.6E-05 UJ	0.0001 UJ	
OCDF	39001-02-0	µg/L	0.000303957	9.6E-05 U	0.0001 U	

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

µg/L = microgram(s) per liter

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Appendix C2

Lab Reports

Provided upon request.

Appendix D

Data Evaluation Report



**Lower Klamath Hydroelectric Project
(FERC No. P-14803)**

Data Quality Evaluation Report

Final

February 2023

PacifiCorp



Contents

Acronyms and Abbreviations.....	iii
1. Introduction	1
2. Analytical Data.....	1
3. Findings	3
3.1 Holding Times	3
3.2 Calibration.....	4
3.3 Method Blanks	4
3.4 Field Blanks	5
3.5 Field Duplicates	5
3.6 Surrogates.....	6
3.7 Internal Standards.....	7
3.8 Laboratory Control Samples.....	7
3.9 Matrix Spike/Matrix Spike Duplicate.....	7
3.10 Laboratory Duplicates.....	8
3.11 Estimated Maximum Possible Concentrations.....	8
3.12 Chain of Custody	8
3.13 Overall Assessment.....	9
4. References.....	11
5. Signature Page.....	12

Attachment

Samples Associated with Data Quality Evaluation Report

Tables

1	Sample Delivery Groups.....	1
2	Analytical Parameters.....	2
3	Data Qualification Summary	10

Acronyms and Abbreviations

DQE	data quality evaluation
DQO	data quality objective
EB	equipment blank
EMPC	estimated maximum possible concentration
EPA	U.S. Environmental Protection Agency
EUCG	Eurofins Calscience Laboratory
FD	field duplicate
Jacobs	Jacobs Engineering Group Inc.
LANC	Eurofins Lancaster Laboratory
LCL	lower control limit
LCS	laboratory control sample
MS/MSD	matrix spike/matrix spike duplicates
PAH	polycyclic aromatic hydrocarbon(s)
Project	Lower Klamath Hydroelectric Project
QC	quality control
RPD	relative percent difference
SIWP	site investigation work plan
STLC	Soluble Threshold Limit Concentration
SVOC	semivolatile organic compound
TAM2	Eurofins TestAmerica Seattle
TAMC	Eurofins TestAmerica West Sac
TB	trip blank
TCLP	toxicity characteristic leaching procedure
TPH	total petroleum hydrocarbon(s)
UCL	upper confidence limit
VOC	volatile organic compound

1. Introduction

The objective of this data quality evaluation (DQE) report is to assess the data quality of analytical results for water and soil samples collected by Jacobs Engineering Group Inc. (Jacobs) on behalf of PacifiCorp during investigation of pre-existing environmental conditions for the Lower Klamath Hydroelectric Project (Project). The Project is divided between sites in California and Oregon. Jacobs and PacifiCorp have prepared separate Site Investigation Work Plans (SIWPs) for the sites in California and Oregon (Jacobs 2021a and 2021b) and a sampling and analysis plan (Appendix A to the California and Oregon SIWPs). Jacobs is currently preparing a site investigation report for the sites in each state to meet Project-specific requirements.

The individual method requirements and guidelines from the U.S. Environmental Protection Agency (EPA) *National Functional Guidelines for Organic Superfund Methods Data Review* (EPA 2020a) and the EPA *National Functional Guidelines for Inorganic Superfund Methods Data Review* (EPA 2020b) were consulted for this evaluation. This DQE report provides a general data quality assessment and a summary of data issues.

2. Analytical Data

This DQE report covers 17 normal water and 308 normal soil samples, 5 water and 30 soil field duplicates (FDs), 16 equipment blanks (EBs), and 21 trip blanks (TBs) for a total of 39,378 individual sample results. Samples were collected between March 8 and May 14, 2022. A list of samples and collection dates is attached to this report. These sample results were reported under 38 sample delivery groups (Table 1). The analyses were performed by Eurofins Calscience Laboratory (EUCG) in Garden Grove, California, Eurofins Lancaster Laboratory (LANC) in Lancaster, Pennsylvania, Eurofins TestAmerica Seattle (TAM2) in Tacoma, Washington, and Eurofins TestAmerica West Sac (TAMC) in West Sacramento, California.

Table 1. Sample Delivery Groups

580-111242-1	580-111242-3	580-111291-1	580-111291-3
580-111310-1	580-111310-4	580-111378-1	580-111378-5
580-111908-1	580-113389-1	580-113389-2	580-113389-3
580-113389-4	580-113448-1	580-113448-2	580-113501-1
580-113501-2	580-113501-3	580-113534-1	580-113534-2
580-113673-1	580-113673-2	580-113717-1	580-113720-1
580-113720-2	580-113785-1	580-113785-2	580-113790-1
580-113790-2	580-113802-1	580-113809-1	580-113809-2
580-113851-1	580-113851-2	580-113862-1	580-113862-2
580-113864-1	580-113864-2		

Samples were collected and delivered by courier to the laboratories for analysis. Samples were analyzed by the laboratories listed above for the one or more of the parameters/methods presented in the California or Oregon SIWPs (Table 2).

Table 2. Analytical Parameters

Parameter	Method	Laboratory
TPH as Gasoline Range Organics	CALUFTMS/SW8015B-P	TAM2; LANC
Metals	SW6010B/SW6020	TAM2
Metals (STLC Leachate)	SW6010B-STLC	TAMC
Metals (TCLP Leachate)	SW1311/SW6010B	TAM2
Mercury	SW7470A/SW7471A	TAM2
Mercury (STLC Leachate)	SW7470A-STLC	TAMC
Ethylene Dibromide/Dibromochloropropane	SW8011	TAM2
TPH as Diesel Range Organics/Extended Range Organics	SW8015B-E	TAM2
Polychlorinated Biphenyls	SW8082	TAM2
Volatile Organic Compounds	SW8260B	TAM2
Volatile Organic Compounds (STLC Leachate)	SW8260B-STLC	EUCG
Semivolatile Organic Compounds	SW8270C	TAM2
Semivolatile Organic Compounds (STLC Leachate)	SW8270C-STLC	TAMC
Polycyclic Aromatic Hydrocarbons	SW8270SIM	TAM2
Dioxins/Furans	SW8290	TAMC

Notes:

Parameters

STLC = Soluble Threshold Limit Concentration
 TPH = total petroleum hydrocarbons
 TCLP = toxicity characteristic leaching procedure

Laboratories

EUCG = Eurofins Calscience Laboratory
 LANC = Eurofins Lancaster Laboratory
 TAM2 = Eurofins TestAmerica Seattle
 TAMC = Eurofins TestAmerica West Sac

The assessment of data includes a review of: (1) the chain-of-custody documentation; (2) holding-time compliance; (3) the required field and laboratory quality control (QC) samples; (4) method blanks; (5) laboratory control samples (LCS); (6) surrogate spike recoveries; (7) matrix spike/matrix spike duplicate (MS/MSD) samples; (8) analytical spike data (for example, post-digestion spikes for metals analyses); (9) initial and continuing calibration information; and (10) other method-specific criteria.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included the review of FDs, EBs, and TBs.

Data flags were assigned according to QC acceptance limits. These flags, as well as the reason for each flag, are entered into the electronic database. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there will be only one final flag. A final flag is applied to the data and is the most conservative of the applied validation flags. The final flag also includes blank sample impacts.

The data flags are defined from most conservative to least as follows:

- R = The result was unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.
- J = Analyte was present but the reported value may not be accurate or precise (estimated). The result was estimated due to either being less than the referenced reporting limit but greater than the method detection limit or due to a QC exceedance.
- UJ = Analyte was not detected and the specified detection limit may not be accurate or precise (estimated).
- U = Analyte was not detected at the specified detection limit.

3. Findings

The overall summaries of the data validation findings are contained in the following sections. Qualified data are presented in Table 3.

3.1 Holding Times

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

- The holding time for the STLC leachate of mercury by method SW7470A was exceeded by 15 to 17 days for 22 soil samples. Samples were received by the secondary laboratory after holding time had been exceeded. Analysis was also performed by laboratory on a precautionary basis due to lab capacity issues. After review of the final results for total mercury, the analysis of method SW7470A-STLC was not required. Because hold times had been exceeded, one detected sample result was qualified as an estimated value and flagged "J" and 21 nondetected sample results were qualified as estimated values and flagged "UJ."
- The holding time for 1,2,3-trichloropropane, 1,2-dibromo-3-chloropropane, and ethylene dibromide by method SW8011 was exceeded by 1 to 14 days for one groundwater sample and 112 soil samples because of a laboratory error. The laboratory utilized a holding time of 14 days from sample collection to extraction, then 40 days from extraction to analysis while the methodology recommends using a 14-day holding time from sample collection to analysis like other volatile organic compound (VOC) methods (for example, SW8260B). The data were evaluated based on SW8011 methodology recommendation. Seven detected sample results were qualified as estimated and flagged "J;" 326 nondetected sample results were qualified as estimated and flagged "UJ." One sample was analyzed more than 14 days past the holding time. The associated three sample results were nondetect and were rejected from project use and flagged "R."
- The sample preparation holding time for TPH as Diesel Range Organics/Extended Range Organics by method SW8015B-E was exceeded by 13 to 15 days for two soil samples. Samples were released from hold after the holding time had been exceeded. Three detected sample results were qualified as estimated and flagged "J;" one nondetected sample result was qualified as estimated and flagged "UJ." One water sample was reprepared 2 days past the sample preparation holding because of a laboratory QC exceedance in the original sample batch. One detected sample result was qualified as estimated and flagged "J."
- The sample preparation holding time for benzoic acid by method SW8270C was exceeded by 3 days for 13 soil samples. The samples were reprepared outside holding time because of laboratory QC exceedances in the original sample batch. A total of 13 nondetected sample results were qualified as estimated and flagged "UJ."

- The holding time for the STLC leachate of semivolatile organic compounds (SVOC) by method SW8270C-STLC was exceeded by 4 days for 4 soil samples. Analysis was performed by laboratory on a precautionary basis because of lab capacity issues. SW8270C-STLC analysis was only required for two of the four samples due to pentachlorophenol exceeding STLC limits in the original SW8270C analysis. A total of 264 nondetected sample results were qualified as estimated and flagged "UJ."
- The sample preparation holding time for polycyclic aromatic hydrocarbons (PAH) by method SW8270SIM was exceeded by 6 days for one soil sample, and 2 days for two water samples. The samples were reprepared outside holding time because of laboratory QC exceedances in the original sample batch. A total of 54 nondetected sample results were qualified as estimated and flagged "UJ."
- The sample preparation holding time for dioxins/furans by method SW8290 was exceeded by 1 day for two soil samples because of a laboratory error. A total of 12 detected sample results were qualified as estimated and flagged "J;" 22 nondetected sample results were qualified as estimated and flagged "UJ."

3.2 Calibration

Initial and continuing calibration criteria were met, with the following exceptions:

- Acetone or vinyl acetate in the initial calibration verification standard by method SW8260B were either less than or greater than the acceptance criteria. Two detected sample results were qualified as estimated and flagged "J;" six nondetected sample results were qualified as estimated and flagged "UJ."
- Benzo(a)pyrene in the initial calibration verification standard by method SW8270C was either less than or greater than the acceptance criteria. A total of 14 detected sample results were qualified as estimated and flagged "J;" 20 nondetected sample results were qualified as estimated and flagged "UJ."
- Several VOCs in one or more continuing calibration verification standards by method SW8260B were either less than or greater than the acceptance criteria. A total of 10 detected sample results were qualified as estimated and flagged "J;" 60 nondetected sample results were qualified as estimated and flagged "UJ."
- Several SVOCs in one or more continuing calibration verification standards by method SW8270C were either less than or greater than the acceptance criteria. Three detected sample results were qualified as estimated and flagged "J;" 79 nondetected sample results were qualified as estimated and flagged "UJ."

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:

- Boron was detected less than the reporting limit in three method blanks for method SW6010B. A total of 18 associated results less than five times the blank concentrations were qualified as not detected (EPA 2020b) and flagged "U."
- Beryllium, chromium, copper, selenium, silver, or zinc were detected less than the reporting limit in three method blanks for method SW6010B-STLC. A total of 44 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Several VOCs were detected less than the reporting limit in three method blanks for method SW8260B. A total of 36 associated results less than five times the blank concentrations were qualified as not detected (EPA 2020a) and flagged "U."

- Several SVOCs were detected less than the reporting limit in 12 method blanks for method SW8270C. A total of 223 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Fluorene was detected less than the reporting limit in one method blank for method SW8270SIM. Two associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Dioxins/furans were detected less than the reporting limit in 11 method blanks for method SW8290. A total of 311 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."

3.4 Field Blanks

Field blanks consist of Equipment Blanks (EBs) collected to evaluate the potential for contamination from equipment between sites and Travel Blanks (TBs) included in sample shipping containers to evaluate contamination during transit. A total of 16 EBs and 20 TBs were collected and analyzed and were free of contamination that would affect the sample results with the following exceptions:

- Boron was detected less than the reporting limit in three EBs for method SW6010B. A total of 31 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Molybdenum or nickel were detected less than the reporting limit in four EBs for method SW6020. A total of 50 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- TPH as Diesel Range Organics/Extended Range Organics were detected greater than the reporting limit in four EBs for method SW8015B-E. Eight associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Several VOCs were detected either less than or greater than the reporting limit in two EBs or TBs for method SW8260B. A total of 22 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Bis(2-ethylhexyl) phthalate was detected less than the reporting limit in five EBs for method SW8270C. A total of 66 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Several PAHs were detected less than the reporting limit in one EB for method SW8270SIM. Thirteen associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Dioxins/furans were detected less than the reporting limit in eight EBs for method SW8290. A total of 92 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."

3.5 Field Duplicates

Five water and 30 soil FD sets were collected and analyzed during this event. Precision criteria are based on laboratory established precision values. All precision criteria were met, with the following exceptions:

- The TCLP leachate for lead in one soil FD set for method SW1311/SW6010B exceeded the relative percent difference (RPD) limit of less than 20 percent between the native and field duplicate results. Two detected sample results were qualified as estimated and flagged "J."

- The STLC leachate for vanadium or lead in two soil FD sets for method SW6010B-STLC exceeded the RPD limit of less than 20 percent between the native and field duplicate results. Four detected sample results were qualified as estimated and flagged "J."
- Several metal compounds in two water and 19 soil FD sets for method SW6020 exceeded the RPD limit of less than 20 percent between the native and field duplicate results. A total of 182 detected sample results were qualified as estimated and flagged "J."
- Several SVOCs in six soil FD sets for method SW8270C exceeded the RPD limit of less than 50 percent between the native and field duplicate results. A total of 62 detected sample results were qualified as estimated and flagged "J;" four nondetected sample results were qualified as estimated and flagged "UJ."
- Several PAHs in one water and one soil FD sets for method SW8270SIM exceeded the RPD limit of less than 50 percent between the native and field duplicate results. A total of 19 detected sample results were qualified as estimated and flagged "J;" nine nondetected sample results were qualified as estimated and flagged "UJ."
- Four dioxin or furan compounds in one soil FD set for method SW8290 exceeded the RPD limit of less than 40 percent between the native and field duplicate results. Eight detected sample results were qualified as estimated and flagged "J."

3.6 Surrogates

Surrogate spikes were analyzed in each sample for all required methods. All acceptance criteria were met, with the following exceptions:

- Surrogate recoveries were less than the lower control limit (LCL) in five soil samples for method SW8011. Fifteen associated nondetected sample results were qualified as estimated and flagged "UJ." Surrogate recoveries were less than 10 percent in one soil sample. Three nondetected sample results were rejected from project use and flagged "R."
- Surrogate recoveries were less than the LCL in three water and two soil samples for method SW8015B-E. Five associated detected sample results were qualified as estimated and flagged "J;" Three nondetected sample results were qualified as estimated and flagged "UJ."
- Surrogate recoveries were less than the LCL in three water and four soil samples for method SW8082. One associated detected sample result was qualified as estimated and flagged "J;" 61 nondetected sample results were qualified as estimated and flagged "UJ."
- Surrogate recoveries were either less than the LCL or greater than the upper confidence limit (UCL) in two water and 32 soil samples for method SW8260B. A total of 43 associated detected sample results were qualified as estimated and flagged "J" and 1,009 nondetected sample results were qualified as estimated and flagged "UJ."
- Surrogate recoveries were less than the LCL in 21 soil samples for method SW8270C. A total of 63 associated detected sample results were qualified as estimated and flagged "J;" 493 nondetected sample results were qualified as estimated and flagged "UJ." Surrogate recoveries were less than 10 percent in three soil samples. A total of 19 nondetected sample results were rejected from project use and flagged "R."
- Surrogate recoveries were less than the LCL in seven soil samples for method SW8290. Three associated detected sample results were qualified as estimated and flagged "J;" five nondetected sample results were qualified as estimated and flagged "UJ."

3.7 Internal Standards

Internal standards are compounds that have similar properties as the analytes of interest but are not expected to occur naturally in the samples. Some methods require the use of internal standards to compensate for losses during injection or purging or losses due to viscosity. A measured amount of the internal standard is added to the standards, the samples, and QC samples following preparation. Internal standards were analyzed for all required methods. All acceptance criteria were met.

3.8 Laboratory Control Samples

LCS and LCS duplicates were analyzed as required. Accuracy and precision criteria were met, with the following exceptions:

- The recovery for 1,2-dibromo-3-chloropropane in one soil LCS was greater than the UCL for method SW8011. One associated detected sample result was qualified as estimated and flagged "J."
- The recovery for TPH as Extended Range Organics in one water LCS was less than the LCL for method SW8015B-E. One associated detected sample result was qualified as estimated and flagged "J;" three nondetected sample results were qualified as estimated and flagged "UJ."
- The RPD for Aroclor-1260 in one soil LCS/LCS duplicate exceeded the control limit for method SW8082. One associated detected sample result was qualified as estimated and flagged "J."
- The recoveries for several VOCs in one or more soil LCS were either less than the LCL or greater than the UCL for method SW8260B. Nine associated detected sample results were qualified as estimated and flagged "J;" 119 nondetected sample results were qualified as estimated and flagged "UJ."
- The recoveries for several SVOCs in one or more soil or water LCS were either less than the LCL or greater than the UCL for method SW8270C. A total of 57 associated detected sample results were qualified as estimated and flagged "J;" 372 nondetected sample results were qualified as estimated and flagged "UJ." The recoveries of either benzoic acid or pyridine were less than 10 percent in one or more LCS. A total of 21 nondetected sample results were rejected from project use and flagged "R."
- The RPD for several SVOCs in one or more soil LCS/LCS duplicate exceeded the control limit for method SW8270C. A total of 20 associated detected sample results were qualified as estimated and flagged "J;" two nondetected sample results were qualified as estimated and flagged "UJ."
- The recoveries for several PAHs in one or more soil LCS were less than the LCL for method SW8270SIM. A total of 25 associated detected sample results were qualified as estimated and flagged "J;" 23 nondetected sample results were qualified as estimated and flagged "UJ."

3.9 Matrix Spike/Matrix Spike Duplicate

The results of MS/MSD analyses provide information about the possible influence of the matrix on either accuracy or precision of the measurements. A total of 47 MS/MSD sets were submitted by the field team or selected by the laboratory. All acceptance criteria were met, with the following exceptions:

- The recovery for boron in five soil MS/MSD sets was less than the LCL for method SW6010B. Three detected native sample results were qualified as estimated and flagged "J;" two nondetected native sample results were qualified as estimated and flagged "UJ."
- The recoveries for several metal compounds in 20 soil MS/MSD sets were either less than the LCL or greater than the UCL for method SW6020. A total of 86 detected native sample results were qualified as estimated and flagged "J."
- The RPD for several metal compounds in five soil MS/MSD sets exceeded the control limit for method SW6020. A total of 24 detected native sample results were qualified as estimated and flagged "J."

- The recovery for the STLC leachate of mercury in one soil MSD was less than the LCL for method SW7470A. One detected native sample result was qualified as estimated and flagged "J."
- The recovery for mercury in one soil MS/MSD set was less than the LCL for method SW7471A. One detected native sample result was qualified as estimated and flagged "J."
- The recovery for TPH as Diesel Range Organics/Extended Range Organics in one water and two soil MS/MSD sets were either less than the LCL or greater than the UCL for method SW8015B-E. Four detected native sample results were qualified as estimated and flagged "J."
- The RPD for TPH as Diesel Range Organics/Extended Range Organics in one soil MS/MSD set exceeded the control limit for method SW8015B-E. Two detected native sample results were qualified as estimated and flagged "J."
- The recoveries for several VOCs in 12 soil MS/MSD sets were either less than the LCL or greater than the UCL for method SW8260B. One detected native sample result was qualified as estimated and flagged "J;" 477 nondetected native sample results were qualified as estimated and flagged "UJ." The recoveries for several VOCs in two soil MS/MSD sets were less than 10 percent. Six nondetected native sample results were rejected from project use and flagged "R."
- The recoveries for several SVOCs in 14 soil MS/MSD sets were either less than the LCL or greater than the UCL for method SW8270C. Twelve detected native sample results were qualified as estimated and flagged "J;" 74 nondetected native sample results were qualified as estimated and flagged "UJ." The recoveries for several SVOCs in seven soil MS/MSD sets were less than 10 percent. A total of 14 nondetected native sample results were rejected from project use and flagged "R."
- The RPD for several SVOCs in five soil MS/MSD sets exceeded the control limit for method SW8270C. A total of 22 detected native sample results were qualified as estimated and flagged "J."
- The recovery for several PAHs in one water and two soil MS/MSD sets were less than the LCL for method SW8270SIM. Five nondetected native sample results were qualified as estimated and flagged "UJ."
- The recoveries or RPD for two dioxin compounds in one soil MS/MSD set were greater than the UCL for method SW8290. Two detected native sample results were qualified as estimated and flagged "J."

3.10 Laboratory Duplicates

Laboratory duplicate sets were analyzed at the proper frequency for the required methods. All precision criteria were met, with the exception of RPDs for several metal compounds in five laboratory duplicates exceeded the control limit for method SW6020. A total of 18 detected native sample results were qualified as estimated and flagged "J."

3.11 Estimated Maximum Possible Concentrations

Estimated maximum possible concentrations (EMPCs) were reported for Method SW8290 where ion abundance ratio criteria were not met. One or more analytes in 4 water or 69 soil samples exceedance ion abundance ratio criteria. A total of 205 results were qualified as estimated and flagged "UJ."

3.12 Chain of Custody

Each sample was documented in a completed chain-of-custody form and received at the laboratory within temperature criteria and in good condition.

3.13 Overall Assessment

The final activity in the DQE is an assessment of whether the data meet the required precision, accuracy, representativeness, completeness, and comparability (PARCC). 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 for the above defined events:

- 1) A total of 65 results for Methods SW8011, SW8260B, or SW8270C were rejected due to low LCS, MS/MSD, or surrogate recoveries, or for hold-time exceedances. The completeness goal of 95 percent for water samples or 90 percent for soil samples were met for all method/analyte combinations, except for benzoic acid which was 86 percent complete in soil. Benzoic acid is a historically poor performing analyte; however, based on common industrial uses this analyte is not considered to be a COPC for this site.
- 2) Approximately 1.7 percent of the data were qualified due to associated method blank and EB contamination. Approximately 1.8 percent of the data were qualified as estimated because of holding-time issues.
- 3) Approximately 11 percent of the data were qualified as estimated due to quality control exceedances that included: FD and laboratory RPD exceedances, LCS recovery and RPD exceedances, surrogate and internal standard recovery exceedances, MS/MSD recovery and RPD exceedances, calibration standard exceedances, or ion ratio exceedances resulting in reported EMPC values.
- 4) Overall, the precision and accuracy of the data, as measured by laboratory and field quality control indicators, indicates that the PARCC were met. Data are usable for project decision-making, considering the biases outlined in this data quality evaluation, except for the rejected data.
- 5) Representativeness and comparability of the data was 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 events.
- 6) Sensitivity is a measurement based on the analytical instrument method reporting limits determined by each subcontract laboratory and is ensured through compliance with reporting limits being equivalent to, or less than the project screening levels. Any nondetect results that were reported by the laboratory, or were flagged nondetect due to blank contamination, have been evaluated against the project screening levels as discussed in the work plan.

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-01-0.5-20220310	SW6020	Barium	67	mg/Kg	J	LabDupRPD
C1DP-01-0.5-20220310	SW6020	Chromium	45	mg/Kg	J	LabDupRPD; SD>UCL
C1DP-01-0.5-20220310	SW6020	Copper	50	mg/Kg	J	MS>UCL; SD>UCL
C1DP-01-0.5-20220310	SW6020	Iron	33000	mg/Kg	J	LabDupRPD
C1DP-01-0.5-20220310	SW6020	Lead	5.3	mg/Kg	J	LabDupRPD
C1DP-01-0.5-20220310	SW6020	Manganese	490	mg/Kg	J	LabDupRPD
C1DP-01-0.5-20220310	SW6020	Nickel	53	mg/Kg	J	SD>UCL
C1DP-01-0.5-20220310	SW6020	Vanadium	84	mg/Kg	J	LabDupRPD;MS>UCL; SD>UCL
C1DP-01-0.5-20220310	SW6020	Zinc	25	mg/Kg	J	LabDupRPD
C1DP-02-0.5-20220310	SW6020	Lead	5.9	mg/Kg	J	FD>RPD
C1DP-02-0.5-20220310-FD	SW6020	Lead	3.3	mg/Kg	J	FD>RPD
C1DP-04-0.5-20220311	SW6010B	Boron	4	mg/Kg	U	EB<RL
C1DP-04-0.5-20220311	SW6020	Molybdenum	0.092	mg/Kg	U	EB<RL
C1DP-04-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
C1DP-04-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-04-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-04-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.032	mg/Kg	U	EB<RL; LB<RL
C1DP-04-0.5-20220311	SW8270C	Di-n-butyl phthalate	0.0081	mg/Kg	U	LB<RL
C1DP-04-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000074	mg/Kg	U	LB<RL
C1DP-04-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000025	mg/Kg	UJ	EMPC
C1DP-04-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000048	mg/Kg	U	LB<RL
C1DP-04-1.5-20220311	SW6010B	Boron	2.7	mg/Kg	U	EB<RL
C1DP-04-1.5-20220311	SW6020	Molybdenum	0.063	mg/Kg	U	EB<RL
C1DP-04-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
C1DP-04-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-04-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-04-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.024	mg/Kg	U	EB<RL; LB<RL
C1DP-04-1.5-20220311	SW8270C	Di-n-butyl phthalate	0.006	mg/Kg	U	LB<RL
C1DP-04-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000089	mg/Kg	U	LB<RL
C1DP-04-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.00000049	mg/Kg	U	LB<RL
C1DP-04-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000043	mg/Kg	U	LB<RL
C1DP-04-2.5-20220311	SW6010B	Boron	2.5	mg/Kg	U	EB<RL
C1DP-04-2.5-20220311	SW6020	Molybdenum	0.12	mg/Kg	U	EB<RL
C1DP-04-2.5-20220311	SW8011	1,2,3-Trichloropropane	0.000066	mg/Kg	UJ	HTa>UCL
C1DP-04-2.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-04-2.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-04-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.028	mg/Kg	U	EB<RL; LB<RL
C1DP-04-2.5-20220311	SW8270C	Di-n-butyl phthalate	0.0071	mg/Kg	U	LB<RL
C1DP-04-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000023	mg/Kg	U	LB<RL
C1DP-04-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000012	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-04-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000042	mg/Kg	U	LB<RL
C1DP-04-2.5-20220311	SW8290	OCDF	0.00000008	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-05-0.5-20220311	SW6010B	Boron	8.7	mg/Kg	U	EB<RL
C1DP-05-0.5-20220311	SW6020	Molybdenum	0.19	mg/Kg	U	EB<RL
C1DP-05-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000069	mg/Kg	UJ	HTa>UCL
C1DP-05-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-05-0.5-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-05-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.025	mg/Kg	U	EB<RL; LB<RL
C1DP-05-0.5-20220311	SW8270C	Di-n-butyl phthalate	0.0086	mg/Kg	U	LB<RL
C1DP-05-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000012	mg/Kg	UJ	EMPC
C1DP-05-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000004	mg/Kg	U	EB<RL; LB<RL
C1DP-05-1.5-20220311	SW6010B	Boron	3.7	mg/Kg	U	EB<RL
C1DP-05-1.5-20220311	SW6020	Molybdenum	0.075	mg/Kg	U	EB<RL
C1DP-05-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C1DP-05-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-05-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-05-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.026	mg/Kg	U	EB<RL; LB<RL
C1DP-05-1.5-20220311	SW8270C	Di-n-butyl phthalate	0.0061	mg/Kg	U	LB<RL
C1DP-05-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000005	mg/Kg	UJ	EMPC
C1DP-05-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000003	mg/Kg	U	EB<RL; LB<RL
C1DP-05-2.5-20220311	SW6020	Molybdenum	0.14	mg/Kg	U	EB<RL
C1DP-05-2.5-20220311	SW8011	1,2,3-Trichloropropane	0.000065	mg/Kg	UJ	HTa>UCL
C1DP-05-2.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.0000098	mg/Kg	UJ	HTa>UCL
C1DP-05-2.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-05-2.5-20220311	SW8270C	2,4,5-Trichlorophenol	0.00083	mg/Kg	UJ	Sur<LCL
C1DP-05-2.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL; Sur<LCL
C1DP-05-2.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL; Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-05-2.5-20220311	SW8270C	2-Methylnaphthalene	0.0009	mg/Kg	UJ	LCS<LCL
C1DP-05-2.5-20220311	SW8270C	4,6-Dinitro-2-methylphenol	0.01	mg/Kg	UJ	Sur<LCL
C1DP-05-2.5-20220311	SW8270C	4-Chloro-3-methylphenol	0.0034	mg/Kg	UJ	Sur<LCL
C1DP-05-2.5-20220311	SW8270C	4-Nitrophenol	0.018	mg/Kg	UJ	Sur<LCL
C1DP-05-2.5-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTp>UCL
C1DP-05-2.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-05-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.011	mg/Kg	U	EB<RL; LB<RL
C1DP-05-2.5-20220311	SW8270C	Pentachlorophenol	0.0064	mg/Kg	UJ	Sur<LCL
C1DP-05-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000005	mg/Kg	U	LB<RL
C1DP-05-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000018	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-05-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000004	mg/Kg	U	EB<RL; LB<RL
C1DP-06-0.5-20220311	SW6020	Molybdenum	0.15	mg/Kg	U	EB<RL
C1DP-06-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL; Sur<LCL
C1DP-06-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL; Sur<LCL
C1DP-06-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL; Sur<LCL
C1DP-06-0.5-20220311	SW8260B	2-Butanone (MEK)	0.029	mg/Kg	J	Sur>UCL
C1DP-06-0.5-20220311	SW8260B	Acetone	0.41	mg/Kg	J	Sur>UCL
C1DP-06-0.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0012	mg/Kg	UJ	LCS<LCL
C1DP-06-0.5-20220311	SW8270C	2,4-Dichlorophenol	0.0026	mg/Kg	UJ	LCS<LCL
C1DP-06-0.5-20220311	SW8270C	2-Methylnaphthalene	0.0045	mg/Kg	J	LCS<LCL
C1DP-06-0.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	UJ	HTp>UCL
C1DP-06-0.5-20220311	SW8270C	Benzyl alcohol	0.0047	mg/Kg	UJ	CCV<LCL
C1DP-06-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.015	mg/Kg	U	EB<RL; LB<RL
C1DP-06-0.5-20220311	SW8270C	Di-n-butyl phthalate	0.0027	mg/Kg	U	LB<RL
C1DP-06-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000013	mg/Kg	U	LB<RL
C1DP-06-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000043	mg/Kg	U	LB<RL
C1DP-06-0.5-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.0000013	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311	SW6010B	Boron	2.8	mg/Kg	U	EB<RL
C1DP-06-1.5-20220311	SW6020	Molybdenum	0.078	mg/Kg	U	EB<RL
C1DP-06-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000061	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.0000092	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311	SW8011	Ethylene Dibromide	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311	SW8270C	2,4,5-Trichlorophenol	0.00083	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL; Sur<LCL
C1DP-06-1.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-06-1.5-20220311	SW8270C	2,4-Dinitrophenol	0.06	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8270C	2-Methylnaphthalene	0.0009	mg/Kg	UJ	LCS<LCL
C1DP-06-1.5-20220311	SW8270C	4,6-Dinitro-2-methylphenol	0.01	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8270C	4-Chloro-3-methylphenol	0.0034	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8270C	4-Nitrophenol	0.018	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTp>UCL
C1DP-06-1.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-06-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.0076	mg/Kg	U	EB<RL; LB<RL
C1DP-06-1.5-20220311	SW8270C	Pentachlorophenol	0.0064	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000008	mg/Kg	U	LB<RL
C1DP-06-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000065	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000013	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000035	mg/Kg	U	EB<RL; LB<RL
C1DP-06-1.5-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.0000001	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311-FD	SW6010B	Boron	3.1	mg/Kg	U	EB<RL
C1DP-06-1.5-20220311-FD	SW6020	Molybdenum	0.084	mg/Kg	U	EB<RL
C1DP-06-1.5-20220311-FD	SW8011	1,2,3-Trichloropropane	0.00006	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.0000091	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311-FD	SW8011	Ethylene Dibromide	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311-FD	SW8260B	Acetone	0.027	mg/Kg	J	Sur>UCL
C1DP-06-1.5-20220311-FD	SW8260B	Dichlorodifluoromethane	0.00056	mg/Kg	UJ	CCV<LCL
C1DP-06-1.5-20220311-FD	SW8260B	Methylene Chloride	0.011	mg/Kg	UJ	CCV<LCL
C1DP-06-1.5-20220311-FD	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	CCV<LCL
C1DP-06-1.5-20220311-FD	SW8270C	2,4,5-Trichlorophenol	0.00082	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL; Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	2,4-Dichlorophenol	0.0028	mg/Kg	UJ	LCS<LCL
C1DP-06-1.5-20220311-FD	SW8270C	2,4-Dinitrophenol	0.06	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	2-Methylnaphthalene	0.00095	mg/Kg	J	LCS<LCL
C1DP-06-1.5-20220311-FD	SW8270C	4,6-Dinitro-2-methylphenol	0.01	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	4-Chloro-3-methylphenol	0.0034	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	4-Nitrophenol	0.017	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	Benzoic acid	0.12	mg/Kg	UJ	HTp>UCL
C1DP-06-1.5-20220311-FD	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-06-1.5-20220311-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.016	mg/Kg	U	EB<RL
C1DP-06-1.5-20220311-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.016	mg/Kg	U	LB<RL
C1DP-06-1.5-20220311-FD	SW8270C	Pentachlorophenol	0.0064	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000022	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311-FD	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000022	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-06-1.5-20220311-FD	SW8290	1,2,3,4,7,8-HxCDF	0.0000037	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311-FD	SW8290	1,2,3,7,8,9-HxCDF	0.0000041	mg/Kg	UJ	EB<RL
C1DP-06-1.5-20220311-FD	SW8290	1,2,3,7,8,9-HxCDF	0.0000041	mg/Kg	U	LB<RL
C1DP-06-4.5-20220311	SW6010B	Boron	2.5	mg/Kg	U	EB<RL
C1DP-06-4.5-20220311	SW6020	Molybdenum	0.23	mg/Kg	U	EB<RL
C1DP-06-4.5-20220311	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C1DP-06-4.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-06-4.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-06-4.5-20220311	SW8260B	Acetone	0.011	mg/Kg	J	Sur>UCL
C1DP-06-4.5-20220311	SW8260B	Dichlorodifluoromethane	0.00061	mg/Kg	UJ	CCV<LCL
C1DP-06-4.5-20220311	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	CCV<LCL
C1DP-06-4.5-20220311	SW8260B	Vinyl acetate	0.0019	mg/Kg	UJ	CCV<LCL
C1DP-06-4.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-06-4.5-20220311	SW8270C	2,4-Dichlorophenol	0.0028	mg/Kg	UJ	LCS<LCL
C1DP-06-4.5-20220311	SW8270C	2-Methylnaphthalene	0.00089	mg/Kg	UJ	LCS<LCL
C1DP-06-4.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	UJ	HTp>UCL
C1DP-06-4.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-06-4.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.016	mg/Kg	U	EB<RL
C1DP-06-4.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000066	mg/Kg	U	LB<RL
C1DP-06-4.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000032	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-06-4.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.0000012	mg/Kg	UJ	EMPC
C1DP-06-4.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.0000035	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-06-4.5-20220311	SW8290	OCDF	0.0000008	mg/Kg	U	EB<RL; LB<RL
C1DP-06-6.0-20220311	SW6010B	Boron	2.8	mg/Kg	U	EB<RL
C1DP-06-6.0-20220311	SW6020	Molybdenum	0.26	mg/Kg	U	EB<RL
C1DP-06-6.0-20220311	SW8011	1,2,3-Trichloropropane	0.000064	mg/Kg	UJ	HTa>UCL
C1DP-06-6.0-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000097	mg/Kg	UJ	HTa>UCL
C1DP-06-6.0-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-06-6.0-20220311	SW8270C	2,4,6-Trichlorophenol	0.0014	mg/Kg	UJ	LCS<LCL
C1DP-06-6.0-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-06-6.0-20220311	SW8270C	2-Methylnaphthalene	0.00092	mg/Kg	UJ	LCS<LCL
C1DP-06-6.0-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTp>UCL
C1DP-06-6.0-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-06-6.0-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.0096	mg/Kg	UJ	EB<RL; LB<RL
C1DP-06-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000034	mg/Kg	U	EMPC; EB<RL; LB<RL (U)
C1DP-06-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000016	mg/Kg	U	LB<RL
C1DP-06-6.0-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000012	mg/Kg	U	LB<RL
C1DP-06-6.0-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.0000022	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-06-6.0-20220311	SW8290	OCDF	0.0000049	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-07-0.5-20220311	SW6010B	Boron	2.9	mg/Kg	U	EB<RL
C1DP-07-0.5-20220311	SW6020	Barium	20	mg/Kg	J	MSRPD
C1DP-07-0.5-20220311	SW6020	Copper	61	mg/Kg	J	MS>UCL; SD>UCL
C1DP-07-0.5-20220311	SW6020	Molybdenum	0.19	mg/Kg	U	EB<RL
C1DP-07-0.5-20220311	SW6020	Vanadium	36	mg/Kg	J	SD>UCL
C1DP-07-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.00008	mg/Kg	UJ	HTa>UCL
C1DP-07-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-07-0.5-20220311	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C1DP-07-0.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.00095	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.00097	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00068	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.0019	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0021	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,3-Dichlorobenzene	0.0018	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,4-Dichlorobenzene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	2-Chlorotoluene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	2-Hexanone	0.0063	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	4-Chlorotoluene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Bromobenzene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Bromomethane	0.00034	mg/Kg	R	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Chlorobenzene	0.0004	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Chloroethane	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Chloromethane	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-07-0.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00032	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00079	mg/Kg	R	MS<LCL; SD<LCL; CCV<LCL (UJ)
C1DP-07-0.5-20220311	SW8260B	Ethylbenzene	0.00066	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Hexachlorobutadiene	0.00097	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Isopropylbenzene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Methylene Chloride	0.016	mg/Kg	UJ	CCV<LCL
C1DP-07-0.5-20220311	SW8260B	m-Xylene & p-Xylene	0.0009	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Naphthalene	0.0029	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	n-Butylbenzene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	N-Propylbenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	o-Xylene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	p-Isopropyltoluene	0.00064	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	sec-Butylbenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Styrene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	tert-Butylbenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Tetrachloroethene	0.00064	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	Toluene	0.0021	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.00097	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	Trichloroethene	0.00048	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	Trichlorofluoromethane	0.00048	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Vinyl acetate	0.0024	mg/Kg	R	MS<LCL; SD<LCL; CCV<LCL (UJ)
C1DP-07-0.5-20220311	SW8260B	Vinyl chloride	0.00048	mg/Kg	R	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Xylenes, Total	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8270C	1,2-Dichlorobenzene	0.00056	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8270C	1,4-Dichlorobenzene	0.00094	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C1DP-07-0.5-20220311	SW8270C	2,4-Dichlorophenol	0.0032	mg/Kg	UJ	LCS<LCL
C1DP-07-0.5-20220311	SW8270C	2-Methylnaphthalene	0.00099	mg/Kg	UJ	LCS<LCL; MS<LCL
C1DP-07-0.5-20220311	SW8270C	Benzoic acid	0.14	mg/Kg	R	MS<LCL; SD<LCL; HTP>UCL (UJ)
C1DP-07-0.5-20220311	SW8270C	Benzyl alcohol	0.0056	mg/Kg	UJ	CCV<LCL
C1DP-07-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.00000042	mg/Kg	UJ	EMPC
C1DP-07-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.00000025	mg/Kg	U	LB<RL
C1DP-07-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000055	mg/Kg	U	LB<RL
C1DP-07-1.5-20220311	SW6020	Molybdenum	0.14	mg/Kg	U	EB<RL
C1DP-07-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.00007	mg/Kg	UJ	HTa>UCL
C1DP-07-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-07-1.5-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-07-1.5-20220311	SW8260B	Dichlorodifluoromethane	0.00079	mg/Kg	UJ	CCV<LCL
C1DP-07-1.5-20220311	SW8260B	Methylene Chloride	0.016	mg/Kg	UJ	CCV<LCL
C1DP-07-1.5-20220311	SW8260B	Vinyl acetate	0.0024	mg/Kg	UJ	CCV<LCL
C1DP-07-1.5-20220311	SW8270C	2,4,5-Trichlorophenol	0.00083	mg/Kg	UJ	Sur<LCL
C1DP-07-1.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL; Sur<LCL
C1DP-07-1.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-07-1.5-20220311	SW8270C	2,4-Dinitrophenol	0.06	mg/Kg	UJ	Sur<LCL
C1DP-07-1.5-20220311	SW8270C	2-Methylnaphthalene	0.00091	mg/Kg	UJ	LCS<LCL
C1DP-07-1.5-20220311	SW8270C	4,6-Dinitro-2-methylphenol	0.01	mg/Kg	UJ	Sur<LCL
C1DP-07-1.5-20220311	SW8270C	4-Chloro-3-methylphenol	0.0034	mg/Kg	UJ	Sur<LCL
C1DP-07-1.5-20220311	SW8270C	4-Nitrophenol	0.018	mg/Kg	UJ	Sur>UCL
C1DP-07-1.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	UJ	HTp>UCL
C1DP-07-1.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-07-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	EB<RL; LB<RL
C1DP-07-1.5-20220311	SW8270C	Pentachlorophenol	0.0065	mg/Kg	UJ	Sur<LCL
C1DP-07-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000059	mg/Kg	U	LB<RL
C1DP-07-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000037	mg/Kg	U	LB<RL
C1DP-07-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000018	mg/Kg	UJ	EMPC
C1DP-07-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000019	mg/Kg	UJ	EMPC
C1DP-07-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000041	mg/Kg	U	EB<RL; LB<RL
C1DP-07-2.5-20220311	SW6020	Molybdenum	0.14	mg/Kg	U	EB<RL
C1DP-07-2.5-20220311	SW8260B	Dichlorodifluoromethane	0.00062	mg/Kg	UJ	CCV<LCL
C1DP-07-2.5-20220311	SW8260B	Methylene Chloride	0.013	mg/Kg	UJ	CCV<LCL
C1DP-07-2.5-20220311	SW8260B	Vinyl acetate	0.0019	mg/Kg	UJ	CCV<LCL
C1DP-07-2.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-07-2.5-20220311	SW8270C	2,4-Dichlorophenol	0.0027	mg/Kg	UJ	LCS<LCL
C1DP-07-2.5-20220311	SW8270C	2-Methylnaphthalene	0.00086	mg/Kg	UJ	LCS<LCL
C1DP-07-2.5-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-07-2.5-20220311	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-07-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C1DP-07-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000012	mg/Kg	U	LB<RL
C1DP-07-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000004	mg/Kg	U	LB<RL
C1DP-07-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000019	mg/Kg	U	LB<RL
C1DP-07-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000034	mg/Kg	U	EB<RL; LB<RL
C1DP-07-2.5-20220311	SW8290	OCDF	0.0000013	mg/Kg	UJ	EMPC
C1DP-08-0.5-20220311	SW6020	Molybdenum	0.11	mg/Kg	U	EB<RL
C1DP-08-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00059	mg/Kg	UJ	CCV<LCL
C1DP-08-0.5-20220311	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	CCV<LCL
C1DP-08-0.5-20220311	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	CCV<LCL
C1DP-08-0.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-08-0.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-08-0.5-20220311	SW8270C	2-Methylnaphthalene	0.0009	mg/Kg	UJ	LCS<LCL
C1DP-08-0.5-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTp>UCL
C1DP-08-0.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-08-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	U	EB<RL; LB<RL
C1DP-08-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000064	mg/Kg	U	LB<RL
C1DP-08-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000042	mg/Kg	U	LB<RL
C1DP-08-1.5-20220311	SW6020	Molybdenum	0.14	mg/Kg	U	EB<RL
C1DP-08-1.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.00077	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1,1-Trichloroethane	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1,2,2-Tetrachloroethane	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00068	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1,2-Trichloroethane	0.00033	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1-Dichloroethane	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1-Dichloroethene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1-Dichloropropene	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.00079	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2,3-Trichloropropane	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00055	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.0016	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2-Dibromo-3-Chloropropane	0.0021	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2-Dibromoethane	0.00026	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0017	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2-Dichloroethane	0.00026	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2-Dichloropropane	0.00052	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,3-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,3-Dichloropropane	0.0003	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,4-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	2,2-Dichloropropane	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	2-Butanone (MEK)	0.012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	2-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	2-Hexanone	0.0051	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	4-Chlorotoluene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0079	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Acetone	0.011	mg/Kg	J	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Benzene	0.00051	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Bromobenzene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Bromochloromethane	0.00033	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Bromodichloromethane	0.00024	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Bromoform	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Bromomethane	0.00028	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Carbon disulfide	0.00026	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Carbon tetrachloride	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Chlorobenzene	0.00033	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Chloroethane	0.00098	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Chloroform	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Chloromethane	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	cis-1,2-Dichloroethene	0.00079	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00026	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Dibromochloromethane	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Dibromomethane	0.00022	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Dichlorodifluoromethane	0.00064	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Ethylbenzene	0.00054	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Hexachlorobutadiene	0.00079	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Isopropylbenzene	0.0006	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-08-1.5-20220311	SW8260B	Methyl tert-butyl ether	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Methylene Chloride	0.013	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-08-1.5-20220311	SW8260B	m-Xylene & p-Xylene	0.00073	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Naphthalene	0.0024	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	n-Butylbenzene	0.00083	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	N-Propylbenzene	0.001	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	p-Isopropyltoluene	0.00052	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	sec-Butylbenzene	0.00088	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Styrene	0.00097	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	tert-Butylbenzene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Tetrachloroethene	0.00052	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Toluene	0.0017	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	trans-1,2-Dichloroethene	0.00052	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.00079	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Trichloroethene	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Trichlorofluoromethane	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Vinyl acetate	0.002	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Vinyl chloride	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-08-1.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-08-1.5-20220311	SW8270C	2-Methylnaphthalene	0.00091	mg/Kg	UJ	LCS<LCL
C1DP-08-1.5-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTP>UCL
C1DP-08-1.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-08-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	EB<RL; LB<RL
C1DP-08-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000039	mg/Kg	U	LB<RL
C1DP-08-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.0000004	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-08-2.5-20220311	SW6020	Molybdenum	0.098	mg/Kg	U	EB<RL
C1DP-08-2.5-20220311	SW8260B	Dichlorodifluoromethane	0.00064	mg/Kg	UJ	CCV<LCL
C1DP-08-2.5-20220311	SW8260B	Methylene Chloride	0.013	mg/Kg	UJ	Sur<LCL
C1DP-08-2.5-20220311	SW8260B	Vinyl acetate	0.0019	mg/Kg	UJ	CCV<LCL
C1DP-08-2.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-08-2.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-08-2.5-20220311	SW8270C	2-Methylnaphthalene	0.00091	mg/Kg	UJ	LCS<LCL
C1DP-08-2.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	UJ	HTP>UCL
C1DP-08-2.5-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-08-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	EB<RL; LB<RL
C1DP-08-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000034	mg/Kg	U	LB<RL
C1DP-08-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000002	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-08-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000038	mg/Kg	U	EB<RL; LB<RL
C1DP-08-2.5-20220311	SW8290	OCDF	0.0000012	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-09-0.5-20220311	SW6010B	Boron	2.2	mg/Kg	U	EB<RL
C1DP-09-0.5-20220311	SW6020	Manganese	180	mg/Kg	J	MS>UCL; SD>UCL
C1DP-09-0.5-20220311	SW6020	Molybdenum	0.3	mg/Kg	U	EB<RL
C1DP-09-0.5-20220311	SW6020	Nickel	30	mg/Kg	J	MS>UCL
C1DP-09-0.5-20220311	SW6020	Vanadium	27	mg/Kg	J	MS>UCL
C1DP-09-0.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.0005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1,1-Trichloroethane	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1,2,2-Tetrachloroethane	0.00076	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00044	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1,2-Trichloroethane	0.00021	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1-Dichloroethane	0.00016	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1-Dichloroethene	0.00092	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1-Dichloropropene	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.0005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2,3-Trichloropropane	0.00084	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.001	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2-Dibromo-3-Chloropropane	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2-Dibromoethane	0.00017	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2-Dichloroethane	0.00017	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2-Dichloropropane	0.00034	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.00068	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,3-Dichlorobenzene	0.00092	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,3-Dichloropropane	0.00019	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,4-Dichlorobenzene	0.00082	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-09-0.5-20220311	SW8260B	2,2-Dichloropropane	0.00028	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	2-Butanone (MEK)	0.0075	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	2-Chlorotoluene	0.00078	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	2-Hexanone	0.0033	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	4-Chlorotoluene	0.00084	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	4-Methyl-2-pentanone (MIBK)	0.005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Acetone	0.0073	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Benzene	0.00033	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Bromobenzene	0.00084	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Bromochloromethane	0.00021	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Bromodichloromethane	0.00015	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Bromoform	0.00071	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Bromomethane	0.00018	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Carbon disulfide	0.00017	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Carbon tetrachloride	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Chlorobenzene	0.00021	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Chloroethane	0.00063	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Chloroform	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Chloromethane	0.00078	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	cis-1,2-Dichloroethene	0.0005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00017	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Dibromochloromethane	0.00023	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Dibromomethane	0.00014	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00041	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Ethylbenzene	0.00034	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Hexachlorobutadiene	0.0005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Isopropylbenzene	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Methyl tert-butyl ether	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Methylene Chloride	0.0083	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-09-0.5-20220311	SW8260B	m-Xylene & p-Xylene	0.00047	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Naphthalene	0.0015	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	n-Butylbenzene	0.00053	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	N-Propylbenzene	0.00064	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	o-Xylene	0.00077	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	p-Isopropyltoluene	0.00034	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	sec-Butylbenzene	0.00056	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Styrene	0.00062	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	tert-Butylbenzene	0.00055	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Tetrachloroethene	0.00034	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Toluene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	trans-1,2-Dichloroethene	0.00034	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.0005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Trichloroethene	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Trichlorofluoromethane	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Vinyl acetate	0.0013	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Vinyl chloride	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Xylenes, Total	0.00077	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-09-0.5-20220311	SW8270C	2,4-Dichlorophenol	0.0028	mg/Kg	UJ	LCS<LCL
C1DP-09-0.5-20220311	SW8270C	2-Methylnaphthalene	0.00086	mg/Kg	UJ	LCS<LCL
C1DP-09-0.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	R	LCS<LCL; HTP>UCL (UJ)
C1DP-09-0.5-20220311	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-09-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C1DP-09-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000011	mg/Kg	U	LB<RL
C1DP-09-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000037	mg/Kg	U	EB<RL; LB<RL
C1DP-09-1.5-20220311	SW6010B	Boron	3	mg/Kg	U	EB<RL
C1DP-09-1.5-20220311	SW6020	Molybdenum	0.35	mg/Kg	U	EB<RL
C1DP-09-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000065	mg/Kg	R	Sur<LCL
C1DP-09-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.0000098	mg/Kg	R	Sur<LCL
C1DP-09-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	R	Sur<LCL
C1DP-09-1.5-20220311	SW8260B	Dichlorodifluoromethane	0.00032	mg/Kg	UJ	CCV<LCL
C1DP-09-1.5-20220311	SW8260B	Methylene Chloride	0.0065	mg/Kg	UJ	CCV<LCL
C1DP-09-1.5-20220311	SW8260B	Vinyl acetate	0.00098	mg/Kg	UJ	CCV<LCL
C1DP-09-1.5-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-09-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.031	mg/Kg	U	EB<RL; LB<RL
C1DP-09-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000089	mg/Kg	U	LB<RL
C1DP-09-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000033	mg/Kg	U	LB<RL
C1DP-09-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000043	mg/Kg	U	LB<RL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-09-1.5-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.00000097	mg/Kg	UJ	EMPC
C1DP-09-2.5-20220311	SW6010B	Boron	2.6	mg/Kg	U	EB<RL
C1DP-09-2.5-20220311	SW6020	Molybdenum	0.7	mg/Kg	U	EB<RL
C1DP-09-2.5-20220311	SW8260B	Dichlorodifluoromethane	0.0011	mg/Kg	UJ	CCV<LCL
C1DP-09-2.5-20220311	SW8260B	Methylene Chloride	0.022	mg/Kg	UJ	CCV<LCL
C1DP-09-2.5-20220311	SW8260B	Vinyl acetate	0.0034	mg/Kg	UJ	CCV<LCL
C1DP-09-2.5-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-09-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.000001	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-09-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000003	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-09-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000023	mg/Kg	U	LB<RL
C1DP-09-2.5-20220311	SW8290	OCDF	0.00000088	mg/Kg	U	EB<RL; LB<RL
C1DP-10-0.5-20220311	SW6010B	Boron	2	mg/Kg	U	EB<RL
C1DP-10-0.5-20220311	SW6020	Molybdenum	0.069	mg/Kg	U	EB<RL
C1DP-10-0.5-20220311	SW8260B	Acetone	0.056	mg/Kg	J	Sur>UCL
C1DP-10-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00071	mg/Kg	UJ	CCV<LCL
C1DP-10-0.5-20220311	SW8260B	Methylene Chloride	0.014	mg/Kg	UJ	CCV<LCL
C1DP-10-0.5-20220311	SW8260B	Vinyl acetate	0.0022	mg/Kg	UJ	CCV<LCL
C1DP-10-0.5-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-10-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000019	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000059	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000037	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000022	mg/Kg	UJ	EMPC
C1DP-10-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000024	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.00000021	mg/Kg	UJ	EMPC
C1DP-10-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000017	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000063	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	OCDF	0.0000021	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW6010B	Boron	2.1	mg/Kg	U	EB<RL
C1DP-10-1.5-20220311	SW6020	Molybdenum	0.072	mg/Kg	U	EB<RL
C1DP-10-1.5-20220311	SW8260B	Acetone	0.06	mg/Kg	J	Sur>UCL
C1DP-10-1.5-20220311	SW8270C	Benzyl alcohol	0.0054	mg/Kg	UJ	CCV<LCL
C1DP-10-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.016	mg/Kg	U	EB<RL; LB<RL
C1DP-10-1.5-20220311	SW8270C	Butyl benzyl phthalate	0.012	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000014	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000034	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000024	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000025	mg/Kg	UJ	EMPC
C1DP-10-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000016	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000013	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000046	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.00000065	mg/Kg	UJ	EMPC
C1DP-10-1.5-20220311	SW8290	OCDF	0.0000011	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-10-2.5-20220311	SW6020	Molybdenum	0.075	mg/Kg	U	EB<RL
C1DP-10-2.5-20220311	SW8260B	Acetone	0.027	mg/Kg	J	Sur>UCL
C1DP-10-2.5-20220311	SW8270C	Benzyl alcohol	0.0055	mg/Kg	UJ	CCV<LCL
C1DP-10-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.013	mg/Kg	U	EB<RL; LB<RL
C1DP-10-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000012	mg/Kg	U	LB<RL
C1DP-10-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000032	mg/Kg	U	LB<RL
C1DP-10-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000023	mg/Kg	U	LB<RL
C1DP-10-2.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000013	mg/Kg	U	LB<RL
C1DP-10-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000038	mg/Kg	U	EB<RL; LB<RL
C1DP-10-2.5-20220311	SW8290	OCDF	0.0000012	mg/Kg	U	LB<RL
C1DP-11-0.5-20220311	SW6020	Molybdenum	0.077	mg/Kg	U	EB<RL
C1DP-11-0.5-20220311	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-11-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.000001	mg/Kg	U	LB<RL
C1DP-11-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000021	mg/Kg	U	LB<RL
C1DP-11-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000016	mg/Kg	UJ	EMPC
C1DP-11-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000019	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-11-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.00000017	mg/Kg	U	LB<RL
C1DP-11-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000034	mg/Kg	U	EB<RL; LB<RL
C1DP-11-1.5-20220311	SW6020	Molybdenum	0.064	mg/Kg	U	EB<RL
C1DP-11-1.5-20220311	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-11-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.0083	mg/Kg	U	EB<RL; LB<RL
C1DP-11-1.5-20220311	SW8270C	Butyl benzyl phthalate	0.0052	mg/Kg	U	LB<RL
C1DP-11-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000017	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-11-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000006	mg/Kg	U	LB<RL
C1DP-11-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000024	mg/Kg	U	LB<RL
C1DP-11-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000012	mg/Kg	UJ	EMPC; LB<RL (U)

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-11-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000041	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-11-1.5-20220311	SW8290	OCDF	0.0000014	mg/Kg	U	LB<RL
C1DP-11-2.5-20220311	SW6020	Molybdenum	0.066	mg/Kg	U	EB<RL
C1DP-11-2.5-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-11-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	EB<RL; LB<RL
C1DP-11-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000018	mg/Kg	U	LB<RL
C1DP-11-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000054	mg/Kg	U	LB<RL
C1DP-11-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000017	mg/Kg	U	LB<RL
C1DP-11-2.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000019	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-11-2.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000012	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-11-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000031	mg/Kg	U	EB<RL; LB<RL
C1DP-11-2.5-20220311	SW8290	OCDF	0.0000015	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311	SW6020	Barium	25	mg/Kg	J	FD>RPD
C1DP-12-0.5-20220311	SW6020	Chromium	13	mg/Kg	J	FD>RPD
C1DP-12-0.5-20220311	SW6020	Molybdenum	0.56	mg/Kg	U	EB<RL
C1DP-12-0.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.00085	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1,1-Trichloroethane	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1,2,2-Tetrachloroethane	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00075	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1,2-Trichloroethane	0.00036	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1-Dichloroethane	0.00027	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1-Dichloroethene	0.0016	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1-Dichloropropene	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2,3-Trichloropropane	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00061	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.0017	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2-Dibromo-3-Chloropropane	0.0023	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2-Dibromoethane	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0019	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2-Dichloroethane	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2-Dichloropropane	0.00058	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,3-Dichlorobenzene	0.0016	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,3-Dichloropropane	0.00033	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,4-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	2,2-Dichloropropane	0.00048	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	2-Butanone (MEK)	0.013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	2-Chlorotoluene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	2-Hexanone	0.0056	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	4-Chlorotoluene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0086	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Acetone	0.012	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Benzene	0.00056	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Bromobenzene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Bromochloromethane	0.00036	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Bromodichloromethane	0.00026	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Bromoform	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Bromomethane	0.0003	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Carbon disulfide	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Carbon tetrachloride	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Chlorobenzene	0.00036	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Chloroethane	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Chloroform	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Chloromethane	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	cis-1,2-Dichloroethene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Dibromochloromethane	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Dibromomethane	0.00024	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00071	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Ethylbenzene	0.00059	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Hexachlorobutadiene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Isopropylbenzene	0.00066	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Methyl tert-butyl ether	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Methylene Chloride	0.014	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	m-Xylene & p-Xylene	0.00081	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Naphthalene	0.0026	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	n-Butylbenzene	0.00091	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-12-0.5-20220311	SW8260B	N-Propylbenzene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	o-Xylene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	p-Isopropyltoluene	0.00058	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	sec-Butylbenzene	0.00097	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Styrene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	tert-Butylbenzene	0.00095	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Tetrachloroethene	0.00058	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Toluene	0.0019	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	trans-1,2-Dichloroethene	0.00058	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Trichloroethene	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Trichlorofluoromethane	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Vinyl acetate	0.0022	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Vinyl chloride	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Xylenes, Total	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8270C	Benzyl alcohol	0.0053	mg/Kg	UJ	CCV<LCL
C1DP-12-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.000001	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000032	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000024	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000001	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-12-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000039	mg/Kg	UJ	EB<RL; LB<RL
C1DP-12-0.5-20220311-FD	SW6020	Barium	31	mg/Kg	J	FD>RPD
C1DP-12-0.5-20220311-FD	SW6020	Chromium	18	mg/Kg	J	FD>RPD
C1DP-12-0.5-20220311-FD	SW6020	Molybdenum	0.67	mg/Kg	U	EB<RL
C1DP-12-0.5-20220311-FD	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-12-0.5-20220311-FD	SW8270C	Butyl benzyl phthalate	0.0054	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000071	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311-FD	SW8290	1,2,3,7,8,9-HxCDF	0.0000002	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-12-1.5-20220311	SW6010B	Boron	2.3	mg/Kg	U	EB<RL
C1DP-12-1.5-20220311	SW8270C	Benzyl alcohol	0.0053	mg/Kg	UJ	CCV<LCL
C1DP-12-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	U	EB<RL; LB<RL
C1DP-12-1.5-20220311	SW8270C	Di-n-butyl phthalate	0.0039	mg/Kg	U	LB<RL
C1DP-12-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000017	mg/Kg	U	LB<RL
C1DP-12-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000062	mg/Kg	U	LB<RL
C1DP-12-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000025	mg/Kg	UJ	LB<RL
C1DP-12-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000024	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-12-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000095	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-12-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.0000003	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-12-1.5-20220311	SW8290	OCDF	0.0000016	mg/Kg	UJ	LB<RL
C1DP-12-2.5-20220311	SW8270C	Benzyl alcohol	0.0055	mg/Kg	UJ	CCV<LCL
C1DP-12-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.018	mg/Kg	U	EB<RL; LB<RL
C1DP-12-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000061	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-12-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000031	mg/Kg	U	LB<RL
C1DP-12-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000021	mg/Kg	U	LB<RL
C1DP-12-2.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000011	mg/Kg	U	LB<RL
C1DP-12-2.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000011	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-12-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000035	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-12-2.5-20220311	SW8290	OCDF	0.00000063	mg/Kg	U	EB<RL; LB<RL
C1DP-13-0.5-20220311	SW6020	Molybdenum	0.18	mg/Kg	UJ	EB<RL
C1DP-13-0.5-20220311	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-13-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.015	mg/Kg	U	EB<RL; LB<RL
C1DP-13-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000016	mg/Kg	U	LB<RL
C1DP-13-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000032	mg/Kg	U	LB<RL
C1DP-13-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000012	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000016	mg/Kg	UJ	EMPC
C1DP-13-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000072	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.00000012	mg/Kg	UJ	EMPC
C1DP-13-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000011	mg/Kg	U	LB<RL
C1DP-13-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000037	mg/Kg	U	EB<RL; LB<RL
C1DP-13-0.5-20220311	SW8290	OCDF	0.00000078	mg/Kg	U	EB<RL; LB<RL
C1DP-13-1.5-20220311	SW6020	Barium	90	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Chromium	40	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Cobalt	20	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Copper	55	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Iron	40000	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Manganese	770	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Molybdenum	0.21	mg/Kg	U	EB<RL
C1DP-13-1.5-20220311	SW6020	Vanadium	120	mg/Kg	J	FD>RPD

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-13-1.5-20220311	SW6020	Zinc	34	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW8270C	Benzyl alcohol	0.0056	mg/Kg	UJ	CCV<LCL
C1DP-13-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000011	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000025	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000014	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.000000077	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000004	mg/Kg	U	EB<RL; LB<RL
C1DP-13-1.5-20220311	SW8290	OCDF	0.00000052	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-13-1.5-20220311-FD	SW6020	Barium	48	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Chromium	24	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Cobalt	14	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Copper	39	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Iron	26000	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Manganese	400	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Molybdenum	0.11	mg/Kg	U	EB<RL
C1DP-13-1.5-20220311-FD	SW6020	Vanadium	67	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Zinc	22	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-13-1.5-20220311-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.035	mg/Kg	U	EB<RL; LB<RL
C1DP-13-1.5-20220311-FD	SW8270C	Butyl benzyl phthalate	0.0058	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000018	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000037	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000026	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,4,7,8-HxCDF	0.00000013	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,6,7,8-HxCDF	0.00000016	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,7,8,9-HxCDF	0.00000049	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	OCDF	0.00000094	mg/Kg	U	EB<RL; LB<RL
C1DP-13-6.0-20220311	SW6020	Molybdenum	0.21	mg/Kg	U	EB<RL
C1DP-13-6.0-20220311	SW8011	1,2,3-Trichloropropane	0.000071	mg/Kg	UJ	HTa>UCL
C1DP-13-6.0-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-13-6.0-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-13-6.0-20220311	SW8270C	Benzyl alcohol	0.0053	mg/Kg	UJ	CCV<LCL
C1DP-13-6.0-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	EB<RL; LB<RL
C1DP-13-6.0-20220311	SW8270C	Butyl benzyl phthalate	0.011	mg/Kg	U	LB<RL
C1DP-13-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000021	mg/Kg	U	LB<RL
C1DP-13-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000026	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-6.0-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000002	mg/Kg	UJ	EMPC
C1DP-13-6.0-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000002	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-6.0-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000012	mg/Kg	U	LB<RL
C1DP-13-6.0-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000001	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-6.0-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000049	mg/Kg	U	LB<RL
C1DP-13-6.0-20220311	SW8290	OCDF	0.00000072	mg/Kg	U	EB<RL; LB<RL
C1DP-14-0.5-20220311	SW6010B	Boron	4.2	mg/Kg	U	EB<RL
C1DP-14-0.5-20220311	SW6020	Molybdenum	0.19	mg/Kg	U	EB<RL
C1DP-14-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000063	mg/Kg	UJ	HTa>UCL
C1DP-14-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.0000096	mg/Kg	UJ	HTa>UCL
C1DP-14-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-14-0.5-20220311	SW8270C	Benzyl alcohol	0.024	mg/Kg	UJ	CCV<LCL
C1DP-14-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.15	mg/Kg	U	EB<RL; LB<RL
C1DP-14-0.5-20220311	SW8270C	Dibenzofuran	0.016	mg/Kg	J	LCS>UCL
C1DP-14-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000077	mg/Kg	U	LB<RL
C1DP-14-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000048	mg/Kg	U	LB<RL
C1DP-14-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.00000099	mg/Kg	U	LB<RL
C1DP-14-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000004	mg/Kg	U	EB<RL; LB<RL
C1DP-14-1.5-20220311	SW6010B	Boron	2.9	mg/Kg	U	EB<RL
C1DP-14-1.5-20220311	SW6020	Molybdenum	0.18	mg/Kg	U	EB<RL
C1DP-14-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C1DP-14-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-14-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-14-1.5-20220311	SW8270C	Benzyl alcohol	0.026	mg/Kg	UJ	CCV<LCL
C1DP-14-1.5-20220311	SW8270C	Dibenzofuran	0.0066	mg/Kg	J	LCS>UCL
C1DP-14-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000054	mg/Kg	U	LB<RL
C1DP-14-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000084	mg/Kg	U	LB<RL
C1DP-14-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.00000061	mg/Kg	UJ	EMPC
C1DP-14-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000003	mg/Kg	U	LB<RL
C1DP-14-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.00000056	mg/Kg	U	LB<RL
C1DP-14-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000033	mg/Kg	U	EB<RL; LB<RL
C1DP-14-1.5-20220311	SW8290	1,2,3,7,8-PeCDF	0.00000021	mg/Kg	UJ	EMPC

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-14-1.5-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.00000016	mg/Kg	UJ	EMPC
C1DP-14-1.5-20220311	SW8290	2,3,4,7,8-PeCDF	0.00000019	mg/Kg	UJ	EMPC
C1DP-14-6.0-20220311	SW6010B	Boron	2.1	mg/Kg	U	EB<RL
C1DP-14-6.0-20220311	SW6020	Molybdenum	0.35	mg/Kg	U	EB<RL
C1DP-14-6.0-20220311	SW8011	1,2,3-Trichloropropane	0.000065	mg/Kg	UJ	HTa>UCL
C1DP-14-6.0-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000098	mg/Kg	UJ	HTa>UCL
C1DP-14-6.0-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-14-6.0-20220311	SW8260B	Acetone	0.032	mg/Kg	J	Sur>UCL
C1DP-14-6.0-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-14-6.0-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C1DP-14-6.0-20220311	SW8270C	Butyl benzyl phthalate	0.0079	mg/Kg	U	LB<RL
C1DP-14-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000022	mg/Kg	U	LB<RL
C1DP-14-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000045	mg/Kg	U	LB<RL
C1DP-14-6.0-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000018	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-14-6.0-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000011	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-14-6.0-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000002	mg/Kg	U	LB<RL
C1DP-14-6.0-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000046	mg/Kg	U	LB<RL
C1DP-14-6.0-20220311	SW8290	OCDF	0.00000092	mg/Kg	U	EB<RL; LB<RL
C1DP-15-0.5-20220311	SW6010B	Boron	3.3	mg/Kg	U	EB<RL
C1DP-15-0.5-20220311	SW6020	Molybdenum	0.13	mg/Kg	U	EB<RL
C1DP-15-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
C1DP-15-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-15-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-15-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	U	EB<RL; LB<RL
C1DP-15-0.5-20220311	SW8270C	Diethyl phthalate	0.0071	mg/Kg	U	LB<RL
C1DP-15-1.5-20220311	SW6010B	Boron	3.3	mg/Kg	U	EB<RL
C1DP-15-1.5-20220311	SW6020	Molybdenum	0.13	mg/Kg	U	EB<RL
C1DP-15-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000071	mg/Kg	UJ	HTa>UCL
C1DP-15-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-15-1.5-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-15-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.017	mg/Kg	U	EB<RL; LB<RL
C1DP-15-1.5-20220311	SW8270C	Diethyl phthalate	0.0095	mg/Kg	U	LB<RL
C1DP-15-6.0-20220311	SW6010B	Boron	2.9	mg/Kg	U	EB<RL
C1DP-15-6.0-20220311	SW6020	Molybdenum	0.21	mg/Kg	U	EB<RL
C1DP-15-6.0-20220311	SW8011	1,2,3-Trichloropropane	0.000074	mg/Kg	UJ	HTa>UCL
C1DP-15-6.0-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-15-6.0-20220311	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C1DP-15-6.0-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.018	mg/Kg	U	EB<RL; LB<RL
C1DP-15-6.0-20220311	SW8270C	Diethyl phthalate	0.007	mg/Kg	U	LB<RL
C1DP-16-0.5-20220311	SW6010B	Boron	2.9	mg/Kg	U	EB<RL
C1DP-16-0.5-20220311	SW6020	Molybdenum	0.15	mg/Kg	U	EB<RL
C1DP-16-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000066	mg/Kg	UJ	HTa>UCL
C1DP-16-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-16-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-16-0.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.00069	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1,1-Trichloroethane	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1,2,2-Tetrachloroethane	0.001	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0006	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1,2-Trichloroethane	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1-Dichloroethene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1-Dichloropropene	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.0007	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2,3-Trichloropropane	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00049	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2-Dibromo-3-Chloropropane	0.0019	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2-Dibromoethane	0.00023	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0015	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2-Dichloroethane	0.00023	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2-Dichloropropane	0.00047	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.00094	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,3-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,3-Dichloropropane	0.00027	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	2,2-Dichloropropane	0.00038	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-16-0.5-20220311	SW8260B	2-Hexanone	0.0045	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	4-Methyl-2-pentanone (MIBK)	0.007	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Acetone	0.01	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Benzene	0.00045	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Bromochloromethane	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Bromodichloromethane	0.00021	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Bromoform	0.00098	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Bromomethane	0.00024	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Carbon disulfide	0.00023	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Carbon tetrachloride	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Chlorobenzene	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Chloroethane	0.00087	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Chloroform	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Chloromethane	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	cis-1,2-Dichloroethene	0.0007	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00023	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Dibromochloromethane	0.00031	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Dibromomethane	0.0002	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00057	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Ethylbenzene	0.00048	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Hexachlorobutadiene	0.0007	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Isopropylbenzene	0.00054	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Methyl tert-butyl ether	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	m-Xylene & p-Xylene	0.00065	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Naphthalene	0.0021	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	n-Butylbenzene	0.00073	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	N-Propylbenzene	0.00088	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	p-Isopropyltoluene	0.00047	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	sec-Butylbenzene	0.00078	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Styrene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	tert-Butylbenzene	0.00077	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Tetrachloroethene	0.00047	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Toluene	0.0015	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	trans-1,2-Dichloroethene	0.00047	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.0007	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Trichloroethene	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Trichlorofluoromethane	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Vinyl chloride	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.042	mg/Kg	U	EB<RL; LB<RL
C1DP-16-0.5-20220311	SW8270C	Diethyl phthalate	0.0045	mg/Kg	U	LB<RL
C1DP-16-1.5-20220311	SW6020	Molybdenum	0.17	mg/Kg	U	EB<RL
C1DP-16-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000066	mg/Kg	UJ	HTa>UCL
C1DP-16-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-16-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-16-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.026	mg/Kg	U	EB<RL; LB<RL
C1DP-16-1.5-20220311	SW8270C	Diethyl phthalate	0.011	mg/Kg	U	LB<RL
C1DP-16-2.5-20220311	SW6010B	Boron	2.6	mg/Kg	U	EB<RL
C1DP-16-2.5-20220311	SW6020	Barium	45	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW6020	Chromium	24	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW6020	Copper	62	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW6020	Molybdenum	0.15	mg/Kg	U	EB<RL
C1DP-16-2.5-20220311	SW6020	Nickel	39	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW6020	Vanadium	42	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW6020	Zinc	24	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW8011	1,2,3-Trichloropropane	0.000069	mg/Kg	UJ	HTa>UCL
C1DP-16-2.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-16-2.5-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-16-2.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.00073	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00052	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-16-2.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,3-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	2-Hexanone	0.0048	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Chlorobenzene	0.00031	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00025	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Ethylbenzene	0.0005	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Hexachlorobutadiene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Isopropylbenzene	0.00057	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Methylene Chloride	0.012	mg/Kg	R	SD<LCL
C1DP-16-2.5-20220311	SW8260B	m-Xylene & p-Xylene	0.00069	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Naphthalene	0.0022	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	n-Butylbenzene	0.00077	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	N-Propylbenzene	0.00093	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	p-Isopropyltoluene	0.00049	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	sec-Butylbenzene	0.00082	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Styrene	0.00091	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	tert-Butylbenzene	0.00081	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Tetrachloroethene	0.00049	mg/Kg	UJ	MS<LCL
C1DP-16-2.5-20220311	SW8260B	Toluene	0.0016	mg/Kg	UJ	MS<LCL
C1DP-16-2.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Trichloroethene	0.00037	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Vinyl acetate	0.0018	mg/Kg	R	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8270C	3,3'-Dichlorobenzidine	0.008	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	R	MS<LCL
C1DP-16-2.5-20220311	SW8270C	Benzyl alcohol	0.0048	mg/Kg	UJ	CCV<LCL
C1DP-16-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	EB<RL; LB<RL
C1DP-17-0.5-20220311	SW6010B	Boron	2.4	mg/Kg	U	EB<RL
C1DP-17-0.5-20220311	SW6020	Molybdenum	0.11	mg/Kg	U	EB<RL
C1DP-17-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C1DP-17-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-17-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-17-0.5-20220311	SW8260B	Vinyl acetate	0.0022	mg/Kg	UJ	CCV<LCL
C1DP-17-1.5-20220311	SW6010B	Boron	2.4	mg/Kg	U	EB<RL
C1DP-17-1.5-20220311	SW6020	Molybdenum	0.14	mg/Kg	U	EB<RL
C1DP-17-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
C1DP-17-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-17-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-17-1.5-20220311-FD	SW6010B	Boron	2.8	mg/Kg	U	EB<RL
C1DP-17-1.5-20220311-FD	SW6020	Molybdenum	0.16	mg/Kg	U	EB<RL
C1DP-17-1.5-20220311-FD	SW8011	1,2,3-Trichloropropane	0.000065	mg/Kg	UJ	HTa>UCL
C1DP-17-1.5-20220311-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.0000099	mg/Kg	UJ	HTa>UCL
C1DP-17-1.5-20220311-FD	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-17-2.5-20220311	SW6010B	Boron	3	mg/Kg	U	EB<RL
C1DP-17-2.5-20220311	SW6020	Molybdenum	0.15	mg/Kg	U	EB<RL
C1DP-17-2.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
C1DP-17-2.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-17-2.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-20220311-EB	SW8270C	Benzyl alcohol	0.18	ug/L	UJ	CCV<LCL
C1DP-20220311-TB-S	SW8260B	2-Butanone (MEK)	0.0089	mg/Kg	UJ	CCV<LCL
C1DP-PCB-20220311	SW6010B	Boron	2.3	mg/Kg	U	EB<RL
C1DP-PCB-20220311	SW6020	Molybdenum	0.11	mg/Kg	U	EB<RL
C1DP-PCB-20220311	SW8011	1,2,3-Trichloropropane	0.000064	mg/Kg	UJ	HTa>UCL
C1DP-PCB-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	J	HTa>UCL; LCS>UCL
C1DP-PCB-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-PCB-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	R	MS<LCL; SD<LCL
C1DP-PCB-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C1DP-PCB-20220311	SW8270C	Dibenzofuran	0.00074	mg/Kg	J	MSRPD
C1DP-PCB-20220311	SW8270C	Diethyl phthalate	0.0094	mg/Kg	U	LB<RL
C1DP-PCB-20220311	SW8270C	Fluoranthene	0.0022	mg/Kg	J	MSRPD
C1DP-WC2-20220311	SW6010B	Boron	2.9	mg/Kg	U	EB<RL
C1DP-WC2-20220311	SW6020	Molybdenum	0.12	mg/Kg	U	EB<RL
C1DP-WC2-20220311	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-WC2-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-WC2-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-WC2-20220311	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	CCV<LCL
C1DP-WC2-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	EB<RL; LB<RL
C1DP-WC2-20220311	SW8270C	Diethyl phthalate	0.0068	mg/Kg	U	LB<RL
C1DP-WC2-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0001	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.000012	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,4,7,8-HpCDF	0.0000011	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.0000069	mg/Kg	UJ	EMPC; HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.0000058	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.0000029	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000039	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.0000013	mg/Kg	UJ	EMPC; HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.0000038	mg/Kg	UJ	HTp>UCL; EB<RL (U)
C1DP-WC2-20220311	SW8290	1,2,3,7,8-PeCDD	0.0000019	mg/Kg	UJ	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,7,8-PeCDF	0.00000089	mg/Kg	UJ	HTp>UCL
C1DP-WC2-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.0000026	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	2,3,4,7,8-PeCDF	0.00000091	mg/Kg	UJ	HTp>UCL
C1DP-WC2-20220311	SW8290	2,3,7,8-TCDD	0.00000021	mg/Kg	UJ	HTp>UCL
C1DP-WC2-20220311	SW8290	2,3,7,8-TCDF	0.00000085	mg/Kg	UJ	HTp>UCL
C1DP-WC2-20220311	SW8290	OCDD	0.00063	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	OCDF	0.000075	mg/Kg	J	HTp>UCL
C1DP-WC3-20220311	SW6020	Molybdenum	0.36	mg/Kg	U	EB<RL
C1DP-WC3-20220311	SW8011	1,2,3-Trichloropropane	0.00007	mg/Kg	UJ	HTa>UCL
C1DP-WC3-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-WC3-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-WC3-20220311	SW8260B	2-Butanone (MEK)	0.0053	mg/Kg	UJ	CCV<LCL
C1DP-WC3-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C1DP-WC3-20220311	SW8270C	Diethyl phthalate	0.008	mg/Kg	U	LB<RL
C1DP-WC3-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000024	mg/Kg	J	HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000066	mg/Kg	UJ	HTp>UCL; LB<RL (U)
C1DP-WC3-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000012	mg/Kg	UJ	EMPC; HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000022	mg/Kg	UJ	EMPC; HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000044	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.00000017	mg/Kg	UJ	EMPC; HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000039	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.00000054	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000018	mg/Kg	UJ	HTp>UCL; EB<RL (U)
C1DP-WC3-20220311	SW8290	1,2,3,7,8-PeCDD	0.00000012	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,7,8-PeCDF	0.00000068	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.00000043	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	2,3,4,7,8-PeCDF	0.00000069	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	2,3,7,8-TCDD	0.00000019	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	2,3,7,8-TCDF	0.00000077	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	OCDD	0.000022	mg/Kg	J	HTp>UCL
C1DP-WC3-20220311	SW8290	OCDF	0.0000016	mg/Kg	J	HTp>UCL
C1DP-WC4-20220311	SW6010B	Boron	2.2	mg/Kg	U	EB<RL
C1DP-WC4-20220311	SW6020	Molybdenum	0.15	mg/Kg	U	EB<RL
C1DP-WC4-20220311	SW8011	1,2,3-Trichloropropane	0.000069	mg/Kg	R	HTa>UCL
C1DP-WC4-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	R	HTa>UCL
C1DP-WC4-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	R	HTa>UCL
C1DP-WC4-20220311	SW8260B	2-Butanone (MEK)	0.014	mg/Kg	UJ	CCV<LCL
C1DP-WC4-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	EB<RL; LB<RL
C1DP-WC4-20220311	SW8270C	Diethyl phthalate	0.0091	mg/Kg	U	LB<RL
C2BP-01-0.5-20220309	SW6010B	Boron	3.2	mg/Kg	U	LB<RL
C2BP-01-0.5-20220309	SW8011	1,2,3-Trichloropropane	0.000073	mg/Kg	UJ	HTa>UCL
C2BP-01-0.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-01-0.5-20220309	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-01-0.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.025	mg/Kg	U	LB<RL
C2BP-01-1.5-20220309	SW6010B	Boron	2.9	mg/Kg	U	LB<RL
C2BP-01-1.5-20220309	SW8011	1,2,3-Trichloropropane	0.000079	mg/Kg	UJ	HTa>UCL
C2BP-01-1.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-01-1.5-20220309	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-01-1.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.03	mg/Kg	U	LB<RL
C2BP-01-1.5-20220309	SW8270C	Butyl benzyl phthalate	0.0079	mg/Kg	U	LB<RL
C2BP-01-2.5-20220309	SW6010B	Boron	2.1	mg/Kg	U	LB<RL
C2BP-01-2.5-20220309	SW8011	1,2,3-Trichloropropane	0.000073	mg/Kg	UJ	HTa>UCL
C2BP-01-2.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-01-2.5-20220309	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-01-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.034	mg/Kg	U	LB<RL
C2BP-01-2.5-20220309	SW8270C	Di-n-butyl phthalate	0.0052	mg/Kg	U	LB<RL
C2BP-02-0.5-20220309	SW6010B	Boron	3.1	mg/Kg	U	LB<RL
C2BP-02-0.5-20220309	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2BP-02-0.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-02-0.5-20220309	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-02-0.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.039	mg/Kg	U	LB<RL
C2BP-02-0.5-20220309	SW8270C	Butyl benzyl phthalate	0.011	mg/Kg	U	LB<RL
C2BP-02-1.5-20220309	SW6020	Arsenic	2.3	mg/Kg	J	FD>RPD
C2BP-02-1.5-20220309	SW8011	1,2,3-Trichloropropane	0.000083	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.034	mg/Kg	U	LB<RL
C2BP-02-1.5-20220309	SW8270C	Di-n-butyl phthalate	0.0039	mg/Kg	U	LB<RL
C2BP-02-1.5-20220309-FD	SW6020	Arsenic	3	mg/Kg	J	FD>RPD
C2BP-02-1.5-20220309-FD	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309-FD	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309-FD	SW8260B	p-Isopropyltoluene	0.00072	mg/Kg	J	Sur>UCL
C2BP-02-1.5-20220309-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.023	mg/Kg	U	LB<RL
C2BP-02-2.5-20220309	SW6010B	Boron	3	mg/Kg	U	LB<RL
C2BP-02-2.5-20220309	SW8011	1,2,3-Trichloropropane	0.000066	mg/Kg	UJ	HTa>UCL
C2BP-02-2.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C2BP-02-2.5-20220309	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-02-2.5-20220309	SW8270C	Benzyl alcohol	0.0057	mg/Kg	UJ	CCV<LCL
C2BP-02-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.027	mg/Kg	U	LB<RL
C2BP-02-2.5-20220309	SW8270C	Butyl benzyl phthalate	0.006	mg/Kg	U	LB<RL
C2BP-02-2.5-20220309	SW8270C	Di-n-butyl phthalate	0.0045	mg/Kg	U	LB<RL
C2BP-02-2.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.00092	mg/Kg	UJ	CCV<LCL
C2BP-03-0.5-20220309	SW6010B	Boron	3.9	mg/Kg	U	LB<RL
C2BP-03-0.5-20220309	SW8011	1,2,3-Trichloropropane	0.000078	mg/Kg	UJ	HTa>UCL
C2BP-03-0.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-03-0.5-20220309	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-03-0.5-20220309	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	CCV<LCL
C2BP-03-0.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.034	mg/Kg	U	LB<RL
C2BP-03-0.5-20220309	SW8270C	Di-n-butyl phthalate	0.0054	mg/Kg	U	LB<RL
C2BP-03-0.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.00094	mg/Kg	UJ	CCV<LCL
C2BP-03-1.5-20220309	SW8011	1,2,3-Trichloropropane	0.000081	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-03-1.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-03-1.5-20220309	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-03-1.5-20220309	SW8270C	Benzyl alcohol	0.0057	mg/Kg	UJ	CCV<LCL
C2BP-03-1.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.023	mg/Kg	U	LB<RL
C2BP-03-1.5-20220309	SW8270C	Di-n-butyl phthalate	0.0039	mg/Kg	U	LB<RL
C2BP-03-1.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.00091	mg/Kg	UJ	CCV<LCL
C2BP-03-2.5-20220309	SW8011	1,2,3-Trichloropropane	0.00008	mg/Kg	UJ	HTa>UCL
C2BP-03-2.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-03-2.5-20220309	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-03-2.5-20220309	SW8270C	1,2,4-Trichlorobenzene	0.00068	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	1,2-Dichlorobenzene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	1,3-Dichlorobenzene	0.00054	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	1,4-Dichlorobenzene	0.00094	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	1-Methylnaphthalene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4,5-Trichlorophenol	0.00092	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4-Dichlorophenol	0.0032	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4-Dimethylphenol	0.0068	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4-Dinitrophenol	0.066	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4-Dinitrotoluene	0.0049	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,6-Dinitrotoluene	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Chloronaphthalene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Chlorophenol	0.00045	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Methylnaphthalene	0.00099	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Methylphenol	0.0011	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Nitroaniline	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Nitrophenol	0.0007	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	3 & 4 Methylphenol	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	3,3'-Dichlorobenzidine	0.0095	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-03-2.5-20220309	SW8270C	3-Nitroaniline	0.011	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4,6-Dinitro-2-methylphenol	0.011	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Bromophenyl phenyl ether	0.001	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Chloro-3-methylphenol	0.0037	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Chloroaniline	0.015	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Chlorophenyl phenyl ether	0.00071	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Nitroaniline	0.0057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Nitrophenol	0.019	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Acenaphthene	0.00052	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Acenaphthylene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Anthracene	0.0018	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Azobenzene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzo[a]anthracene	0.0012	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzo[b]fluoranthene	0.0011	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzo[g,h,i]perylene	0.002	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzo[k]fluoranthene	0.0016	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzyl alcohol	0.0057	mg/Kg	UJ	CCV<LCL
C2BP-03-2.5-20220309	SW8270C	Benzyl alcohol	0.0057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	bis(2-chloroisopropyl) ether	0.00069	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Bis(2-chloroethoxy)methane	0.002	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Bis(2-chloroethyl)ether	0.00087	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.008	mg/Kg	U	LB<RL; Sur<LCL (J)
C2BP-03-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.008	mg/Kg	U	LB<RL
C2BP-03-2.5-20220309	SW8270C	Butyl benzyl phthalate	0.0058	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Carbazole	0.00082	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Chrysene	0.0015	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Dibenz(a,h)anthracene	0.0014	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Dibenzofuran	0.00067	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Diethyl phthalate	0.0025	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Dimethyl phthalate	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Di-n-butyl phthalate	0.0031	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Di-n-octyl phthalate	0.0014	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Fluoranthene	0.0014	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Fluorene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Hexachlorobenzene	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Hexachlorobutadiene	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Hexachlorocyclopentadiene	0.00087	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Hexachloroethane	0.00049	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Indeno[1,2,3-cd]pyrene	0.0014	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Isophorone	0.00095	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Naphthalene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Nitrobenzene	0.0023	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	N-Nitrosodi-n-propylamine	0.0025	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.0009	mg/Kg	UJ	CCV<LCL
C2BP-03-2.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.0009	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Pentachlorophenol	0.0071	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Phenanthrene	0.00066	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Phenol	0.0026	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Pyrene	0.0015	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Pyridine	0.018	mg/Kg	UJ	Sur<LCL
C2BP-04-0.5-20220310	SW6020	Vanadium	130	mg/Kg	J	MS>UCL
C2BP-04-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2BP-04-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000037	mg/Kg	J	HTa>UCL
C2BP-04-0.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-04-0.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-04-0.5-20220310	SW8270C	Benzo[a]pyrene	0.021	mg/Kg	J	ICVs>UCL
C2BP-04-0.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL
C2BP-04-0.5-20220310	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	CCV<LCL
C2BP-04-0.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.077	mg/Kg	U	EB<RL; LB<RL
C2BP-04-0.5-20220310	SW8270C	Butyl benzyl phthalate	0.021	mg/Kg	U	LB<RL
C2BP-04-0.5-20220310	SW8270C	Di-n-butyl phthalate	0.0036	mg/Kg	UJ	LB<RL
C2BP-04-0.5-20220310	SW8270C	Pentachlorophenol	0.0074	mg/Kg	UJ	LCS<LCL
C2BP-04-0.5-20220310	SW8270SIM	Fluoranthene	0.031	mg/Kg	U	EB<RL
C2BP-04-0.5-20220310	SW8270SIM	Pyrene	0.042	mg/Kg	U	EB<RL
C2BP-04-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL
C2BP-04-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-04-1.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-04-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-04-1.5-20220310	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	J	ICVs>UCL
C2BP-04-1.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-04-1.5-20220310	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	CCV<LCL
C2BP-04-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.023	mg/Kg	U	EB<RL; LB<RL
C2BP-04-1.5-20220310	SW8270C	Butyl benzyl phthalate	0.015	mg/Kg	U	LB<RL
C2BP-04-1.5-20220310	SW8270C	Pentachlorophenol	0.0075	mg/Kg	UJ	LCS<LCL
C2BP-04-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.000075	mg/Kg	UJ	HTa>UCL
C2BP-04-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-04-2.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-04-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-04-2.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL
C2BP-04-2.5-20220310	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	CCV<LCL
C2BP-04-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C2BP-04-2.5-20220310	SW8270C	Butyl benzyl phthalate	0.0071	mg/Kg	UJ	LB<RL
C2BP-04-2.5-20220310	SW8270C	Pentachlorophenol	0.0075	mg/Kg	UJ	LCS<LCL
C2BP-05-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2BP-05-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000026	mg/Kg	J	HTa>UCL
C2BP-05-0.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-05-0.5-20220310	SW8015B-E	CA Diesel Range Organics (C10-C28)	6700	mg/Kg	J	Sur<LCL
C2BP-05-0.5-20220310	SW8015B-E	CA Extended Range Organics (>C28-C40)	8100	mg/Kg	J	Sur<LCL
C2BP-05-0.5-20220310	SW8260B	Ethylbenzene	0.0063	mg/Kg	J	Sur>UCL
C2BP-05-0.5-20220310	SW8260B	m-Xylene & p-Xylene	0.0093	mg/Kg	J	Sur>UCL
C2BP-05-0.5-20220310	SW8260B	o-Xylene	0.016	mg/Kg	J	Sur>UCL
C2BP-05-0.5-20220310	SW8260B	Toluene	0.0074	mg/Kg	J	Sur>UCL
C2BP-05-0.5-20220310	SW8260B	Xylenes, Total	0.025	mg/Kg	J	Sur>UCL
C2BP-05-0.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0088	mg/Kg	UJ	LCS<LCL
C2BP-05-0.5-20220310	SW8270C	Benzoic acid	0.83	mg/Kg	R	LCS<LCL
C2BP-05-0.5-20220310	SW8270C	Benzyl alcohol	0.034	mg/Kg	UJ	CCV<LCL
C2BP-05-0.5-20220310	SW8270C	Butyl benzyl phthalate	4.8	mg/Kg	U	LB<RL
C2BP-05-0.5-20220310	SW8270C	Pentachlorophenol	0.36	mg/Kg	UJ	LCS<LCL
C2BP-05-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000082	mg/Kg	UJ	HTa>UCL
C2BP-05-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000018	mg/Kg	J	HTa>UCL
C2BP-05-1.5-20220310	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-05-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0017	mg/Kg	UJ	LCS<LCL
C2BP-05-1.5-20220310	SW8270C	Benzoic acid	0.16	mg/Kg	R	LCS<LCL
C2BP-05-1.5-20220310	SW8270C	Benzyl alcohol	0.0065	mg/Kg	UJ	CCV<LCL
C2BP-05-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.12	mg/Kg	U	EB<RL
C2BP-05-1.5-20220310	SW8270C	Pentachlorophenol	0.0082	mg/Kg	UJ	LCS<LCL
C2BP-05-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL
C2BP-05-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000017	mg/Kg	J	HTa>UCL
C2BP-05-2.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-05-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-05-2.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL
C2BP-05-2.5-20220310	SW8270C	Benzyl alcohol	0.0056	mg/Kg	UJ	CCV<LCL
C2BP-05-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.4	mg/Kg	U	EB<RL
C2BP-05-2.5-20220310	SW8270C	Butyl benzyl phthalate	0.049	mg/Kg	U	LB<RL
C2BP-05-2.5-20220310	SW8270C	Pentachlorophenol	0.0071	mg/Kg	UJ	LCS<LCL
C2BP-06-0.5-20220309	SW6010B	Boron	3.1	mg/Kg	U	LB<RL
C2BP-06-0.5-20220309	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2BP-06-0.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-06-0.5-20220309	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-06-0.5-20220309	SW8270C	1,2,4-Trichlorobenzene	0.035	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	1,2-Dichlorobenzene	0.029	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	1,3-Dichlorobenzene	0.028	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	1,4-Dichlorobenzene	0.049	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	1-Methylnaphthalene	0.12	mg/Kg	J	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2,4,5-Trichlorophenol	0.047	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2,4,6-Trichlorophenol	0.076	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2,4-Dinitrophenol	3.4	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2,4-Dinitrotoluene	0.25	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2,6-Dinitrotoluene	0.088	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2-Chloronaphthalene	0.029	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2-Methylnaphthalene	0.16	mg/Kg	J	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2-Nitroaniline	0.088	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	3,3'-Dichlorobenzidine	0.49	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	3-Nitroaniline	0.59	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-06-0.5-20220309	SW8270C	4,6-Dinitro-2-methylphenol	0.59	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Bromophenyl phenyl ether	0.053	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Chloro-3-methylphenol	0.19	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Chloroaniline	0.79	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Chlorophenyl phenyl ether	0.037	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Nitroaniline	0.29	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Nitrophenol	1	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Azobenzene	0.029	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Benzyl alcohol	0.29	mg/Kg	UJ	CCV<LCL; Sur<LCL
C2BP-06-0.5-20220309	SW8270C	bis (2-chloroisopropyl) ether	0.036	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Bis(2-chloroethoxy)methane	0.11	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Bis(2-chloroethyl)ether	0.045	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.42	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Butyl benzyl phthalate	0.3	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Carbazole	0.34	mg/Kg	J	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Dibenz(a,h)anthracene	2.1	mg/Kg	J	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Dibenzofuran	0.15	mg/Kg	J	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Diethyl phthalate	0.13	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Dimethyl phthalate	0.029	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Di-n-butyl phthalate	0.16	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Di-n-octyl phthalate	0.07	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Hexachlorobenzene	0.088	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Hexachlorobutadiene	0.088	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Hexachlorocyclopentadiene	0.045	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Hexachloroethane	0.025	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Isophorone	0.049	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Nitrobenzene	0.12	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	N-Nitrosodi-n-propylamine	0.13	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.047	mg/Kg	UJ	CCV<LCL; Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Pentachlorophenol	0.37	mg/Kg	R	Sur<LCL
C2BP-06-1.5-20220309	SW6010B	Boron	3.8	mg/Kg	U	LB<RL
C2BP-06-1.5-20220309	SW6020	Antimony	0.089	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Barium	160	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Chromium	30	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Cobalt	20	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Copper	27	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Selenium	3.4	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Vanadium	130	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Zinc	59	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW7471A	Mercury	0.012	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8011	1,2,3-Trichloropropane	0.000069	mg/Kg	UJ	HTa>UCL
C2BP-06-1.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C2BP-06-1.5-20220309	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-06-1.5-20220309	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00058	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,1-Dichloroethane	0.00021	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,1-Dichloroethene	0.0012	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,1-Dichloropropene	0.00033	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,2,3-Trichlorobenzene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,2,4-Trichlorobenzene	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,2,4-Trimethylbenzene	0.0013	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,3,5-Trimethylbenzene	0.0009	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,3-Dichlorobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	2-Chlorotoluene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	2-Hexanone	0.0043	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	4-Chlorotoluene	0.0011	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Benzene	0.00043	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Carbon disulfide	0.00022	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Chlorobenzene	0.00028	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	cis-1,3-Dichloropropene	0.00022	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Ethylbenzene	0.00046	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Hexachlorobutadiene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	Isopropylbenzene	0.00051	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	m-Xylene & p-Xylene	0.00062	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Naphthalene	0.002	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	n-Butylbenzene	0.0007	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-06-1.5-20220309	SW8260B	N-Propylbenzene	0.00085	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	o-Xylene	0.001	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	p-Isopropyltoluene	0.00045	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	sec-Butylbenzene	0.00075	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Styrene	0.00082	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	tert-Butylbenzene	0.00073	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Tetrachloroethene	0.00045	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Toluene	0.0014	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	trans-1,3-Dichloropropene	0.00067	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Trichloroethene	0.00033	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Trichlorofluoromethane	0.00033	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	Xylenes, Total	0.001	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8270C	Benzoic acid	0.14	mg/Kg	R	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	CCV<LCL
C2BP-06-1.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.036	mg/Kg	U	LB<RL
C2BP-06-1.5-20220309	SW8270C	Di-n-butyl phthalate	0.0049	mg/Kg	U	LB<RL; MSRPD (J)
C2BP-06-1.5-20220309	SW8270C	Hexachlorocyclopentadiene	0.00091	mg/Kg	UJ	MS<LCL
C2BP-06-1.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.00094	mg/Kg	UJ	CCV<LCL
C2BP-06-1.5-20220309	SW8270C	Pyridine	0.019	mg/Kg	R	MS<LCL
C2BP-06-2.5-20220309	SW8011	1,2,3-Trichloropropane	0.00071	mg/Kg	UJ	HTa>UCL
C2BP-06-2.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.00011	mg/Kg	UJ	HTa>UCL
C2BP-06-2.5-20220309	SW8011	Ethylene Dibromide	0.00013	mg/Kg	UJ	HTa>UCL
C2BP-06-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.016	mg/Kg	U	LB<RL
C2BP-06-2.5-20220309	SW8270C	Butyl benzyl phthalate	0.0066	mg/Kg	U	LB<RL
C2BP-07-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.00076	mg/Kg	UJ	HTa>UCL
C2BP-07-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2BP-07-0.5-20220310	SW8011	Ethylene Dibromide	0.00014	mg/Kg	UJ	HTa>UCL
C2BP-07-0.5-20220310	SW8260B	Acetone	0.039	mg/Kg	J	Sur>UCL
C2BP-07-0.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0046	mg/Kg	UJ	LCS<LCL
C2BP-07-0.5-20220310	SW8270C	Benzo[a]pyrene	0.024	mg/Kg	J	ICVS>UCL
C2BP-07-0.5-20220310	SW8270C	Benzoic acid	0.43	mg/Kg	R	LCS<LCL
C2BP-07-0.5-20220310	SW8270C	Benzyl alcohol	0.018	mg/Kg	UJ	CCV<LCL
C2BP-07-0.5-20220310	SW8270C	Pentachlorophenol	0.022	mg/Kg	UJ	LCS<LCL
C2BP-07-0.5-20220310	SW8270SIM	Chrysene	0.0027	mg/Kg	U	EB<RL
C2BP-07-0.5-20220310	SW8270SIM	Fluoranthene	0.0029	mg/Kg	U	EB<RL
C2BP-07-0.5-20220310	SW8270SIM	Pyrene	0.0041	mg/Kg	U	EB<RL
C2BP-07-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.00087	mg/Kg	UJ	HTa>UCL
C2BP-07-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.00013	mg/Kg	UJ	HTa>UCL
C2BP-07-1.5-20220310	SW8011	Ethylene Dibromide	0.00016	mg/Kg	UJ	HTa>UCL
C2BP-07-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0017	mg/Kg	UJ	LCS<LCL
C2BP-07-1.5-20220310	SW8270C	Benzoic acid	0.16	mg/Kg	R	LCS<LCL
C2BP-07-1.5-20220310	SW8270C	Benzyl alcohol	0.0066	mg/Kg	UJ	CCV<LCL
C2BP-07-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.02	mg/Kg	U	EB<RL; LB<RL
C2BP-07-1.5-20220310	SW8270C	Butyl benzyl phthalate	0.013	mg/Kg	U	LB<RL
C2BP-07-1.5-20220310	SW8270C	Pentachlorophenol	0.0083	mg/Kg	UJ	LCS<LCL
C2BP-07-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.00078	mg/Kg	UJ	HTa>UCL
C2BP-07-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2BP-07-2.5-20220310	SW8011	Ethylene Dibromide	0.00014	mg/Kg	UJ	HTa>UCL
C2BP-07-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-07-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-07-2.5-20220310	SW8270C	Azobenzene	0.0014	mg/Kg	U	LB<RL
C2BP-07-2.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-07-2.5-20220310	SW8270C	Benzyl alcohol	0.006	mg/Kg	UJ	CCV<LCL
C2BP-07-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.017	mg/Kg	U	EB<RL; LB<RL
C2BP-07-2.5-20220310	SW8270C	Butyl benzyl phthalate	0.0078	mg/Kg	U	LB<RL
C2BP-07-2.5-20220310	SW8270C	Di-n-butyl phthalate	0.0033	mg/Kg	U	LB<RL
C2BP-07-2.5-20220310	SW8270C	Pentachlorophenol	0.0076	mg/Kg	UJ	LCS<LCL
C2BP-07-2.5-20220310	SW8270SIM	Benzo[a]anthracene	0.0031	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Benzo[a]pyrene	0.0067	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Benzo[b]fluoranthene	0.0074	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Benzo[g,h,i]perylene	0.0041	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Chrysene	0.0041	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Fluoranthene	0.0027	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.0059	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Pyrene	0.0037	mg/Kg	U	EB<RL
C2BP-08-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.00076	mg/Kg	UJ	HTa>UCL
C2BP-08-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-08-0.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-08-0.5-20220310	SW8270C	2,4,5-Trichlorophenol	0.00093	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2,4-Dichlorophenol	0.0032	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2,4-Dimethylphenol	0.0069	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2,4-Dinitrophenol	0.067	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2-Chlorophenol	0.00046	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2-Methylphenol	0.0011	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2-Nitrophenol	0.00071	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	3 & 4 Methylphenol	0.024	mg/Kg	J	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	4,6-Dinitro-2-methylphenol	0.011	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	4-Chloro-3-methylphenol	0.0038	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	4-Nitrophenol	0.02	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	Benzo[a]pyrene	0.0072	mg/Kg	J	ICVS>UCL
C2BP-08-0.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.048	mg/Kg	U	EB<RL; LB<RL
C2BP-08-0.5-20220310	SW8270C	Di-n-butyl phthalate	0.011	mg/Kg	U	LB<RL
C2BP-08-0.5-20220310	SW8270C	Pentachlorophenol	0.026	mg/Kg	J	CCV<LCL; Sur<LCL
C2BP-08-0.5-20220310	SW8270C	Phenol	0.011	mg/Kg	J	Sur<LCL
C2BP-08-0.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.00004	mg/Kg	UJ	EMPC
C2BP-08-0.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000046	mg/Kg	U	EB<RL
C2BP-08-0.5-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000056	mg/Kg	U	EB<RL
C2BP-08-1.5-20220310	SW6020	Antimony	0.22	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Arsenic	74	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Barium	150	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Chromium	39	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Cobalt	7.8	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Copper	130	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Iron	11000	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Lead	30	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Manganese	580	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Molybdenum	0.19	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Nickel	9.8	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Vanadium	35	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Zinc	230	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310	SW8270C	1,2-Dichlorobenzene	0.064	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	1,3-Dichlorobenzene	0.082	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	1,4-Dichlorobenzene	0.037	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	1-Methylnaphthalene	0.058	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	2,4,5-Trichlorophenol	0.00097	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2,4-Dichlorophenol	0.0034	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2,4-Dimethylphenol	0.0072	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2,4-Dinitrophenol	0.07	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2-Chloronaphthalene	0.065	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	2-Chlorophenol	0.00048	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2-Methylnaphthalene	0.082	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	2-Methylphenol	0.0012	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2-Nitrophenol	0.00074	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	3 & 4 Methylphenol	0.026	mg/Kg	J	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	4,6-Dinitro-2-methylphenol	0.012	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	4-Chloro-3-methylphenol	0.004	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	4-Nitrophenol	0.021	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	Acenaphthylene	0.15	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	Benzo[a]pyrene	0.039	mg/Kg	J	FD>RPD; ICVS>UCL
C2BP-08-1.5-20220310	SW8270C	Benzo[b]fluoranthene	0.047	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.055	mg/Kg	U	EB<RL; LB<RL
C2BP-08-1.5-20220310	SW8270C	Di-n-butyl phthalate	0.014	mg/Kg	U	LB<RL
C2BP-08-1.5-20220310	SW8270C	Indeno[1,2,3-cd]pyrene	0.031	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	Naphthalene	0.42	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	Pentachlorophenol	0.0076	mg/Kg	UJ	CCV<LCL; Sur<LCL
C2BP-08-1.5-20220310	SW8270C	Phenanthrene	0.23	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	Phenol	0.036	mg/Kg	J	Sur<LCL
C2BP-08-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDD	0.00039	mg/Kg	J	FD>RPD

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-08-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.000061	mg/Kg	UJ	EMPC
C2BP-08-1.5-20220310	SW8290	1,2,3,7,8,9-HxCDD	0.000031	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8290	OCDD	0.0013	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8290	OCDF	0.000074	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Antimony	2.6	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Arsenic	110	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Barium	250	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Chromium	72	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Cobalt	14	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Copper	180	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Iron	50000	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Lead	48	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Manganese	1300	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Molybdenum	1.4	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Nickel	19	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Vanadium	96	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Zinc	420	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8011	1,2,3-Trichloropropane	0.000072	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310-FD	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310-FD	SW8270C	1,2-Dichlorobenzene	0.0036	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	1,3-Dichlorobenzene	0.0034	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	1,4-Dichlorobenzene	0.002	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	1-Methylnaphthalene	0.025	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	2-Chloronaphthalene	0.00061	mg/Kg	UJ	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	2-Methylnaphthalene	0.036	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Acenaphthylene	0.026	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Benzo[a]pyrene	0.0016	mg/Kg	UJ	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Benzo[b]fluoranthene	0.014	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.084	mg/Kg	U	EB<RL; LB<RL
C2BP-08-1.5-20220310-FD	SW8270C	Di-n-butyl phthalate	0.011	mg/Kg	U	LB<RL
C2BP-08-1.5-20220310-FD	SW8270C	Indeno[1,2,3-cd]pyrene	0.0015	mg/Kg	UJ	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Naphthalene	0.14	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Pentachlorophenol	0.0077	mg/Kg	UJ	CCV<LCL
C2BP-08-1.5-20220310-FD	SW8270C	Phenanthrene	0.086	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.0015	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.000071	mg/Kg	UJ	EMPC
C2BP-08-1.5-20220310-FD	SW8290	1,2,3,7,8,9-HxCDD	0.000088	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8290	OCDD	0.0045	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8290	OCDF	0.00015	mg/Kg	J	FD>RPD
C2BP-08-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL
C2BP-08-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-08-2.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-08-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.025	mg/Kg	U	EB<RL; LB<RL
C2BP-08-2.5-20220310	SW8270C	Di-n-butyl phthalate	0.0076	mg/Kg	U	LB<RL
C2BP-08-2.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000096	mg/Kg	UJ	EMPC
C2BP-08-2.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000026	mg/Kg	U	EB<RL
C2BP-08-3.5-20220310	SW8011	1,2,3-Trichloropropane	0.000074	mg/Kg	UJ	HTa>UCL
C2BP-08-3.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-08-3.5-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-08-3.5-20220310	SW8270C	Benzo[a]pyrene	0.0069	mg/Kg	J	ICVS>UCL
C2BP-08-3.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.037	mg/Kg	U	EB<RL; LB<RL
C2BP-08-3.5-20220310	SW8270C	Di-n-butyl phthalate	0.01	mg/Kg	U	LB<RL
C2BP-08-3.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000087	mg/Kg	UJ	EMPC
C2BP-08-3.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000016	mg/Kg	U	EB<RL
C2BP-08-3.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000031	mg/Kg	U	EB<RL
C2BP-08-3.5-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000024	mg/Kg	U	EB<RL
C2BP-08-3.5-20220310	SW8290	2,3,7,8-TCDD	0.0000016	mg/Kg	UJ	EMPC
C2BP-08-3.5-20220310	SW8290	2,3,7,8-TCDF	0.0000087	mg/Kg	U	LB<RL
C2BP-09-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.000075	mg/Kg	UJ	HTa>UCL
C2BP-09-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-09-0.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-09-0.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.022	mg/Kg	U	EB<RL; LB<RL
C2BP-09-0.5-20220310	SW8270C	Di-n-butyl phthalate	0.0077	mg/Kg	U	LB<RL
C2BP-09-0.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.00000022	mg/Kg	UJ	EMPC; EB<RL (U)
C2BP-09-0.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000012	mg/Kg	U	EB<RL
C2BP-09-0.5-20220310	SW8290	1,2,3,7,8,9-HxCDD	0.00000054	mg/Kg	UJ	EMPC
C2BP-09-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-09-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000015	mg/Kg	J	HTa>UCL
C2BP-09-1.5-20220310	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL
C2BP-09-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-09-1.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-09-1.5-20220310	SW8270C	Benzyl alcohol	0.0063	mg/Kg	UJ	CCV<LCL
C2BP-09-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.013	mg/Kg	U	EB<RL; LB<RL
C2BP-09-1.5-20220310	SW8270C	Butyl benzyl phthalate	0.011	mg/Kg	U	LB<RL
C2BP-09-1.5-20220310	SW8270C	Pentachlorophenol	0.031	mg/Kg	J	LCS<LCL; LCSRPD
C2BP-09-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000059	mg/Kg	U	EB<RL; LB<RL
C2BP-09-1.5-20220310	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000024	mg/Kg	UJ	EMPC
C2BP-09-1.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000033	mg/Kg	U	EB<RL
C2BP-09-1.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000035	mg/Kg	U	EB<RL
C2BP-09-1.5-20220310	SW8290	OCDF	0.0000024	mg/Kg	U	EB<RL
C2BP-09-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL
C2BP-09-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-09-2.5-20220310	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL
C2BP-09-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-09-2.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-09-2.5-20220310	SW8270C	Benzyl alcohol	0.0063	mg/Kg	UJ	CCV<LCL
C2BP-09-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.022	mg/Kg	U	EB<RL; LB<RL
C2BP-09-2.5-20220310	SW8270C	Butyl benzyl phthalate	0.014	mg/Kg	U	LB<RL
C2BP-09-2.5-20220310	SW8270C	Pentachlorophenol	0.027	mg/Kg	J	LCS<LCL; LCSRPD
C2BP-09-2.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000096	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C2BP-09-2.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000055	mg/Kg	U	EB<RL
C2BP-09-2.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000043	mg/Kg	UJ	EMPC; EB<RL (U)
C2BP-09-2.5-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.0000041	mg/Kg	U	EB<RL
C2BP-09-3.5-20220310	SW8011	1,2,3-Trichloropropane	0.000083	mg/Kg	UJ	HTa>UCL
C2BP-09-3.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-09-3.5-20220310	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-09-3.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-09-3.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-09-3.5-20220310	SW8270C	Benzyl alcohol	0.0063	mg/Kg	UJ	CCV<LCL
C2BP-09-3.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.022	mg/Kg	U	EB<RL; LB<RL
C2BP-09-3.5-20220310	SW8270C	Butyl benzyl phthalate	0.014	mg/Kg	U	LB<RL
C2BP-09-3.5-20220310	SW8270C	Pentachlorophenol	0.008	mg/Kg	UJ	LCS<LCL
C2BP-09-3.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.000001	mg/Kg	U	EB<RL; LB<RL
C2BP-09-3.5-20220310	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000015	mg/Kg	UJ	EMPC
C2BP-09-3.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000038	mg/Kg	U	EB<RL
C2BP-09-3.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000098	mg/Kg	U	EB<RL
C2BP-09-3.5-20220310	SW8290	1,2,3,7,8,9-HxCDD	0.0000048	mg/Kg	UJ	EMPC
C2BP-10-0.5-20220310	SW6020	Arsenic	5.1	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310	SW6020	Copper	24	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310	SW6020	Lead	6.8	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.000072	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310	SW8270C	3 & 4 Methylphenol	0.1	mg/Kg	J	MS<LCL; SD<LCL
C2BP-10-0.5-20220310	SW8270C	3,3'-Dichlorobenzidine	0.0091	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-10-0.5-20220310	SW8270C	4-Nitroaniline	0.0054	mg/Kg	UJ	SD<LCL
C2BP-10-0.5-20220310	SW8270C	Benzo[a]pyrene	0.002	mg/Kg	J	ICVS>UCL
C2BP-10-0.5-20220310	SW8270C	Benzoic acid	0.13	mg/Kg	R	MS<LCL; SD<LCL
C2BP-10-0.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.034	mg/Kg	U	EB<RL; LB<RL
C2BP-10-0.5-20220310	SW8270C	Dibenzofuran	0.036	mg/Kg	J	MSRPD
C2BP-10-0.5-20220310	SW8270C	Di-n-butyl phthalate	0.01	mg/Kg	U	LB<RL
C2BP-10-0.5-20220310	SW8270C	Phenol	0.11	mg/Kg	J	FD>RPD; MS<LCL; SD<LCL
C2BP-10-0.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.000012	mg/Kg	UJ	EMPC
C2BP-10-0.5-20220310	SW8290	1,2,3,7,8-PeCDF	0.0000024	mg/Kg	UJ	EMPC
C2BP-10-0.5-20220310-FD	SW6020	Arsenic	7.2	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310-FD	SW6020	Copper	30	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310-FD	SW6020	Lead	9.4	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310-FD	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310-FD	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310-FD	SW8260B	Acetone	0.039	mg/Kg	J	Sur>UCL
C2BP-10-0.5-20220310-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.031	mg/Kg	U	EB<RL; LB<RL
C2BP-10-0.5-20220310-FD	SW8270C	Di-n-butyl phthalate	0.0068	mg/Kg	U	LB<RL
C2BP-10-0.5-20220310-FD	SW8270C	Phenol	0.0026	mg/Kg	UJ	FD>RPD
C2BP-10-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-10-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-10-1.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-10-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.02	mg/Kg	U	EB<RL; LB<RL
C2BP-10-1.5-20220310	SW8270C	Di-n-butyl phthalate	0.008	mg/Kg	U	LB<RL
C2BP-10-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000023	mg/Kg	U	LB<RL
C2BP-10-1.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.00000051	mg/Kg	U	EB<RL
C2BP-10-1.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.00000096	mg/Kg	U	EB<RL
C2BP-10-1.5-20220310	SW8290	1,2,3,6,7,8-HxCDF	0.00000013	mg/Kg	UJ	EMPC
C2BP-10-1.5-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000016	mg/Kg	U	EB<RL
C2BP-10-3.5-20220310	SW8011	1,2,3-Trichloropropane	0.000083	mg/Kg	UJ	HTa>UCL
C2BP-10-3.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-10-3.5-20220310	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-10-3.5-20220310	SW8260B	Acetone	0.012	mg/Kg	J	Sur>UCL
C2BP-10-3.5-20220310	SW8260B	Dichlorodifluoromethane	0.00054	mg/Kg	UJ	CCV<LCL
C2BP-10-3.5-20220310	SW8260B	Methylene Chloride	0.011	mg/Kg	UJ	CCV<LCL
C2BP-10-3.5-20220310	SW8260B	Vinyl acetate	0.0016	mg/Kg	UJ	CCV<LCL
C2BP-10-3.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.029	mg/Kg	U	EB<RL; LB<RL
C2BP-10-3.5-20220310	SW8270C	Di-n-butyl phthalate	0.0094	mg/Kg	U	LB<RL
C2BP-10-3.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000049	mg/Kg	U	EB<RL; LB<RL
C2BP-10-3.5-20220310	SW8290	OCDF	0.0000018	mg/Kg	U	EB<RL
C2BP-10-6.0-20220310	SW8011	1,2,3-Trichloropropane	0.000075	mg/Kg	UJ	HTa>UCL
C2BP-10-6.0-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-10-6.0-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-10-6.0-20220310	SW8260B	Dichlorodifluoromethane	0.00066	mg/Kg	UJ	CCV<LCL
C2BP-10-6.0-20220310	SW8260B	Methylene Chloride	0.013	mg/Kg	UJ	CCV<LCL
C2BP-10-6.0-20220310	SW8260B	Vinyl acetate	0.002	mg/Kg	UJ	CCV<LCL
C2BP-10-6.0-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.028	mg/Kg	U	EB<RL; LB<RL
C2BP-10-6.0-20220310	SW8270C	Di-n-butyl phthalate	0.0085	mg/Kg	U	LB<RL
C2BP-10-6.0-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000087	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C2BP-10-6.0-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.00000037	mg/Kg	U	EB<RL
C2BP-10-6.0-20220310	SW8290	1,2,3,6,7,8-HxCDF	0.00000011	mg/Kg	UJ	EMPC
C2BP-10-6.0-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000016	mg/Kg	U	EB<RL
C2BP-10-6.0-20220310	SW8290	OCDF	0.0000021	mg/Kg	U	EB<RL
C2BP-11-0.5-20220310	SW6010B	Boron	12	mg/Kg	J	SD<LCL
C2BP-11-0.5-20220310	SW6020	Barium	180	mg/Kg	J	SD>UCL
C2BP-11-0.5-20220310	SW6020	Vanadium	91	mg/Kg	J	MS>UCL; SD>UCL
C2BP-11-0.5-20220310	SW6020	Zinc	79	mg/Kg	J	SD>UCL
C2BP-11-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.000072	mg/Kg	UJ	HTa>UCL
C2BP-11-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-11-0.5-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-11-0.5-20220310	SW8270C	2,4,5-Trichlorophenol	0.00094	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2,4-Dichlorophenol	0.0033	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2,4-Dimethylphenol	0.007	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2,4-Dinitrophenol	0.068	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2-Chlorophenol	0.00047	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2-Methylphenol	0.0011	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2-Nitrophenol	0.00072	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	3 & 4 Methylphenol	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	4,6-Dinitro-2-methylphenol	0.012	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	4-Chloro-3-methylphenol	0.0038	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	4-Nitrophenol	0.02	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	Benzo[a]pyrene	0.0021	mg/Kg	J	ICVS>UCL
C2BP-11-0.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL; Sur<LCL (UJ)
C2BP-11-0.5-20220310	SW8270C	Benzyl alcohol	0.0058	mg/Kg	UJ	CCV<LCL
C2BP-11-0.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	EB<RL; LB<RL
C2BP-11-0.5-20220310	SW8270C	Butyl benzyl phthalate	0.017	mg/Kg	U	LB<RL
C2BP-11-0.5-20220310	SW8270C	Pentachlorophenol	0.0073	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2BP-11-0.5-20220310	SW8270C	Phenol	0.006	mg/Kg	J	Sur<LCL
C2BP-11-0.5-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.0000012	mg/Kg	U	EB<RL
C2BP-11-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000073	mg/Kg	UJ	HTa>UCL
C2BP-11-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-11-1.5-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-11-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-11-1.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL
C2BP-11-1.5-20220310	SW8270C	Benzyl alcohol	0.0058	mg/Kg	UJ	CCV<LCL
C2BP-11-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.0093	mg/Kg	U	EB<RL; LB<RL
C2BP-11-1.5-20220310	SW8270C	Butyl benzyl phthalate	0.0093	mg/Kg	U	LB<RL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-11-1.5-20220310	SW8270C	Carbazole	0.0015	mg/Kg	J	LCS>UCL
C2BP-11-1.5-20220310	SW8270C	Pentachlorophenol	0.0073	mg/Kg	UJ	LCS<LCL
C2BP-11-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000063	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C2BP-11-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000063	mg/Kg	UJ	EMPC
C2BP-11-1.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000073	mg/Kg	UJ	EMPC; EB<RL (U)
C2BP-11-1.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000098	mg/Kg	UJ	EMPC; EB<RL (U)
C2BP-11-1.5-20220310	SW8290	OCDF	0.0000019	mg/Kg	U	EB<RL
C2BP-11-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL
C2BP-11-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-11-2.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-11-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-11-2.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-11-2.5-20220310	SW8270C	Benzyl alcohol	0.0062	mg/Kg	UJ	CCV<LCL
C2BP-11-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	U	EB<RL; LB<RL
C2BP-11-2.5-20220310	SW8270C	Butyl benzyl phthalate	0.014	mg/Kg	U	LB<RL
C2BP-11-2.5-20220310	SW8270C	Pentachlorophenol	0.0078	mg/Kg	UJ	LCS<LCL
C2BP-11-2.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000037	mg/Kg	U	EB<RL; LB<RL
C2BP-11-2.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000051	mg/Kg	UJ	EMPC; EB<RL (U)
C2BP-11-2.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000067	mg/Kg	U	EB<RL
C2BP-11-2.5-20220310	SW8290	1,2,3,7,8,9-HxCDD	0.0000047	mg/Kg	UJ	EMPC
C2BP-11-2.5-20220310	SW8290	OCDF	0.0000088	mg/Kg	U	EB<RL
C2BP-11-3.5-20220310	SW8011	1,2,3-Trichloropropane	0.000081	mg/Kg	UJ	HTa>UCL
C2BP-11-3.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-11-3.5-20220310	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-11-3.5-20220310	SW8260B	Acetone	0.012	mg/Kg	J	Sur>UCL
C2BP-11-3.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-11-3.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-11-3.5-20220310	SW8270C	Benzyl alcohol	0.0062	mg/Kg	UJ	CCV<LCL
C2BP-11-3.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.021	mg/Kg	U	EB<RL; LB<RL
C2BP-11-3.5-20220310	SW8270C	Butyl benzyl phthalate	0.015	mg/Kg	UJ	LB<RL
C2BP-11-3.5-20220310	SW8270C	Pentachlorophenol	0.0078	mg/Kg	UJ	LCS<LCL
C2BP-11-3.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000059	mg/Kg	U	EB<RL; LB<RL
C2BP-11-3.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000051	mg/Kg	U	EB<RL
C2BP-11-3.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000081	mg/Kg	U	EB<RL
C2BP-11-3.5-20220310	SW8290	OCDF	0.000002	mg/Kg	U	EB<RL
C2BP-12-0.5-20220309	SW6010B	Boron	6.9	mg/Kg	J	SD<LCL
C2BP-12-0.5-20220309	SW6020	Antimony	0.13	mg/Kg	J	MS<LCL; MSRPD
C2BP-12-0.5-20220309	SW6020	Barium	280	mg/Kg	J	LabDupRPD
C2BP-12-0.5-20220309	SW6020	Beryllium	1	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Cadmium	0.32	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Chromium	57	mg/Kg	J	SD<LCL
C2BP-12-0.5-20220309	SW6020	Cobalt	26	mg/Kg	J	LabDupRPD
C2BP-12-0.5-20220309	SW6020	Copper	41	mg/Kg	J	SD<LCL
C2BP-12-0.5-20220309	SW6020	Manganese	1400	mg/Kg	J	LabDupRPD
C2BP-12-0.5-20220309	SW6020	Molybdenum	0.25	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Selenium	3.3	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Silver	0.065	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Thallium	0.29	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Vanadium	120	mg/Kg	J	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8011	1,2,3-Trichloropropane	0.0001	mg/Kg	UJ	HTa>UCL
C2BP-12-0.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-12-0.5-20220309	SW8011	Ethylene Dibromide	0.000018	mg/Kg	UJ	HTa>UCL
C2BP-12-0.5-20220309	SW8260B	1,1,1,2-Tetrachloroethane	0.00082	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,1,1-Trichloroethane	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1,2,2-Tetrachloroethane	0.0013	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00072	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1,2-Trichloroethane	0.00035	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1-Dichloroethane	0.00026	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1-Dichloroethene	0.0015	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1-Dichloropropene	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,2,3-Trichlorobenzene	0.00084	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,2,3-Trichloropropane	0.0014	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,2,4-Trichlorobenzene	0.00059	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,2,4-Trimethylbenzene	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,2-Dibromo-3-Chloropropane	0.0022	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,2-Dibromoethane	0.00028	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,2-Dichlorobenzene	0.0018	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,2-Dichloroethane	0.00028	mg/Kg	UJ	MS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-12-0.5-20220309	SW8260B	1,2-Dichloropropane	0.00056	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,3,5-Trimethylbenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,3-Dichlorobenzene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,3-Dichloropropane	0.00032	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,4-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	2,2-Dichloropropane	0.00046	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	2-Butanone (MEK)	0.012	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	2-Chlorotoluene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	2-Hexanone	0.0054	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	4-Chlorotoluene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0084	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Benzene	0.00054	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Bromobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Bromochloromethane	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Bromoform	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Bromomethane	0.00029	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Carbon disulfide	0.00028	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Carbon tetrachloride	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Chlorobenzene	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Chloroform	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	cis-1,2-Dichloroethene	0.00084	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	cis-1,3-Dichloropropene	0.00028	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Dibromochloromethane	0.00038	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Dibromomethane	0.00024	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Ethylbenzene	0.00057	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Hexachlorobutadiene	0.00084	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Isopropylbenzene	0.00064	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Methyl tert-butyl ether	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	m-Xylene & p-Xylene	0.00078	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Naphthalene	0.0025	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	n-Butylbenzene	0.00088	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	N-Propylbenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	o-Xylene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	p-Isopropyltoluene	0.00056	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	sec-Butylbenzene	0.00093	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Styrene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	tert-Butylbenzene	0.00092	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Tetrachloroethene	0.00056	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Toluene	0.0018	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	trans-1,2-Dichloroethene	0.00056	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	trans-1,3-Dichloropropene	0.00084	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Trichloroethene	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Trichlorofluoromethane	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Vinyl acetate	0.0021	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Vinyl chloride	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Xylenes, Total	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	3,3'-Dichlorobenzidine	0.012	mg/Kg	R	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	3-Nitroaniline	0.014	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	4-Chloroaniline	0.019	mg/Kg	R	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	4-Nitroaniline	0.0072	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	Benzo[a]pyrene	0.0019	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8270C	Benzo[g,h,i]perylene	0.0026	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8270C	Benzoic acid	0.18	mg/Kg	R	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.032	mg/Kg	U	LB<RL
C2BP-12-0.5-20220309	SW8270C	Butyl benzyl phthalate	0.019	mg/Kg	U	LB<RL
C2BP-12-0.5-20220309	SW8270C	Hexachlorocyclopentadiene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-1.5-20220309	SW8011	1,2,3-Trichloropropane	0.000094	mg/Kg	UJ	HTa>UCL
C2BP-12-1.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-12-1.5-20220309	SW8011	Ethylene Dibromide	0.000017	mg/Kg	UJ	HTa>UCL
C2BP-12-1.5-20220309	SW8270C	Benzyl alcohol	0.0061	mg/Kg	UJ	CCV<LCL
C2BP-12-1.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.04	mg/Kg	U	LB<RL
C2BP-12-1.5-20220309	SW8270C	Di-n-butyl phthalate	0.0037	mg/Kg	U	LB<RL
C2BP-12-1.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.00097	mg/Kg	UJ	CCV<LCL
C2BP-12-2.5-20220309	SW6020	Arsenic	2.1	mg/Kg	J	FD>RPD
C2BP-12-2.5-20220309	SW6020	Manganese	1200	mg/Kg	J	FD>RPD
C2BP-12-2.5-20220309	SW8011	1,2,3-Trichloropropane	0.000086	mg/Kg	UJ	HTa>UCL
C2BP-12-2.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-12-2.5-20220309	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-12-2.5-20220309	SW8270C	Benzyl alcohol	0.0068	mg/Kg	UJ	CCV<LCL
C2BP-12-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.025	mg/Kg	U	LB<RL
C2BP-12-2.5-20220309	SW8270C	Butyl benzyl phthalate	0.0071	mg/Kg	U	LB<RL
C2BP-12-2.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.0011	mg/Kg	UJ	CCV<LCL
C2BP-12-2.5-20220309-FD	SW6020	Arsenic	1.7	mg/Kg	J	FD>RPD
C2BP-12-2.5-20220309-FD	SW6020	Manganese	920	mg/Kg	J	FD>RPD
C2BP-12-2.5-20220309-FD	SW8011	1,2,3-Trichloropropane	0.000091	mg/Kg	UJ	HTa>UCL
C2BP-12-2.5-20220309-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-12-2.5-20220309-FD	SW8011	Ethylene Dibromide	0.000017	mg/Kg	UJ	HTa>UCL
C2BP-12-2.5-20220309-FD	SW8270C	Benzyl alcohol	0.0067	mg/Kg	UJ	CCV<LCL
C2BP-12-2.5-20220309-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.043	mg/Kg	U	LB<RL
C2BP-12-2.5-20220309-FD	SW8270C	Butyl benzyl phthalate	0.0069	mg/Kg	U	LB<RL
C2BP-12-2.5-20220309-FD	SW8270C	N-Nitrosodiphenylamine	0.0011	mg/Kg	UJ	CCV<LCL
C2BP-20220310-EB	SW8270C	Benzyl alcohol	0.18	ug/L	UJ	CCV<LCL
C2BP-20220310-TB-S	SW8260B	Dichlorodifluoromethane	0.00049	mg/Kg	UJ	CCV<LCL
C2BP-20220310-TB-S	SW8260B	Methylene Chloride	0.0099	mg/Kg	UJ	CCV<LCL
C2BP-20220310-TB-S	SW8260B	Vinyl acetate	0.0015	mg/Kg	UJ	CCV<LCL
C2BP-WC-20220310	SW8011	1,2,3-Trichloropropane	0.000072	mg/Kg	UJ	HTa>UCL
C2BP-WC-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-WC-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-WC-20220310	SW8260B	Dichlorodifluoromethane	0.00059	mg/Kg	UJ	CCV<LCL
C2BP-WC-20220310	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	CCV<LCL
C2BP-WC-20220310	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	CCV<LCL
C2BP-WC-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-WC-20220310	SW8270C	Benzo[a]pyrene	0.0069	mg/Kg	J	ICVS>UCL
C2BP-WC-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL
C2BP-WC-20220310	SW8270C	Benzyl alcohol	0.0057	mg/Kg	UJ	CCV<LCL
C2BP-WC-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.021	mg/Kg	U	EB<RL; LB<RL
C2BP-WC-20220310	SW8270C	Butyl benzyl phthalate	0.012	mg/Kg	U	LB<RL
C2BP-WC-20220310	SW8270C	Carbazole	0.0019	mg/Kg	J	LCS>UCL
C2BP-WC-20220310	SW8270C	Pentachlorophenol	0.0072	mg/Kg	UJ	LCS<LCL
C2BP-WC-20220310	SW8270C	Pyridine	0.024	mg/Kg	J	LCSRPD
C2BP-WC-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000077	mg/Kg	UJ	EMPC
C2BP-WC-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000043	mg/Kg	U	EB<RL
C2BP-WC-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000043	mg/Kg	U	EB<RL
C2BP-WC2-20220309	SW8011	1,2,3-Trichloropropane	0.000062	mg/Kg	UJ	HTa>UCL
C2BP-WC2-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.0000093	mg/Kg	UJ	HTa>UCL
C2BP-WC2-20220309	SW8011	Ethylene Dibromide	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-WC2-20220309	SW8270C	Benzyl alcohol	0.0055	mg/Kg	UJ	CCV<LCL
C2BP-WC2-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.037	mg/Kg	U	LB<RL
C2BP-WC2-20220309	SW8270C	Butyl benzyl phthalate	0.0094	mg/Kg	U	LB<RL
C2BP-WC2-20220309	SW8270C	Di-n-butyl phthalate	0.0064	mg/Kg	U	LB<RL
C2BP-WC2-20220309	SW8270C	N-Nitrosodiphenylamine	0.00088	mg/Kg	UJ	CCV<LCL
C2BP-WC3-20220310	SW8011	1,2,3-Trichloropropane	0.000074	mg/Kg	UJ	HTa>UCL
C2BP-WC3-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000019	mg/Kg	UJ	HTa>UCL
C2BP-WC3-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-WC3-20220310	SW8260B	Dichlorodifluoromethane	0.00058	mg/Kg	UJ	CCV<LCL
C2BP-WC3-20220310	SW8260B	Ethylbenzene	0.00083	mg/Kg	J	Sur>UCL
C2BP-WC3-20220310	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	CCV<LCL
C2BP-WC3-20220310	SW8260B	o-Xylene	0.0015	mg/Kg	J	Sur>UCL
C2BP-WC3-20220310	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	CCV<LCL
C2BP-WC3-20220310	SW8260B	Xylenes, Total	0.0015	mg/Kg	J	Sur>UCL
C2BP-WC3-20220310	SW8270C	2,4,6-Trichlorophenol	0.0068	mg/Kg	UJ	LCS<LCL
C2BP-WC3-20220310	SW8270C	2,4-Dinitrophenol	0.31	mg/Kg	R	MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270C	3,3'-Dichlorobenzidine	0.044	mg/Kg	R	MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270C	4-Chloroaniline	0.071	mg/Kg	R	MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270C	4-Nitroaniline	0.026	mg/Kg	UJ	MS<LCL
C2BP-WC3-20220310	SW8270C	Benzo[a]pyrene	0.0068	mg/Kg	R	MS<LCL
C2BP-WC3-20220310	SW8270C	Benzo[g,h,i]perylene	0.0095	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270C	Benzoic acid	0.64	mg/Kg	R	LCS<LCL; MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270C	Benzyl alcohol	0.026	mg/Kg	UJ	CCV<LCL
C2BP-WC3-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	4.6	mg/Kg	U	EB<RL; LB<RL
C2BP-WC3-20220310	SW8270C	Butyl benzyl phthalate	1.1	mg/Kg	J	MS>UCL; SD>UCL
C2BP-WC3-20220310	SW8270C	Dibenz(a,h)anthracene	0.0063	mg/Kg	UJ	MS<LCL
C2BP-WC3-20220310	SW8270C	Di-n-butyl phthalate	0.044	mg/Kg	U	LB<RL; MS>UCL; SD>UCL (J)
C2BP-WC3-20220310	SW8270C	Pentachlorophenol	0.033	mg/Kg	UJ	LCS<LCL
C2BP-WC3-20220310	SW8270SIM	1-Methylnaphthalene	0.0056	mg/Kg	J	Sur>UCL
C2BP-WC3-20220310	SW8270SIM	Acenaphthene	0.0006	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-WC3-20220310	SW8270SIM	Acenaphthylene	0.0005	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270SIM	Benzo[g,h,i]perylene	0.0005	mg/Kg	UJ	SD<LCL
C2BP-WC-W-20220325	SW6010B	Boron	170	ug/L	U	LB<RL
C2BP-WC-W-20220325	SW8082	PCB-1016	0.061	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1221	0.075	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1232	0.063	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1242	0.059	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1248	0.052	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1254	0.075	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1260	0.061	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1262	0.063	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1268	0.059	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8260B	Chloroethane	9.6	ug/L	UJ	CCV<LCL
C2BP-WC-W-20220325	SW8260B	m-Xylene & p-Xylene	26	ug/L	J	CCV>UCL
C2BP-WC-W-20220325	SW8260B	o-Xylene	29	ug/L	J	CCV>UCL
C2BP-WC-W-20220325	SW8260B	Styrene	29	ug/L	J	CCV>UCL
C2BP-WC-W-20220325	SW8260B	Vinyl acetate	74	ug/L	J	CCV>UCL
C2BP-WC-W-20220325	SW8270C	4-Nitrophenol	1.6	ug/L	UJ	CCV<LCL
C2BP-WC-W-20220325	SW8270C	Benzoic acid	1.3	ug/L	UJ	CCV<LCL
C2BP-WC-W-20220325	SW8270C	Hexachlorocyclopentadiene	0.13	ug/L	UJ	LCS<LCL
C2BP-WC-W-20220325	SW8270C	Pyridine	1	ug/L	R	LCS<LCL
C2BP-WC-W-20220325	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000016	ug/L	UJ	EMPC
C2BP-WC-W-20220325	SW8290	OCDD	0.000011	ug/L	UJ	EMPC
C2CB-08-0.0-5.0-20220511	SW8015B-E	CA Diesel Range Organics (C10-C28)	14	mg/Kg	U	EB>RL
C2CB-08-0.0-5.0-20220511	SW8260B	1,1-Dichloropropene	0.00061	mg/Kg	UJ	LCS<LCL
C2CB-08-0.0-5.0-20220511	SW8260B	Tetrachloroethene	0.00081	mg/Kg	UJ	LCS<LCL
C2CB-08-0.0-5.0-20220511	SW8270SIM	Fluoranthene	0.0025	mg/Kg	J	Sur>UCL
C2CB-08-0.0-5.0-20220511	SW8270SIM	Naphthalene	0.002	mg/Kg	J	Sur>UCL
C2CB-08-0.0-5.0-20220511	SW8270SIM	Pyrene	0.0024	mg/Kg	J	Sur>UCL
C2CB-08-10.0-15.0-20220511	SW8015B-E	CA Diesel Range Organics (C10-C28)	76	mg/Kg	J	MS>UCL; MSRPD
C2CB-08-10.0-15.0-20220511	SW8015B-E	CA Extended Range Organics (>C28-C40)	380	mg/Kg	J	MS>UCL; MSRPD
C2CB-08-10.0-15.0-20220511	SW8260B	1,1,1,2-Tetrachloroethane	0.00054	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00047	mg/Kg	UJ	MS<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,2,3-Trichlorobenzene	0.00055	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,2,4-Trichlorobenzene	0.00038	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,2-Dichlorobenzene	0.00012	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,3-Dichlorobenzene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,3-Dichloropropane	0.00021	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,4-Dichlorobenzene	0.00089	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	2-Butanone (MEK)	0.0081	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	2-Chlorotoluene	0.00085	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Bromobenzene	0.00091	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	cis-1,3-Dichloropropene	0.00018	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Ethylbenzene	0.00037	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Hexachlorobutadiene	0.00055	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Isopropylbenzene	0.00042	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Methylene Chloride	0.009	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	m-Xylene & p-Xylene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	o-Xylene	0.00084	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Styrene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	tert-Butylbenzene	0.0006	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Tetrachloroethene	0.00036	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Toluene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	trans-1,3-Dichloropropene	0.00055	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Trichloroethene	0.00027	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Vinyl acetate	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Xylenes, Total	0.00084	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8270SIM	Benzo[g,h,i]perylene	0.0028	mg/Kg	J	Sur>UCL
C2CB-08-10.0-15.0-20220511	SW8270SIM	Pyrene	0.002	mg/Kg	J	Sur>UCL
C2CB-08-5.0-10.0-20220511	SW8015B-E	CA Diesel Range Organics (C10-C28)	18	mg/Kg	U	EB>RL
C2CB-08-5.0-10.0-20220511	SW8270SIM	Benzo[b]fluoranthene	0.0044	mg/Kg	J	Sur>UCL
C2CB-08-5.0-10.0-20220511	SW8270SIM	Benzo[g,h,i]perylene	0.0033	mg/Kg	J	Sur>UCL
C2CB-08-5.0-10.0-20220511	SW8270SIM	Fluoranthene	0.0023	mg/Kg	J	Sur>UCL
C2CB-08-5.0-10.0-20220511	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.0021	mg/Kg	J	Sur>UCL
C2CB-08-5.0-10.0-20220511	SW8270SIM	Pyrene	0.0028	mg/Kg	J	Sur>UCL
C2CB-08-GW-20220511	SW8015B-E	CA Extended Range Organics (>C28-C40)	200	ug/L	J	LCS<LCL; MS<LCL
C2CB-08-GW-20220511	SW8260B	Chloroform	0.14	ug/L	U	EB>RL
C2CB-08-GW-20220511	SW8260B	Toluene	0.062	ug/L	U	EB>RL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2CB-09-0.0-5.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00073	mg/Kg	UJ	LCS<LCL
C2CB-09-0.0-5.0-20220510	SW8260B	Ethylbenzene	0.00051	mg/Kg	UJ	LCS<LCL
C2CB-09-0.0-5.0-20220510	SW8260B	Isopropylbenzene	0.00057	mg/Kg	UJ	LCS<LCL
C2CB-09-0.0-5.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0015	mg/Kg	UJ	LCS<LCL
C2CB-09-0.0-5.0-20220510	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	LCS<LCL
C2CB-09-0.0-5.0-20220510	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00073	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	Ethylbenzene	0.00051	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	Isopropylbenzene	0.00057	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0015	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.0006	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	Ethylbenzene	0.00042	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	Isopropylbenzene	0.00047	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0012	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	o-Xylene	0.00094	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	Xylenes, Total	0.00094	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00078	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	Ethylbenzene	0.00054	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	Isopropylbenzene	0.00061	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0016	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00084	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	Ethylbenzene	0.00058	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	Isopropylbenzene	0.00065	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0017	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	o-Xylene	0.0013	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	Xylenes, Total	0.0013	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00079	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	Ethylbenzene	0.00055	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	Isopropylbenzene	0.00062	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0016	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00064	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	Ethylbenzene	0.00044	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	Isopropylbenzene	0.0005	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0013	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	o-Xylene	0.00099	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	Xylenes, Total	0.00099	mg/Kg	UJ	LCS<LCL
C2CB-10-GW-20220511	SW8015B-E	CA Extended Range Organics (>C28-C40)	190	ug/L	UJ	LCS<LCL
C2CB-10-GW-20220511-FD	SW8015B-E	CA Extended Range Organics (>C28-C40)	190	ug/L	UJ	LCS<LCL
C2CB-10-GW-20220511-FD	SW8260B	Toluene	0.13	ug/L	UJ	EB>RL
C2CB-13-15.0-20.0-20220511	SW8270SIM	1-Methylnaphthalene	0.0007	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	2-Methylnaphthalene	0.0023	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Acenaphthene	0.00067	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Acenaphthylene	0.00056	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Anthracene	0.00067	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Benzo[a]anthracene	0.002	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Benzo[a]pyrene	0.00094	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Benzo[b]fluoranthene	0.0013	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Benzo[g,h,i]perylene	0.00056	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Benzo[k]fluoranthene	0.00067	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Chrysene	0.0017	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Dibenz(a,h)anthracene	0.0008	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Fluoranthene	0.0016	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Fluorene	0.00056	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.00067	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Naphthalene	0.0018	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Phenanthrene	0.0018	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Pyrene	0.0011	mg/Kg	UJ	HTp>UCL
C2CB-13-5.0-10.0-20220511	SW8015B-E	CA Diesel Range Organics (C10-C28)	9.7	mg/Kg	UJ	Sur>UCL
C2CB-13-5.0-10.0-20220511	SW8015B-E	CA Extended Range Organics (>C28-C40)	20	mg/Kg	UJ	Sur<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,1,1,2-Tetrachloroethane	0.00066	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,1,2-Trichloroethane	0.00059	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,1-Dichloropropene	0.00033	mg/Kg	UJ	SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2CB-13-5.0-10.0-20220511	SW8260B	1,2,3-Trichlorobenzene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2,3-Trichloropropane	0.0011	mg/Kg	UJ	MS<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2,4-Trichlorobenzene	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2,4-Trimethylbenzene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2-Dibromoethane	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2-Dichloroethane	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2-Dichloropropane	0.00045	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,3,5-Trimethylbenzene	0.0009	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,3-Dichlorobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,3-Dichloropropane	0.00026	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	2-Butanone (MEK)	0.0099	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	2-Chlorotoluene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	2-Hexanone	0.0043	mg/Kg	UJ	MS<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	4-Chlorotoluene	0.0011	mg/Kg	UJ	MS<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Benzene	0.00043	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Bromochloromethane	0.00028	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Bromodichloromethane	0.0002	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Bromoform	0.00094	mg/Kg	UJ	MS<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Chlorobenzene	0.00028	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	cis-1,2-Dichloroethene	0.00067	mg/Kg	UJ	SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	cis-1,3-Dichloropropene	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Dibromochloromethane	0.00062	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Dibromomethane	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Ethylbenzene	0.00046	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Hexachlorobutadiene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Isopropylbenzene	0.00051	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	m-Xylene & p-Xylene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Naphthalene	0.002	mg/Kg	UJ	MS<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	n-Butylbenzene	0.0007	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	N-Propylbenzene	0.00085	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	o-Xylene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	p-Isopropyltoluene	0.00045	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	sec-Butylbenzene	0.00075	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Styrene	0.00083	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	tert-Butylbenzene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Tetrachloroethene	0.00045	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Toluene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	trans-1,3-Dichloropropene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Trichloroethene	0.00033	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Trichlorofluoromethane	0.00033	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Xylenes, Total	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-WC-S-20220325	SW8082	PCB-1016	0.00082	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1221	0.00047	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1232	0.00054	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1242	0.00039	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1248	0.00032	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1254	0.00041	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1260	0.00082	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1262	0.00052	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1268	0.00028	mg/Kg	UJ	Sur<LCL
C2CB-WC-W-20220325	SW8015B-E	CA Diesel Range Organics (C10-C28)	2400	ug/L	J	Sur<LCL
C2CB-WC-W-20220325	SW8260B	Chloroethane	9.6	ug/L	UJ	CCV<LCL
C2TF-01-1.0-20220309	SW8015B-E	CA Diesel Range Organics (C10-C28)	90	mg/Kg	U	EB>RL
C2TF-01-1.0-20220309	SW8015B-E	CA Extended Range Organics (>C28-C40)	200	mg/Kg	U	EB>RL
C2TF-01-1.0-20220309	SW8082	PCB-1016	0.00082	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1221	0.00047	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1232	0.00055	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1242	0.00039	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1248	0.00032	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1254	0.00041	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1260	0.00082	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1268	0.00028	mg/Kg	UJ	Sur<LCL
C2TF-01-2.0-20220309	SW8260B	Ethylbenzene	0.00043	mg/Kg	UJ	SD<LCL
C2TF-01-2.0-20220309	SW8260B	m-Xylene & p-Xylene	0.00059	mg/Kg	UJ	SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2TF-01-2.0-20220309	SW8260B	o-Xylene	0.00097	mg/Kg	UJ	MS<LCL; SD<LCL
C2TF-WC-S-20220325	SW8082	PCB-1016	0.00075	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1221	0.00043	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1232	0.0005	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1242	0.00036	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1248	0.00029	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1254	0.00038	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1260	0.02	mg/Kg	J	LCSRPD
C2TF-WC-S-20220325	SW8082	PCB-1260	0.02	mg/Kg	J	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1262	0.00048	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1268	0.00025	mg/Kg	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1016	0.06	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1221	0.074	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1232	0.062	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1242	0.058	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1248	0.052	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1254	0.074	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1260	0.06	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1262	0.062	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1268	0.058	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8260B	Benzene	15	ug/L	J	Sur<LCL
C2TF-WC-W-20220325	SW8260B	Ethylbenzene	8.2	ug/L	J	Sur<LCL
C2TF-WC-W-20220325	SW8260B	m-Xylene & p-Xylene	26	ug/L	J	CCV>UCL; Sur<LCL
C2TF-WC-W-20220325	SW8260B	o-Xylene	29	ug/L	J	CCV>UCL; Sur<LCL
C2TF-WC-W-20220325	SW8260B	Toluene	5	ug/L	UJ	Sur<LCL
C2UT-02-12-20220308	SW8011	1,2,3-Trichloropropane	0.000086	mg/Kg	UJ	HTa>UCL
C2UT-02-12-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2UT-02-12-20220308	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL
C2UT-02-12-20220308	SW8260B	2-Butanone (MEK)	0.018	mg/Kg	J	Sur>UCL
C2UT-02-12-20220308	SW8260B	Acetone	0.1	mg/Kg	J	Sur>UCL
C2UT-02-12-20220308	SW8260B	Isopropylbenzene	0.00055	mg/Kg	UJ	LCS<LCL
C2UT-02-12-20220308	SW8270SIM	Fluorene	0.0024	mg/Kg	U	LB<RL
C2UT-02-16-20220308	SW8011	1,2,3-Trichloropropane	0.000081	mg/Kg	UJ	HTa>UCL
C2UT-02-16-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2UT-02-16-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2UT-02-16-20220308	SW8260B	1,1,1,2-Tetrachloroethane	0.00064	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1,1-Trichloroethane	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1,2,2-Tetrachloroethane	0.00097	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00056	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1,2-Trichloroethane	0.00027	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1-Dichloroethane	0.00021	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1-Dichloroethene	0.0012	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1-Dichloropropene	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2,3-Trichlorobenzene	0.00065	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2,3-Trichloropropane	0.0011	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2,4-Trichlorobenzene	0.00045	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2,4-Trimethylbenzene	0.0013	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2-Dibromo-3-Chloropropane	0.0017	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2-Dibromoethane	0.00022	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2-Dichloropropane	0.00043	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,3,5-Trimethylbenzene	0.00088	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,3-Dichlorobenzene	0.0012	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,3-Dichloropropane	0.00025	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	2,2-Dichloropropane	0.00036	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	2-Butanone (MEK)	0.0096	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	2-Chlorotoluene	0.001	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	2-Hexanone	0.0042	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	4-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0065	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Acetone	0.044	mg/Kg	J	Sur>UCL
C2UT-02-16-20220308	SW8260B	Benzene	0.00042	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Bromochloromethane	0.00027	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Bromodichloromethane	0.00019	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Bromoform	0.00091	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2UT-02-16-20220308	SW8260B	Bromomethane	0.00023	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Carbon disulfide	0.00022	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Carbon tetrachloride	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Chlorobenzene	0.00027	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Chloroethane	0.00081	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Chloroform	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Chloromethane	0.001	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	cis-1,2-Dichloroethene	0.00065	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	cis-1,3-Dichloropropene	0.00022	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Dibromochloromethane	0.00029	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Dibromomethane	0.00018	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Dichlorodifluoromethane	0.00053	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Ethylbenzene	0.00044	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Hexachlorobutadiene	0.00065	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Isopropylbenzene	0.0005	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2UT-02-16-20220308	SW8260B	Methyl tert-butyl ether	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Methylene Chloride	0.011	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	m-Xylene & p-Xylene	0.00061	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Naphthalene	0.0019	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	n-Butylbenzene	0.00068	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	N-Propylbenzene	0.00082	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	o-Xylene	0.001	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	p-Isopropyltoluene	0.00043	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	sec-Butylbenzene	0.00073	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Styrene	0.0008	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	tert-Butylbenzene	0.00071	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Tetrachloroethene	0.00043	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Toluene	0.0014	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	trans-1,2-Dichloroethene	0.00043	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	trans-1,3-Dichloropropene	0.00065	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Trichloroethene	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Trichlorofluoromethane	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Vinyl acetate	0.0016	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Vinyl chloride	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Xylenes, Total	0.001	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8270SIM	Fluorene	0.0013	mg/Kg	U	LB<RL
C2UT-02-18-20220308	SW8011	1,2,3-Trichloropropane	0.000081	mg/Kg	UJ	HTa>UCL
C2UT-02-18-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2UT-02-18-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2UT-02-18-20220308	SW8260B	Isopropylbenzene	0.00044	mg/Kg	UJ	LCS<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1016	0.00093	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1221	0.00053	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1232	0.00061	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1242	0.00044	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1248	0.00036	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1254	0.00046	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1260	0.00093	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1262	0.00059	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1268	0.00031	mg/Kg	UJ	Sur<LCL
C2UT-02W-17.5-20220308	SW8015B-E	CA Diesel Range Organics (C10-C28)	11	mg/Kg	UJ	HTp>UCL
C2UT-02W-17.5-20220308	SW8015B-E	CA Extended Range Organics (>C28-C40)	29	mg/Kg	J	HTp>UCL
C2UT-02W-17.5-20220308-FD	SW8015B-E	CA Diesel Range Organics (C10-C28)	28	mg/Kg	J	HTp>UCL
C2UT-02W-17.5-20220308-FD	SW8015B-E	CA Extended Range Organics (>C28-C40)	89	mg/Kg	J	HTp>UCL; SD<LCL
C2UT-02W-20220309	SW8011	1,2,3-Trichloropropane	0.005	ug/L	UJ	HTa>UCL
C2UT-02W-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.002	ug/L	UJ	HTa>UCL
C2UT-02W-20220309	SW8011	Ethylene Dibromide	0.002	ug/L	UJ	HTa>UCL
C2UT-02W-20220309	SW8015B-E	CA Diesel Range Organics (C10-C28)	420	ug/L	J	Sur<LCL
C2UT-02W-20220309	SW8260B	Acetone	4.1	ug/L	U	EB>RL
C2UT-02W-20220309	SW8260B	Carbon disulfide	0.36	ug/L	U	EB>RL
C2UT-02W-20220309	SW8260B	Ethylbenzene	0.052	ug/L	U	EB<RL
C2UT-02W-20220309	SW8260B	Toluene	0.079	ug/L	U	EB>RL
C2UT-02W-20220309	SW8270SIM	1-Methylnaphthalene	0.021	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	2-Methylnaphthalene	0.043	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Acenaphthene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Acenaphthylene	0.0098	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Anthracene	0.024	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Benzo[a]anthracene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Benzo[a]pyrene	0.012	ug/L	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2UT-02W-20220309	SW8270SIM	Benzo[b]fluoranthene	0.012	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Benzo[g,h,i]perylene	0.013	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Benzo[k]fluoranthene	0.013	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Chrysene	0.018	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Dibenz(a,h)anthracene	0.016	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Fluoranthene	0.02	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Fluorene	0.019	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Naphthalene	0.034	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Phenanthrene	0.034	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Pyrene	0.036	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8015B-E	CA Diesel Range Organics (C10-C28)	360	ug/L	U	EB>RL
C2UT-02W-20220309-FD	SW8260B	Carbon disulfide	0.31	ug/L	U	EB>RL
C2UT-02W-20220309-FD	SW8260B	o-Xylene	0.3	ug/L	U	EB>RL
C2UT-02W-20220309-FD	SW8260B	Toluene	0.059	ug/L	U	EB>RL
C2UT-02W-20220309-FD	SW8260B	Xylenes, Total	0.3	ug/L	U	EB>RL
C2UT-02W-20220309-FD	SW8270SIM	1-Methylnaphthalene	0.021	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	2-Methylnaphthalene	0.042	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Acenaphthene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Acenaphthylene	0.0097	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Anthracene	0.024	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Benzo[a]anthracene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Benzo[a]pyrene	0.012	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Benzo[b]fluoranthene	0.012	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Benzo[g,h,i]perylene	0.013	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Benzo[k]fluoranthene	0.013	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Chrysene	0.017	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Dibenz(a,h)anthracene	0.016	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Fluoranthene	0.019	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Fluorene	0.018	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Naphthalene	0.034	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Phenanthrene	0.034	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Pyrene	0.036	ug/L	UJ	HTp>UCL
C2UT-10-15.0-17.0-20220509	SW8260B	Acetone	0.15	mg/Kg	J	LCS>UCL
C2UT-12-10.0-15.0-20220509	SW8260B	2-Butanone (MEK)	0.029	mg/Kg	J	LCS>UCL
C2UT-12-10.0-15.0-20220509	SW8260B	Acetone	0.16	mg/Kg	J	LCS>UCL
C2UT-12-15.0-20.0-20220509-FD	SW8260B	2-Butanone (MEK)	0.02	mg/Kg	J	LCS>UCL
C2UT-12-15.0-20.0-20220509-FD	SW8260B	Acetone	0.14	mg/Kg	J	LCS>UCL
C2UT-12-GW-20220510	SW8270SIM	Anthracene	0.3	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Benzo[a]anthracene	1.5	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Benzo[a]pyrene	1.1	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Benzo[b]fluoranthene	0.69	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Benzo[g,h,i]perylene	0.52	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Benzo[k]fluoranthene	0.12	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Chrysene	2.2	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Fluoranthene	0.9	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.22	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Phenanthrene	0.83	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Pyrene	4.3	ug/L	J	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Anthracene	0.023	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Benzo[a]anthracene	0.015	ug/L	J	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Benzo[a]pyrene	0.023	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Benzo[b]fluoranthene	0.023	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Benzo[g,h,i]perylene	0.012	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Benzo[k]fluoranthene	0.012	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Chrysene	0.038	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Fluoranthene	0.056	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.014	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Phenanthrene	0.032	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Pyrene	0.034	ug/L	J	FD>RPD
C2UT-13-10.0-15.0-20220510	SW8260B	1,2-Dichloroethane	0.00021	mg/Kg	UJ	LCS<LCL
C2UT-13-10.0-15.0-20220510	SW8260B	cis-1,3-Dichloropropene	0.00021	mg/Kg	UJ	LCS<LCL
C2UT-13-10.0-15.0-20220510	SW8260B	Methylene Chloride	0.01	mg/Kg	UJ	LCS<LCL
C2UT-13-10.0-15.0-20220510	SW8260B	trans-1,3-Dichloropropene	0.00062	mg/Kg	UJ	LCS<LCL
C2UT-13-10.0-15.0-20220510	SW8260B	Vinyl chloride	0.00031	mg/Kg	UJ	LCS<LCL
C2UT-13-15.0-20.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00082	mg/Kg	UJ	LCS<LCL
C2UT-13-15.0-20.0-20220510	SW8260B	Ethylbenzene	0.00057	mg/Kg	UJ	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2UT-13-15.0-20.0-20220510	SW8260B	Isopropylbenzene	0.00064	mg/Kg	UJ	LCS<LCL
C2UT-13-15.0-20.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0016	mg/Kg	UJ	LCS<LCL
C2UT-13-15.0-20.0-20220510	SW8260B	o-Xylene	0.0013	mg/Kg	UJ	LCS<LCL
C2UT-13-15.0-20.0-20220510	SW8260B	Xylenes, Total	0.0013	mg/Kg	UJ	LCS<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00069	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1,1-Trichloroethane	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1,2,2-Tetrachloroethane	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00061	mg/Kg	UJ	SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1,2-Trichloroethane	0.00062	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1-Dichloroethane	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1-Dichloroethene	0.0013	mg/Kg	UJ	MS<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1-Dichloropropene	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2,3-Trichlorobenzene	0.00071	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2,3-Trichloropropane	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2,4-Trichlorobenzene	0.00049	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2,4-Trimethylbenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2-Dibromoethane	0.00024	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2-Dichlorobenzene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2-Dichloroethane	0.00024	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2-Dichloropropane	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,3,5-Trimethylbenzene	0.00095	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,3-Dichlorobenzene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,3-Dichloropropane	0.00027	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	2,2-Dichloropropane	0.00091	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	2-Hexanone	0.0046	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0071	mg/Kg	UJ	MS<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Benzene	0.00046	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Bromochloromethane	0.00029	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Bromodichloromethane	0.00021	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Bromoform	0.00099	mg/Kg	UJ	MS<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Bromomethane	0.00025	mg/Kg	UJ	SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Carbon disulfide	0.00024	mg/Kg	UJ	SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Carbon tetrachloride	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Chlorobenzene	0.00029	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Chloroform	0.00035	mg/Kg	UJ	MS<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	cis-1,2-Dichloroethene	0.00071	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	cis-1,3-Dichloropropene	0.00024	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Dibromochloromethane	0.00066	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Dibromomethane	0.00049	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Ethylbenzene	0.00048	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Hexachlorobutadiene	0.00071	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Isopropylbenzene	0.00054	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Methyl tert-butyl ether	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Naphthalene	0.0021	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	n-Butylbenzene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	N-Propylbenzene	0.00089	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	p-Isopropyltoluene	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	sec-Butylbenzene	0.00079	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Styrene	0.00087	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	tert-Butylbenzene	0.00078	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Tetrachloroethene	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Toluene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	trans-1,2-Dichloroethene	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	trans-1,3-Dichloropropene	0.00071	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Trichloroethene	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Trichlorofluoromethane	0.00035	mg/Kg	UJ	SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-GW-20220510	SW8015B-E	CA Extended Range Organics (>C28-C40)	200	ug/L	UJ	LCS<LCL
C2UT-14-0.0-5.0-20220509	SW8260B	1,1,1,2-Tetrachloroethane	0.00071	mg/Kg	UJ	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2UT-14-0-0-5.0-20220509	SW8260B	Ethylbenzene	0.0005	mg/Kg	UJ	LCS<LCL
C2UT-14-0-0-5.0-20220509	SW8260B	Isopropylbenzene	0.00056	mg/Kg	UJ	LCS<LCL
C2UT-14-0-0-5.0-20220509	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	LCS<LCL
C2UT-14-0-0-5.0-20220509	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	LCS<LCL
C2UT-14-0-0-5.0-20220509	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	LCS<LCL
C2UT-14-10.0-15.0-20220509	SW8260B	1,1,1,2-Tetrachloroethane	0.00064	mg/Kg	UJ	LCS<LCL
C2UT-14-10.0-15.0-20220509	SW8260B	Ethylbenzene	0.00044	mg/Kg	UJ	LCS<LCL
C2UT-14-10.0-15.0-20220509	SW8260B	Isopropylbenzene	0.0005	mg/Kg	UJ	LCS<LCL
C2UT-14-10.0-15.0-20220509	SW8260B	m-Xylene & p-Xylene	0.0013	mg/Kg	UJ	LCS<LCL
C2UT-14-10.0-15.0-20220509	SW8260B	o-Xylene	0.001	mg/Kg	UJ	LCS<LCL
C2UT-14-10.0-15.0-20220509	SW8260B	Xylenes, Total	0.001	mg/Kg	UJ	LCS<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,1,1,2-Tetrachloroethane	0.00099	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,1,1-Trichloroethane	0.0005	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,1,2,2-Tetrachloroethane	0.0015	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00087	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,1,2-Trichloroethane	0.00089	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,1-Dichloroethane	0.00032	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,1-Dichloroethene	0.0019	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,1-Dichloropropene	0.0005	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,2,3-Trichlorobenzene	0.001	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,2,3-Trichloropropane	0.0017	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,2,4-Trichlorobenzene	0.00071	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,2,4-Trimethylbenzene	0.002	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,2-Dibromoethane	0.00034	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,2-Dichlorobenzene	0.0022	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,2-Dichloroethane	0.00034	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,2-Dichloropropane	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,3,5-Trimethylbenzene	0.0014	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,3-Dichlorobenzene	0.0019	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,3-Dichloropropane	0.00039	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	1,4-Dichlorobenzene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	2,2-Dichloropropane	0.0013	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	2-Butanone (MEK)	0.015	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	2-Chlorotoluene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	2-Hexanone	0.0066	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Benzene	0.00066	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Bromobenzene	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Bromochloromethane	0.00042	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Bromodichloromethane	0.0003	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Bromoform	0.0014	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Carbon disulfide	0.00034	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Carbon tetrachloride	0.0005	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Chlorobenzene	0.00042	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Chloroform	0.0005	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	cis-1,2-Dichloroethene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	cis-1,3-Dichloropropene	0.00034	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Dibromochloromethane	0.00094	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Dibromomethane	0.00071	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Ethylbenzene	0.00069	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Hexachlorobutadiene	0.001	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Isopropylbenzene	0.00077	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Methyl tert-butyl ether	0.0005	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Methylene Chloride	0.017	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	m-Xylene & p-Xylene	0.002	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	n-Butylbenzene	0.0011	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	N-Propylbenzene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	o-Xylene	0.0015	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	p-Isopropyltoluene	0.00067	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	sec-Butylbenzene	0.0011	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Styrene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	tert-Butylbenzene	0.0011	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Tetrachloroethene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Toluene	0.0022	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	trans-1,2-Dichloroethene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	trans-1,3-Dichloropropene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Trichloroethene	0.0005	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Vinyl acetate	0.0025	mg/Kg	UJ	SD<LCL
C2UT-14-15.0-20.0-20220509	SW8260B	Xylenes, Total	0.0015	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2UT-14-20.0-23.0-20220509	SW8260B	1,1,1,2-Tetrachloroethane	0.00075	mg/Kg	UJ	LCS<LCL
C2UT-14-20.0-23.0-20220509	SW8260B	Ethylbenzene	0.00052	mg/Kg	UJ	LCS<LCL
C2UT-14-20.0-23.0-20220509	SW8260B	Isopropylbenzene	0.00058	mg/Kg	UJ	LCS<LCL
C2UT-14-20.0-23.0-20220509	SW8260B	m-Xylene & p-Xylene	0.0015	mg/Kg	UJ	LCS<LCL
C2UT-14-20.0-23.0-20220509	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	LCS<LCL
C2UT-14-20.0-23.0-20220509	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	1,1,1,2-Tetrachloroethane	0.00071	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	Ethylbenzene	0.0005	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	Isopropylbenzene	0.00056	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	LCS<LCL
C2UT-14-GW-20220509	SW8015B-E	CA Diesel Range Organics (C10-C28)	450	ug/L	J	HTp>UCL
C2UT-14-GW-20220509	SW8015B-E	CA Diesel Range Organics (C10-C28)	180	ug/L	J	Sur<LCL
C2UT-14-GW-20220509	SW8015B-E	CA Extended Range Organics (>C28-C40)	210	ug/L	UJ	Sur<LCL
C2UT-14-GW-20220509	SW8270SIM	Benzo[a]pyrene	0.026	ug/L	UJ	MS<LCL
C2UT-WC-W-20220325	SW8260B	Chloroethane	9.6	ug/L	UJ	CCV<LCL
C2UT-WC-W-20220325	SW8260B	m-Xylene & p-Xylene	26	ug/L	J	CCV>UCL
C2UT-WC-W-20220325	SW8260B	o-Xylene	37	ug/L	J	CCV>UCL
C2UT-WC-W-20220325	SW8260B	Styrene	29	ug/L	J	CCV>UCL
C2UT-WC-W-20220325	SW8260B	Vinyl chloride	5.1	ug/L	J	ICVS>UCL
C2WP-01-0.5-20220308	SW6010B	Boron	5.2	mg/Kg	U	LB<RL
C2WP-01-0.5-20220308	SW6010B-STLC	Beryllium	0.0046	mg/L	U	LB<RL
C2WP-01-0.5-20220308	SW6010B-STLC	Copper	0.3	mg/L	U	LB<RL
C2WP-01-0.5-20220308	SW6020	Barium	190	mg/Kg	J	SD>UCL
C2WP-01-0.5-20220308	SW6020	Beryllium	0.79	mg/Kg	J	MSRPD
C2WP-01-0.5-20220308	SW6020	Chromium	62	mg/Kg	J	MS<LCL
C2WP-01-0.5-20220308	SW6020	Zinc	71	mg/Kg	J	MS<LCL
C2WP-01-0.5-20220308	SW7470A	Mercury, STLC	0.0008	mg/L	UJ	HTa>UCL
C2WP-01-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL
C2WP-01-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-01-0.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-01-0.5-20220308	SW8260B	1,1,1,2-Tetrachloroethane	0.00064	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1,1-Trichloroethane	0.00032	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1,2,2-Tetrachloroethane	0.00097	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00056	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1,2-Trichloroethane	0.00027	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1-Dichloroethane	0.00021	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1-Dichloroethene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1-Dichloropropene	0.00032	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2,3-Trichlorobenzene	0.00065	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2,3-Trichloropropane	0.0011	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2,4-Trichlorobenzene	0.00045	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2,4-Trimethylbenzene	0.0013	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2-Dibromoethane	0.00022	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2-Dichloroethane	0.00022	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2-Dichloropropane	0.00043	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,3,5-Trimethylbenzene	0.00088	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,3-Dichlorobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,3-Dichloropropane	0.00025	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	2,2-Dichloropropane	0.00036	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	2-Butanone (MEK)	0.0096	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	2-Chlorotoluene	0.001	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	2-Hexanone	0.0042	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	4-Chlorotoluene	0.0011	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0065	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Benzene	0.00042	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromochloromethane	0.00027	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromodichloromethane	0.00019	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromoform	0.00091	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromomethane	0.00023	mg/Kg	UJ	MS<LCL
C2WP-01-0.5-20220308	SW8260B	Carbon disulfide	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Carbon tetrachloride	0.00032	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Chlorobenzene	0.00027	mg/Kg	UJ	SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-01-0.5-20220308	SW8260B	Chloroform	0.00032	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	cis-1,2-Dichloroethene	0.00065	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	cis-1,3-Dichloropropene	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Dibromochloromethane	0.00029	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Dibromomethane	0.00018	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Ethylbenzene	0.00044	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Isopropylbenzene	0.00005	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Methyl tert-butyl ether	0.00032	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Methylene Chloride	0.011	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	m-Xylene & p-Xylene	0.00061	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Naphthalene	0.00019	mg/Kg	UJ	MS<LCL
C2WP-01-0.5-20220308	SW8260B	n-Butylbenzene	0.00068	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	N-Propylbenzene	0.00082	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	o-Xylene	0.00099	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	p-Isopropyltoluene	0.00043	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	sec-Butylbenzene	0.00072	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Styrene	0.00008	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	tert-Butylbenzene	0.00071	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Tetrachloroethene	0.00043	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Toluene	0.0014	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	trans-1,2-Dichloroethene	0.00043	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	trans-1,3-Dichloropropene	0.00065	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Trichloroethene	0.00032	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Trichlorofluoromethane	0.00032	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Vinyl acetate	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Xylenes, Total	0.00099	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00076	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	1,2-Dichlorobenzene	0.00063	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	1,3-Dichlorobenzene	0.00067	mg/Kg	J	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	1-Methylnaphthalene	0.00066	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	2,4,5-Trichlorophenol	0.001	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2,4-Dichlorophenol	0.0035	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2,4-Dimethylphenol	0.0076	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2,4-Dinitrotoluene	0.0054	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2,6-Dinitrotoluene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Chloronaphthalene	0.00063	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Chlorophenol	0.00061	mg/Kg	J	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Methylnaphthalene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Methylphenol	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Nitroaniline	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Nitrophenol	0.00079	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	3 & 4 Methylphenol	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	3,3'-Dichlorobenzidine	0.011	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8270C	3-Nitroaniline	0.013	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8270C	4-Bromophenyl phenyl ether	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	4-Chloro-3-methylphenol	0.0042	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	4-Chloroaniline	0.017	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8270C	4-Chlorophenyl phenyl ether	0.0008	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	4-Nitroaniline	0.0063	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8270C	Acenaphthene	0.00058	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Acenaphthylene	0.0011	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Anthracene	0.0033	mg/Kg	UJ	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Azobenzene	0.00063	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Benzo[a]anthracene	0.0055	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Benzo[a]pyrene	0.012	mg/Kg	J	ICV>UCL; LCS<LCL; MSRPD; SD<LCL
C2WP-01-0.5-20220308	SW8270C	Benzo[b]fluoranthene	0.069	mg/Kg	J	LCS<LCL; MS<LCL; SD<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Benzo[k]fluoranthene	0.021	mg/Kg	J	MSRPD
C2WP-01-0.5-20220308	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Bis(2-chloroethyl)ether	0.00098	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.037	mg/Kg	U	LB<RL; MSRPD (J)
C2WP-01-0.5-20220308	SW8270C	Carbazole	0.0047	mg/Kg	J	CCV>UCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Chrysene	0.065	mg/Kg	J	LCS<LCL; MS<LCL; SD<LCL; MSRPD

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-01-0.5-20220308	SW8270C	Dibenz(a,h)anthracene	0.0039	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Dibenzofuran	0.00093	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Diethyl phthalate	0.0028	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Dimethyl phthalate	0.00063	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Di-n-butyl phthalate	0.0085	mg/Kg	U	LB<RL; LCS<LCL; MSRPD (J)
C2WP-01-0.5-20220308	SW8270C	Fluoranthene	0.052	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Fluorene	0.00084	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Hexachlorobenzene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Hexachlorobutadiene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Hexachloroethane	0.00054	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Isophorone	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Naphthalene	0.00098	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Nitrobenzene	0.0025	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0028	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	N-Nitrosodiphenylamine	0.001	mg/Kg	UJ	LCS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8270C	Pentachlorophenol	0.012	mg/Kg	J	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Phenanthrene	0.01	mg/Kg	J	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Phenol	0.0039	mg/Kg	J	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Pyrene	0.049	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-2.5-20220308	SW6010B	Boron	5.3	mg/Kg	U	LB<RL
C2WP-01-2.5-20220308	SW8011	1,2,3-Trichloropropane	0.00008	mg/Kg	UJ	HTa>UCL
C2WP-01-2.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-01-2.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-01-2.5-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00077	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	1,2-Dichlorobenzene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	1,3-Dichlorobenzene	0.00061	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	1-Methylnaphthalene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,4,5-Trichlorophenol	0.001	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,4,6-Trichlorophenol	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,4-Dichlorophenol	0.0036	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,4-Dimethylphenol	0.0077	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,4-Dinitrotoluene	0.0055	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,6-Dinitrotoluene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Chloronaphthalene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Chlorophenol	0.00051	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Methylnaphthalene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Methylphenol	0.0013	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Nitroaniline	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Nitrophenol	0.00079	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	3 & 4 Methylphenol	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	4-Bromophenyl phenyl ether	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	4-Chloro-3-methylphenol	0.0042	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	4-Chlorophenyl phenyl ether	0.00081	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Acenaphthene	0.00059	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Acenaphthylene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Anthracene	0.002	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Azobenzene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Benzo[a]anthracene	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Benzo[a]pyrene	0.0017	mg/Kg	UJ	ICVS<LCL; LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Benzo[b]fluoranthene	0.0013	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Benzoic acid	0.16	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Bis(2-chloroethyl)ether	0.00098	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.044	mg/Kg	U	LB<RL
C2WP-01-2.5-20220308	SW8270C	Chrysene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Dibenz(a,h)anthracene	0.0015	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Dibenzofuran	0.00075	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Diethyl phthalate	0.0028	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Dimethyl phthalate	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Di-n-butyl phthalate	0.01	mg/Kg	U	LB<RL; LCS<LCL (J)
C2WP-01-2.5-20220308	SW8270C	Fluoranthene	0.0015	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Fluorene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Hexachlorobenzene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Hexachlorobutadiene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Hexachloroethane	0.00055	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Isophorone	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Naphthalene	0.00064	mg/Kg	UJ	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-01-2.5-20220308	SW8270C	Nitrobenzene	0.0026	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0028	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	N-Nitrosodiphenylamine	0.001	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Pentachlorophenol	0.0081	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Phenanthrene	0.00074	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Phenol	0.0029	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Pyrene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW6010B	Boron	4.1	mg/Kg	U	LB<RL
C2WP-01-5.0-20220308	SW8011	1,2,3-Trichloropropane	0.00079	mg/Kg	UJ	HTa>UCL
C2WP-01-5.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2WP-01-5.0-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-01-5.0-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00069	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	1,2-Dichlorobenzene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	1,3-Dichlorobenzene	0.00055	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	1,4-Dichlorobenzene	0.00095	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	1-Methylnaphthalene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,4,5-Trichlorophenol	0.00093	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,4-Dichlorophenol	0.0032	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,4-Dimethylphenol	0.0069	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,4-Dinitrotoluene	0.0049	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,6-Dinitrotoluene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Chloronaphthalene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Chlorophenol	0.00046	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Methylnaphthalene	0.001	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Methylphenol	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Nitroaniline	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Nitrophenol	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	3 & 4 Methylphenol	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	4-Bromophenyl phenyl ether	0.001	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	4-Chloro-3-methylphenol	0.0038	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	4-Chlorophenyl phenyl ether	0.00072	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Acenaphthene	0.00053	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Acenaphthylene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Anthracene	0.0018	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Azobenzene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Benzo[a]anthracene	0.0013	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICV5<LCL; LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Benzo[b]fluoranthene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Bis(2-chloroethyl)ether	0.00088	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.04	mg/Kg	U	LB<RL
C2WP-01-5.0-20220308	SW8270C	Chrysene	0.0015	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Dibenz(a,h)anthracene	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Dibenzofuran	0.00068	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Diethyl phthalate	0.0025	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Dimethyl phthalate	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Di-n-butyl phthalate	0.0092	mg/Kg	U	LB<RL; LCS<LCL (J)
C2WP-01-5.0-20220308	SW8270C	Fluoranthene	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Fluorene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Hexachlorobenzene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Hexachlorobutadiene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Hexachloroethane	0.00049	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Isophorone	0.00096	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Naphthalene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Nitrobenzene	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0025	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	N-Nitrosodiphenylamine	0.00092	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Pentachlorophenol	0.0083	mg/Kg	J	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Phenanthrene	0.00066	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Phenol	0.0026	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Pyrene	0.0015	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW6010B	Boron	4.1	mg/Kg	U	LB<RL
C2WP-02-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.00082	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00078	mg/Kg	UJ	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-02-0.5-20220308	SW8270C	1,2-Dichlorobenzene	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	1,3-Dichlorobenzene	0.00062	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	1-Methylnaphthalene	0.0014	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,4,5-Trichlorophenol	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,4,6-Trichlorophenol	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,4-Dichlorophenol	0.0036	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,4-Dimethylphenol	0.0078	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,4-Dinitrotoluene	0.0056	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,6-Dinitrotoluene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Chloronaphthalene	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Chlorophenol	0.00052	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Methylnaphthalene	0.0014	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Methylphenol	0.003	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Nitroaniline	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Nitrophenol	0.0008	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	3 & 4 Methylphenol	0.0079	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	4-Bromophenyl phenyl ether	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	4-Chloro-3-methylphenol	0.0043	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	4-Chlorophenyl phenyl ether	0.00082	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Acenaphthene	0.0006	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Acenaphthylene	0.0013	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Anthracene	0.0023	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Azobenzene	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Benzo[a]anthracene	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Benzo[a]pyrene	0.012	mg/Kg	J	ICVS>UCL; LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Benzo[b]fluoranthene	0.073	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Benzo[b]fluoranthene	0.073	mg/Kg	J	FD>RPD
C2WP-02-0.5-20220308	SW8270C	Benzoic acid	0.16	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Bis(2-chloroethyl)ether	0.001	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.036	mg/Kg	U	LB<RL
C2WP-02-0.5-20220308	SW8270C	Carbazole	0.0062	mg/Kg	J	CCV>UCL
C2WP-02-0.5-20220308	SW8270C	Chrysene	0.069	mg/Kg	J	FD>RPD; LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Dibenz(a,h)anthracene	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Dibenzofuran	0.00077	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Diethyl phthalate	0.0029	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Dimethyl phthalate	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Di-n-butyl phthalate	0.0079	mg/Kg	U	LB<RL; LCS<LCL (J)
C2WP-02-0.5-20220308	SW8270C	Fluoranthene	0.08	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Fluorene	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Hexachlorobenzene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Hexachlorobutadiene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Hexachloroethane	0.00056	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Isophorone	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Naphthalene	0.0016	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Nitrobenzene	0.0026	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0029	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	N-Nitrosodiphenylamine	0.001	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Pentachlorophenol	0.01	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Phenanthrene	0.013	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Phenol	0.025	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Pyrene	0.071	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308-FD	SW6010B-STLC	Chromium	0.045	mg/L	U	LB<RL
C2WP-02-0.5-20220308-FD	SW6010B-STLC	Zinc	0.074	mg/L	U	LB<RL
C2WP-02-0.5-20220308-FD	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-02-0.5-20220308-FD	SW8011	1,2,3-Trichloropropane	0.000083	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308-FD	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308-FD	SW8270C	Benzo[a]pyrene	0.018	mg/Kg	J	ICVS>UCL
C2WP-02-0.5-20220308-FD	SW8270C	Benzo[b]fluoranthene	0.17	mg/Kg	J	FD>RPD
C2WP-02-0.5-20220308-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.011	mg/Kg	U	LB<RL
C2WP-02-0.5-20220308-FD	SW8270C	Butyl benzyl phthalate	0.009	mg/Kg	U	LB<RL
C2WP-02-0.5-20220308-FD	SW8270C	Chrysene	0.12	mg/Kg	J	FD>RPD
C2WP-02-0.5-20220308-FD	SW8270C	Di-n-butyl phthalate	0.0036	mg/Kg	U	LB<RL
C2WP-02-0.5-20220308-FD	SW8270C	Fluoranthene	0.13	mg/Kg	J	FD>RPD
C2WP-02-0.5-20220308-FD	SW8270C	Pyrene	0.1	mg/Kg	J	FD>RPD
C2WP-02-1.5-20220308	SW6010B	Boron	5.4	mg/Kg	U	LB<RL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-02-1.5-20220308	SW6010B-STLC	Beryllium	0.0016	mg/L	U	LB<RL
C2WP-02-1.5-20220308	SW6010B-STLC	Copper	0.2	mg/L	U	LB<RL
C2WP-02-1.5-20220308	SW7470A	Mercury, STLC	0.0008	mg/L	UJ	HTa>UCL
C2WP-02-1.5-20220308	SW8011	1,2,3-Trichloropropane	0.000093	mg/Kg	UJ	HTa>UCL
C2WP-02-1.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-02-1.5-20220308	SW8011	Ethylene Dibromide	0.000017	mg/Kg	UJ	HTa>UCL
C2WP-02-1.5-20220308	SW8260B	Acetone	0.017	mg/Kg	J	Sur>UCL
C2WP-02-1.5-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00085	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	1,2-Dichlorobenzene	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	1,3-Dichlorobenzene	0.00068	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	1-Methylnaphthalene	0.00075	mg/Kg	J	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,4,5-Trichlorophenol	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,4,6-Trichlorophenol	0.0018	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,4-Dichlorophenol	0.004	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,4-Dimethylphenol	0.0085	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,4-Dinitrotoluene	0.0061	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,6-Dinitrotoluene	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Chloronaphthalene	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Chlorophenol	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Methylnaphthalene	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Methylphenol	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Nitroaniline	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Nitrophenol	0.00088	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	3 & 4 Methylphenol	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	4-Bromophenyl phenyl ether	0.0013	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	4-Chloro-3-methylphenol	0.0047	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	4-Chlorophenyl phenyl ether	0.00089	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Acenaphthene	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Acenaphthylene	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Anthracene	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Azobenzene	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Benzo[a]anthracene	0.0016	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Benzo[a]pyrene	0.0018	mg/Kg	UJ	ICVS<LCL; LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Benzo[b]fluoranthene	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Benzoic acid	0.17	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0025	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Bis(2-chloroethyl)ether	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.054	mg/Kg	U	LB<RL
C2WP-02-1.5-20220308	SW8270C	Chrysene	0.0018	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Dibenz(a,h)anthracene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Dibenzofuran	0.00083	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Diethyl phthalate	0.0031	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Dimethyl phthalate	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Di-n-butyl phthalate	0.0097	mg/Kg	U	LB<RL; LCS<LCL (I)
C2WP-02-1.5-20220308	SW8270C	Fluoranthene	0.0024	mg/Kg	J	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Fluorene	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Hexachlorobenzene	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Hexachlorobutadiene	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Hexachloroethane	0.00061	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Isophorone	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Naphthalene	0.00098	mg/Kg	J	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Nitrobenzene	0.0028	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0031	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	N-Nitrosodiphenylamine	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Pentachlorophenol	0.0089	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Phenanthrene	0.0014	mg/Kg	J	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Phenol	0.01	mg/Kg	J	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Pyrene	0.0024	mg/Kg	J	LCS<LCL
C2WP-02-3.5-20220308	SW6010B	Boron	4.3	mg/Kg	U	LB<RL
C2WP-02-3.5-20220308	SW6010B-STLC	Chromium	0.038	mg/L	U	LB<RL
C2WP-02-3.5-20220308	SW6010B-STLC	Selenium	0.082	mg/L	U	LB<RL
C2WP-02-3.5-20220308	SW6010B-STLC	Silver	0.005	mg/L	U	LB<RL
C2WP-02-3.5-20220308	SW6010B-STLC	Zinc	0.041	mg/L	U	LB<RL
C2WP-02-3.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-02-3.5-20220308	SW8011	1,2,3-Trichloropropane	0.000079	mg/Kg	UJ	HTa>UCL
C2WP-02-3.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-02-3.5-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-02-3.5-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-02-3.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.013	mg/Kg	U	LB<RL
C2WP-02-3.5-20220308	SW8270C	Butyl benzyl phthalate	0.014	mg/Kg	U	LB<RL
C2WP-02-3.5-20220308	SW8270C	Di-n-butyl phthalate	0.0034	mg/Kg	U	LB<RL
C2WP-02-6.0-20220308	SW6010B-STLC	Chromium	0.042	mg/L	U	LB<RL
C2WP-02-6.0-20220308	SW6010B-STLC	Zinc	0.043	mg/L	U	LB<RL
C2WP-02-6.0-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-02-6.0-20220308	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2WP-02-6.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-02-6.0-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-02-6.0-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-02-6.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	LB<RL
C2WP-02-6.0-20220308	SW8270C	Butyl benzyl phthalate	0.0066	mg/Kg	U	LB<RL
C2WP-02-6.0-20220308	SW8270C	Di-n-butyl phthalate	0.0032	mg/Kg	U	LB<RL
C2WP-03-0.5-20220308	SW6010B-STLC	Chromium	0.16	mg/L	U	LB<RL
C2WP-03-0.5-20220308	SW6010B-STLC	Zinc	0.72	mg/L	U	LB<RL
C2WP-03-0.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-03-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000087	mg/Kg	UJ	HTa>UCL
C2WP-03-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-03-0.5-20220308	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL
C2WP-03-0.5-20220308	SW8260B	Isopropylbenzene	0.00055	mg/Kg	UJ	LCs<LCL
C2WP-03-0.5-20220308	SW8270C	Benzo[a]pyrene	0.0017	mg/Kg	UJ	ICVS<LCL
C2WP-03-0.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	LB<RL
C2WP-03-0.5-20220308	SW8270C	Butyl benzyl phthalate	0.0075	mg/Kg	U	LB<RL
C2WP-03-0.5-20220308	SW8270C	Di-n-butyl phthalate	0.0051	mg/Kg	U	LB<RL
C2WP-03-2.5-20220308	SW6010B-STLC	Chromium	0.13	mg/L	U	LB<RL
C2WP-03-2.5-20220308	SW6010B-STLC	Zinc	0.16	mg/L	U	LB<RL
C2WP-03-2.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-03-2.5-20220308	SW8011	1,2,3-Trichloropropane	0.000079	mg/Kg	UJ	HTa>UCL
C2WP-03-2.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-03-2.5-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-03-2.5-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-03-2.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.011	mg/Kg	U	LB<RL
C2WP-03-2.5-20220308	SW8270C	Butyl benzyl phthalate	0.0073	mg/Kg	U	LB<RL
C2WP-03-2.5-20220308	SW8270C	Di-n-butyl phthalate	0.0044	mg/Kg	U	LB<RL
C2WP-03-5.0-20220308	SW6010B	Boron	5.2	mg/Kg	U	LB<RL
C2WP-03-5.0-20220308	SW8011	1,2,3-Trichloropropane	0.000074	mg/Kg	UJ	HTa>UCL
C2WP-03-5.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-03-5.0-20220308	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-03-5.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.031	mg/Kg	U	LB<RL
C2WP-03-5.0-20220308	SW8270C	Butyl benzyl phthalate	0.0065	mg/Kg	U	LB<RL
C2WP-03-5.0-20220308	SW8270C	Di-n-butyl phthalate	0.0062	mg/Kg	U	LB<RL
C2WP-04-0.5-20220308	SW6010B-STLC	Chromium	0.12	mg/L	U	LB<RL
C2WP-04-0.5-20220308	SW6010B-STLC	Selenium	0.066	mg/L	U	LB<RL
C2WP-04-0.5-20220308	SW6010B-STLC	Zinc	0.65	mg/L	U	LB<RL
C2WP-04-0.5-20220308	SW7470A	Mercury, STLC	0.0013	mg/L	J	HTa>UCL; SD<LCL
C2WP-04-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL
C2WP-04-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-04-0.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-04-0.5-20220308	SW8270C	Benzo[a]pyrene	0.0017	mg/Kg	UJ	ICVS<LCL
C2WP-04-0.5-20220308	SW8270C-STLC	1,2,4-Trichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	1,2-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	1,3-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	1,4-Dichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4,5-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4,6-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4-Dichlorophenol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4-Dimethylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4-Dinitrophenol	0.1	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,6-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Chloronaphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Chlorophenol	0.008	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Methylnaphthalene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Methylphenol	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Nitroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Nitrophenol	0.0038	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	3,3'-Dichlorobenzidine	0.0048	mg/L	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-04-0.5-20220308	SW8270C-STLC	3-Methylphenol & 4-Methylphenol	0.05	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	3-Nitroaniline	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4,6-Dinitro-2-methylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Bromophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Chloro-3-methylphenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Chloroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Chlorophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Nitroaniline	0.0015	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Nitrophenol	0.03	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Acenaphthene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Acenaphthylene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Anthracene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzo[a]anthracene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzo[a]pyrene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzo[b]fluoranthene	0.006	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzo[g,h,i]perylene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzo[k]fluoranthene	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzoic acid	0.1	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzyl alcohol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	bis (2-chloroisopropyl) ether	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Bis(2-chloroethoxy)methane	0.005	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Bis(2-chloroethyl)ether	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Bis(2-ethylhexyl) phthalate	0.005	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Butyl benzyl phthalate	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Chrysene	0.0035	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Dibenz(a,h)anthracene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Dibenzofuran	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Diethyl phthalate	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Dimethyl phthalate	0.0044	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Di-n-butyl phthalate	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Di-n-octyl phthalate	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Fluoranthene	0.0033	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Fluorene	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Hexachlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Hexachlorobutadiene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Hexachlorocyclopentadiene	0.025	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Hexachloroethane	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Indeno[1,2,3-cd]pyrene	0.017	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Isophorone	0.005	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Naphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Nitrobenzene	0.008	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	N-Nitrosodi-n-propylamine	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	N-Nitrosodiphenylamine	0.0027	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Pentachlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Phenanthrene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Phenol	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Pyrene	0.0014	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Pyridine	0.004	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW6010B-STLC	Chromium	0.12	mg/L	U	LB<RL
C2WP-04-1.5-20220308	SW6010B-STLC	Zinc	0.081	mg/L	U	LB<RL
C2WP-04-1.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-04-1.5-20220308	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL
C2WP-04-1.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-04-1.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-04-1.5-20220308	SW8270C	2,4,5-Trichlorophenol	0.0011	mg/Kg	R	Sur<LCL
C2WP-04-1.5-20220308	SW8270C	2,4,6-Trichlorophenol	0.0078	mg/Kg	J	LCSRPD; Sur<LCL
C2WP-04-1.5-20220308	SW8270C	2,4-Dinitrophenol	0.076	mg/Kg	R	Sur<LCL
C2WP-04-1.5-20220308	SW8270C	4,6-Dinitro-2-methylphenol	0.013	mg/Kg	R	Sur<LCL
C2WP-04-1.5-20220308	SW8270C	4-Chloro-3-methylphenol	0.0043	mg/Kg	R	Sur<LCL
C2WP-04-1.5-20220308	SW8270C	4-Nitrophenol	0.022	mg/Kg	R	Sur<LCL
C2WP-04-1.5-20220308	SW8270C	Benzo[a]pyrene	0.0017	mg/Kg	UJ	ICVS<LCL
C2WP-04-1.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.097	mg/Kg	U	LB<RL
C2WP-04-1.5-20220308	SW8270C	Di-n-butyl phthalate	0.0052	mg/Kg	U	LB<RL
C2WP-04-1.5-20220308	SW8270C-STLC	1,2,4-Trichlorobenzene	0.007	mg/L	UJ	Sur<UCL
C2WP-04-1.5-20220308	SW8270C-STLC	1,2-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	1,3-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	1,4-Dichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,4,5-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-04-1.5-20220308	SW8270C-STLC	2,4,6-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,4-Dichlorophenol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,4-Dimethylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,4-Dinitrophenol	0.1	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,4-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,6-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Chloronaphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Chlorophenol	0.008	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Methylnaphthalene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Methylphenol	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Nitroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Nitrophenol	0.0038	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	3,3'-Dichlorobenzidine	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	3-Methylphenol & 4-Methylphenol	0.05	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	3-Nitroaniline	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4,6-Dinitro-2-methylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Bromophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Chloro-3-methylphenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Chloroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Chlorophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Nitroaniline	0.0015	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Nitrophenol	0.03	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Acenaphthene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Acenaphthylene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Anthracene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzo[a]anthracene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzo[a]pyrene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzo[b]fluoranthene	0.006	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzo[g,h,i]perylene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzo[k]fluoranthene	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzoic acid	0.1	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzyl alcohol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	bis (2-chloroisopropyl) ether	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Bis(2-chloroethoxy)methane	0.005	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Bis(2-chloroethyl)ether	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Bis(2-ethylhexyl) phthalate	0.005	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Butyl benzyl phthalate	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Chrysene	0.0035	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Dibenz(a,h)anthracene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Dibenzofuran	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Diethyl phthalate	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Dimethyl phthalate	0.0044	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Di-n-butyl phthalate	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Di-n-octyl phthalate	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Fluoranthene	0.0033	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Fluorene	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Hexachlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Hexachlorobutadiene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Hexachlorocyclopentadiene	0.025	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Hexachloroethane	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Indeno[1,2,3-cd]pyrene	0.017	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Isophorone	0.005	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Naphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Nitrobenzene	0.008	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	N-Nitrosodi-n-propylamine	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	N-Nitrosodiphenylamine	0.0027	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Pentachlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Phenanthrene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Phenol	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Pyrene	0.0014	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Pyridine	0.004	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW6010B	Boron	5.8	mg/Kg	U	LB<RL
C2WP-04-3.5-20220308	SW8011	1,2,3-Trichloropropane	0.000071	mg/Kg	UJ	HTa>UCL
C2WP-04-3.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-04-3.5-20220308	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-04-3.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.018	mg/Kg	U	LB<RL
C2WP-04-3.5-20220308	SW8270C-STLC	1,2,4-Trichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	1,2-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-04-3.5-20220308	SW8270C-STLC	1,3-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	1,4-Dichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4,5-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4,6-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4-Dichlorophenol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4-Dimethylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4-Dinitrophenol	0.1	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,6-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Chloronaphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Chlorophenol	0.008	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Methylnaphthalene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Methylphenol	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Nitroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Nitrophenol	0.0038	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	3,3'-Dichlorobenzidine	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	3-Methylphenol & 4-Methylphenol	0.05	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	3-Nitroaniline	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4,6-Dinitro-2-methylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Bromophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Chloro-3-methylphenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Chloroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Chlorophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Nitroaniline	0.0015	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Nitrophenol	0.03	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Acenaphthene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Acenaphthylene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Anthracene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzo[a]anthracene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzo[a]pyrene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzo[b]fluoranthene	0.006	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzo[g,h,i]perylene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzo[k]fluoranthene	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzoic acid	0.1	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzyl alcohol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	bis (2-chloroisopropyl) ether	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Bis(2-chloroethoxy)methane	0.005	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Bis(2-chloroethyl)ether	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Bis(2-ethylhexyl) phthalate	0.005	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Butyl benzyl phthalate	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Chrysene	0.0035	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Dibenz(a,h)anthracene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Dibenzofuran	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Diethyl phthalate	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Dimethyl phthalate	0.0044	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Di-n-butyl phthalate	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Di-n-octyl phthalate	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Fluoranthene	0.0033	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Fluorene	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Hexachlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Hexachlorobutadiene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Hexachlorocyclopentadiene	0.025	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Hexachloroethane	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Indeno[1,2,3-cd]pyrene	0.017	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Isophorone	0.005	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Naphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Nitrobenzene	0.008	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	N-Nitrosodi-n-propylamine	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	N-Nitrosodiphenylamine	0.0027	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Pentachlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Phenanthrene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Phenol	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Pyrene	0.0014	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Pyridine	0.004	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW6010B-STLC	Chromium	0.07	mg/L	U	LB<RL
C2WP-04-6.0-20220308	SW6010B-STLC	Selenium	0.096	mg/L	U	LB<RL
C2WP-04-6.0-20220308	SW6010B-STLC	Selenium	0.096	mg/L	U	LB<RL
C2WP-04-6.0-20220308	SW6010B-STLC	Zinc	0.22	mg/L	U	LB<RL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-04-6.0-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-04-6.0-20220308	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2WP-04-6.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-04-6.0-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-04-6.0-20220308	SW8270C	Benzo[a]pyrene	0.0085	mg/Kg	J	ICVS>UCL
C2WP-04-6.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.011	mg/Kg	U	LB<RL
C2WP-04-6.0-20220308	SW8270C	Butyl benzyl phthalate	0.0061	mg/Kg	U	LB<RL
C2WP-04-6.0-20220308	SW8270C	Di-n-butyl phthalate	0.0061	mg/Kg	U	LB<RL
C2WP-04-6.0-20220308	SW8270C-STLC	1,2,4-Trichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	1,2-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	1,3-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	1,4-Dichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4,5-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4,6-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4-Dichlorophenol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4-Dimethylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4-Dinitrophenol	0.1	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,6-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Chloronaphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Chlorophenol	0.008	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Methylnaphthalene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Methylphenol	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Nitroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Nitrophenol	0.0038	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	3,3'-Dichlorobenzidine	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	3-Methylphenol & 4-Methylphenol	0.05	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	3-Nitroaniline	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4,6-Dinitro-2-methylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Bromophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Chloro-3-methylphenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Chloroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Chlorophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Nitroaniline	0.0015	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Nitrophenol	0.03	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Acenaphthene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Acenaphthylene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Anthracene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzo[a]anthracene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzo[a]pyrene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzo[b]fluoranthene	0.006	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzo[g,h,i]perylene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzo[k]fluoranthene	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzoic acid	0.1	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzyl alcohol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	bis (2-chloroisopropyl) ether	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Bis(2-chloroethoxy)methane	0.005	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Bis(2-chloroethyl)ether	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Bis(2-ethylhexyl) phthalate	0.005	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Butyl benzyl phthalate	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Chrysene	0.0035	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Dibenz(a,h)anthracene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Dibenzofuran	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Diethyl phthalate	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Dimethyl phthalate	0.0044	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Di-n-butyl phthalate	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Di-n-octyl phthalate	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Fluoranthene	0.0033	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Fluorene	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Hexachlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Hexachlorobutadiene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Hexachlorocyclopentadiene	0.025	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Hexachloroethane	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Indeno[1,2,3-cd]pyrene	0.017	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Isophorone	0.005	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Naphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Nitrobenzene	0.008	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	N-Nitrosodi-n-propylamine	0.007	mg/L	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-04-6.0-20220308	SW8270C-STLC	N-Nitrosodiphenylamine	0.0027	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Pentachlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Phenanthrene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Phenol	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Pyrene	0.0014	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Pyridine	0.004	mg/L	UJ	HTp>UCL
C2WP-05-0.5-20220308	SW6010B-STLC	Chromium	0.084	mg/L	U	LB<RL
C2WP-05-0.5-20220308	SW6010B-STLC	Silver	0.0044	mg/L	U	LB<RL
C2WP-05-0.5-20220308	SW6010B-STLC	Zinc	0.31	mg/L	U	LB<RL
C2WP-05-0.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-05-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2WP-05-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-05-0.5-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-05-0.5-20220308	SW8270C	Benzo[a]pyrene	0.0016	mg/Kg	UJ	ICVS<LCL
C2WP-05-0.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.015	mg/Kg	U	LB<RL
C2WP-05-0.5-20220308	SW8270C	Butyl benzyl phthalate	0.0064	mg/Kg	U	LB<RL
C2WP-05-2.5-20220308	SW6010B-STLC	Chromium	0.1	mg/L	U	LB<RL
C2WP-05-2.5-20220308	SW6010B-STLC	Selenium	0.069	mg/L	U	LB<RL
C2WP-05-2.5-20220308	SW6010B-STLC	Zinc	0.059	mg/L	U	LB<RL
C2WP-05-2.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-05-2.5-20220308	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2WP-05-2.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-05-2.5-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-05-2.5-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-05-2.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.025	mg/Kg	U	LB<RL
C2WP-05-2.5-20220308	SW8270C	Butyl benzyl phthalate	0.0097	mg/Kg	U	LB<RL
C2WP-05-2.5-20220308	SW8270C	Di-n-butyl phthalate	0.0035	mg/Kg	U	LB<RL
C2WP-05-5.0-20220308	SW6010B-STLC	Chromium	0.085	mg/L	U	LB<RL
C2WP-05-5.0-20220308	SW6010B-STLC	Zinc	0.04	mg/L	U	LB<RL
C2WP-05-5.0-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-05-5.0-20220308	SW8011	1,2,3-Trichloropropane	0.000078	mg/Kg	UJ	HTa>UCL
C2WP-05-5.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-05-5.0-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-05-5.0-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-05-5.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.011	mg/Kg	U	LB<RL
C2WP-05-5.0-20220308	SW8270C	Di-n-butyl phthalate	0.0033	mg/Kg	U	LB<RL
C2WP-06-0.5-20220308	SW6010B-STLC	Chromium	0.12	mg/L	U	LB<RL
C2WP-06-0.5-20220308	SW6010B-STLC	Selenium	0.075	mg/L	U	LB<RL
C2WP-06-0.5-20220308	SW6010B-STLC	Vanadium	1.1	mg/L	J	FD>RPD
C2WP-06-0.5-20220308	SW6010B-STLC	Zinc	0.32	mg/L	U	LB<RL
C2WP-06-0.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-06-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000083	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308	SW8270C	Benzo[a]pyrene	0.0016	mg/Kg	UJ	ICVS<LCL
C2WP-06-0.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.018	mg/Kg	U	LB<RL
C2WP-06-0.5-20220308	SW8270C	Butyl benzyl phthalate	0.0085	mg/Kg	U	LB<RL
C2WP-06-0.5-20220308-FD	SW6010B-STLC	Vanadium	0.88	mg/L	J	FD>RPD
C2WP-06-0.5-20220308-FD	SW6010B-STLC	Zinc	0.46	mg/L	U	LB<RL
C2WP-06-0.5-20220308-FD	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-06-0.5-20220308-FD	SW8011	1,2,3-Trichloropropane	0.000081	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308-FD	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308-FD	SW8260B	Isopropylbenzene	0.00049	mg/Kg	UJ	LCS<LCL
C2WP-06-0.5-20220308-FD	SW8270C	1,2,4-Trichlorobenzene	0.00075	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	1,2-Dichlorobenzene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	1,3-Dichlorobenzene	0.0006	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	1,4-Dichlorobenzene	0.001	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	1-Methylnaphthalene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4,5-Trichlorophenol	0.001	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4-Dichlorophenol	0.0035	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4-Dimethylphenol	0.0075	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4-Dinitrophenol	0.073	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4-Dinitrotoluene	0.0054	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,6-Dinitrotoluene	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2-Chloronaphthalene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2-Chlorophenol	0.0005	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-06-0.5-20220308-FD	SW8270C	2-Methylnaphthalene	0.0011	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2-Methylphenol	0.0012	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2-Nitroaniline	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2-Nitrophenol	0.00078	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	3 & 4 Methylphenol	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	3,3'-Dichlorobenzidine	0.011	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	3-Nitroaniline	0.013	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4,6-Dinitro-2-methylphenol	0.013	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Bromophenyl phenyl ether	0.0011	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Chloro-3-methylphenol	0.0041	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Chloroaniline	0.017	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Chlorophenyl phenyl ether	0.00079	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Nitroaniline	0.0063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Nitrophenol	0.022	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Acenaphthene	0.00058	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Acenaphthylene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Anthracene	0.002	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Azobenzene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzo[a]anthracene	0.0014	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzo[a]pyrene	0.0016	mg/Kg	UJ	ICVS<LCL; Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzo[b]fluoranthene	0.0013	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzo[g,h,i]perylene	0.0023	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzo[k]fluoranthene	0.0018	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzyl alcohol	0.0063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	bis (2-chloroisopropyl) ether	0.00076	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Bis(2-chloroethoxy)methane	0.0023	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Bis(2-chloroethyl)ether	0.00096	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.023	mg/Kg	U	LB<RL; Sur<LCL (J)
C2WP-06-0.5-20220308-FD	SW8270C	Butyl benzyl phthalate	0.0086	mg/Kg	U	LB<RL; Sur<LCL (J)
C2WP-06-0.5-20220308-FD	SW8270C	Carbazole	0.00091	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Chrysene	0.0064	mg/Kg	J	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Dibenz(a,h)anthracene	0.0015	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Dibenzofuran	0.00074	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Diethyl phthalate	0.0028	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Dimethyl phthalate	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Di-n-butyl phthalate	0.0058	mg/Kg	U	LB<RL; Sur<LCL (J)
C2WP-06-0.5-20220308-FD	SW8270C	Di-n-octyl phthalate	0.014	mg/Kg	U	LB<RL; Sur<LCL (J)
C2WP-06-0.5-20220308-FD	SW8270C	Fluoranthene	0.0025	mg/Kg	J	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Fluorene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Hexachlorobenzene	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Hexachlorobutadiene	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Hexachlorocyclopentadiene	0.00096	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Hexachloroethane	0.00054	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Indeno[1,2,3-cd]pyrene	0.0015	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Isophorone	0.0011	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Naphthalene	0.00081	mg/Kg	J	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Nitrobenzene	0.0025	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	N-Nitrosodi-n-propylamine	0.0028	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	N-Nitrosodiphenylamine	0.001	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Pentachlorophenol	0.53	mg/Kg	J	LCS<LCL; Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Phenanthrene	0.0029	mg/Kg	J	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Phenol	0.0029	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Pyrene	0.0045	mg/Kg	J	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Pyridine	0.02	mg/Kg	UJ	Sur<LCL
C2WP-06-1.5-20220308	SW6010B-STLC	Zinc	0.14	mg/L	U	LB<RL
C2WP-06-1.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-06-1.5-20220308	SW8011	1,2,3-Trichloropropane	0.00079	mg/Kg	UJ	HTa>UCL
C2WP-06-1.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2WP-06-1.5-20220308	SW8011	Ethylene Dibromide	0.00014	mg/Kg	UJ	HTa>UCL
C2WP-06-1.5-20220308	SW8270C	4-Nitroaniline	0.0083	mg/Kg	J	LCS>UCL
C2WP-06-1.5-20220308	SW8270C	Benzo[a]pyrene	0.0016	mg/Kg	UJ	ICVS<LCL
C2WP-06-1.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	LB<RL
C2WP-06-1.5-20220308	SW8270C	Butyl benzyl phthalate	0.007	mg/Kg	U	LB<RL
C2WP-06-1.5-20220308	SW8270C	Di-n-butyl phthalate	0.0038	mg/Kg	U	LB<RL
C2WP-06-3.5-20220308	SW6010B-STLC	Zinc	0.042	mg/L	U	LB<RL
C2WP-06-3.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-06-3.5-20220308	SW8011	1,2,3-Trichloropropane	0.00079	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-06-3.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2WP-06-3.5-20220308	SW8011	Ethylene Dibromide	0.00014	mg/Kg	UJ	HTa>UCL
C2WP-06-3.5-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-06-3.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	U	LB<RL
C2WP-06-3.5-20220308	SW8270C	Butyl benzyl phthalate	0.0093	mg/Kg	U	LB<RL
C2WP-06-3.5-20220308	SW8270C	Di-n-butyl phthalate	0.0041	mg/Kg	U	LB<RL
C2WP-06-6.0-20220308	SW6010B-STLC	Zinc	0.057	mg/L	U	LB<RL
C2WP-06-6.0-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-06-6.0-20220308	SW8011	1,2,3-Trichloropropane	0.00068	mg/Kg	UJ	HTa>UCL
C2WP-06-6.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C2WP-06-6.0-20220308	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-06-6.0-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-06-6.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.015	mg/Kg	U	LB<RL
C2WP-06-6.0-20220308	SW8270C	Butyl benzyl phthalate	0.0065	mg/Kg	U	LB<RL
C2WP-07-0.5-20220308	SW6010B-STLC	Zinc	0.3	mg/L	U	LB<RL
C2WP-07-0.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-07-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL
C2WP-07-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-07-0.5-20220308	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL
C2WP-07-0.5-20220308	SW8260B	Isopropylbenzene	0.00067	mg/Kg	UJ	LCS<LCL
C2WP-07-0.5-20220308	SW8270C	Benzo[a]pyrene	0.0017	mg/Kg	UJ	ICVS<LCL
C2WP-07-0.5-20220308	SW8270C	Butyl benzyl phthalate	0.01	mg/Kg	U	LB<RL
C2WP-07-0.5-20220308	SW8270C	Di-n-butyl phthalate	0.0047	mg/Kg	U	LB<RL
C2WP-07-2.5-20220308	SW6010B-STLC	Zinc	0.25	mg/L	U	LB<RL
C2WP-07-2.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-07-2.5-20220308	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2WP-07-2.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-07-2.5-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-07-2.5-20220308	SW8260B	Isopropylbenzene	0.00051	mg/Kg	UJ	LCS<LCL
C2WP-07-2.5-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-07-2.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.054	mg/Kg	U	LB<RL
C2WP-07-2.5-20220308	SW8270C	Butyl benzyl phthalate	0.016	mg/Kg	U	LB<RL
C2WP-07-2.5-20220308	SW8270C	Di-n-butyl phthalate	0.0057	mg/Kg	U	LB<RL
C2WP-07-5.0-20220308	SW6010B-STLC	Zinc	0.065	mg/L	U	LB<RL
C2WP-07-5.0-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-07-5.0-20220308	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C2WP-07-5.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C2WP-07-5.0-20220308	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-07-5.0-20220308	SW8260B	Isopropylbenzene	0.00063	mg/Kg	UJ	LCS<LCL
C2WP-07-5.0-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-07-5.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	LB<RL
C2WP-07-5.0-20220308	SW8270C	Butyl benzyl phthalate	0.0086	mg/Kg	U	LB<RL
C2WP-WC-20220308	SW6010B-STLC	Zinc	0.12	mg/L	U	LB<RL
C2WP-WC-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-WC-20220308	SW8011	1,2,3-Trichloropropane	0.00007	mg/Kg	UJ	HTa>UCL
C2WP-WC-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-WC-20220308	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-WC-20220308	SW8260B	Isopropylbenzene	0.00068	mg/Kg	UJ	LCS<LCL
C2WP-WC-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00071	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	1,2-Dichlorobenzene	0.00059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	1,3-Dichlorobenzene	0.00056	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	1,4-Dichlorobenzene	0.00098	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	2,4,5-Trichlorophenol	0.00095	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2WP-WC-20220308	SW8270C	2,4-Dinitrophenol	0.069	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	4,6-Dinitro-2-methylphenol	0.012	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	4-Chloro-3-methylphenol	0.0039	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	4-Chloroaniline	0.016	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	4-Nitrophenol	0.02	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Acenaphthene	0.00054	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Acenaphthylene	0.00059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Anthracene	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Azobenzene	0.00059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Benzo[a]anthracene	0.0013	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Benzo[a]pyrene	0.0057	mg/Kg	J	ICVS>UCL; Sur<LCL
C2WP-WC-20220308	SW8270C	Benzo[b]fluoranthene	0.016	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Benzo[g,h,i]perylene	0.0047	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Benzo[k]fluoranthene	0.0059	mg/Kg	J	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-WC-20220308	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	LCS<LCL
C2WP-WC-20220308	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	bis (2-chloroisopropyl) ether	0.00072	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0021	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Bis(2-chloroethyl)ether	0.00091	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.018	mg/Kg	U	LB<RL
C2WP-WC-20220308	SW8270C	Butyl benzyl phthalate	0.027	mg/Kg	U	LB<RL
C2WP-WC-20220308	SW8270C	Chrysene	0.017	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Di-n-butyl phthalate	0.0041	mg/Kg	U	LB<RL
C2WP-WC-20220308	SW8270C	Fluoranthene	0.011	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Fluorene	0.00059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Hexachlorobutadiene	0.0018	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Hexachloroethane	0.00051	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Indeno[1,2,3-cd]pyrene	0.0061	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Isophorone	0.00099	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Naphthalene	0.00059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Nitrobenzene	0.0024	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0026	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Pentachlorophenol	0.94	mg/Kg	J	LCS<LCL; Sur<LCL
C2WP-WC-20220308	SW8270C	Phenanthrene	0.0064	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Phenol	0.0027	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Pyrene	0.013	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Pyridine	0.019	mg/Kg	UJ	Sur<LCL
C2WP-WC-W-20220325	SW6010B	Boron	210	ug/L	U	LB<RL
C2WP-WC-W-20220325	SW8082	PCB-1016	0.062	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1221	0.076	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1232	0.064	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1242	0.06	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1248	0.053	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1254	0.076	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1260	0.062	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1262	0.064	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1268	0.06	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1,1,2-Tetrachloroethane	3.8	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1,1-Trichloroethane	2.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1,2,2-Tetrachloroethane	5.6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	8.8	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1,2-Trichloroethane	7	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1-Dichloroethane	2.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1-Dichloroethene	3.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1-Dichloropropene	8.4	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2,3-Trichlorobenzene	82	ug/L	J	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2,3-Trichloropropane	5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2,4-Trichlorobenzene	17	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2,4-Trimethylbenzene	20	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2-Dibromo-3-Chloropropane	17	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2-Dibromoethane	2.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2-Dichlorobenzene	3.8	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2-Dichloroethane	4.3	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2-Dichloropropane	6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,3,5-Trimethylbenzene	15	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,3-Dichlorobenzene	5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,3-Dichloropropane	2.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,4-Dichlorobenzene	5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	2,2-Dichloropropane	6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	2-Butanone (MEK)	250	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	2-Chlorotoluene	12	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	2-Hexanone	94	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	4-Chlorotoluene	12	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	4-Methyl-2-pentanone (MIBK)	170	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Acetone	360	ug/L	J	ICVS>UCL; Sur<LCL
C2WP-WC-W-20220325	SW8260B	Benzene	11	ug/L	J	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Bromobenzene	3.8	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Bromochloromethane	5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Bromodichloromethane	6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Bromoform	16	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Bromomethane	13	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Carbon disulfide	8.3	ug/L	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-WC-W-20220325	SW8260B	Carbon tetrachloride	2.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Chlorobenzene	6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Chloroethane	9.6	ug/L	UJ	CCV<LCL; Sur<LCL
C2WP-WC-W-20220325	SW8260B	Chloroform	3.2	ug/L	J	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Chloromethane	14	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	cis-1,2-Dichloroethene	5.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	cis-1,3-Dichloropropene	9	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Dibromochloromethane	5.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Dibromomethane	6.2	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Dichlorodifluoromethane	13	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Ethylbenzene	8.1	ug/L	J	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Hexachlorobutadiene	6.7	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Isopropylbenzene	19	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Methyl tert-butyl ether	7	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Methylene Chloride	120	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	m-Xylene & p-Xylene	26	ug/L	J	CCV>UCL; Sur<LCL
C2WP-WC-W-20220325	SW8260B	Naphthalene	22	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	n-Butylbenzene	23	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	N-Propylbenzene	9.1	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	o-Xylene	15	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	p-Isopropyltoluene	15	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	sec-Butylbenzene	27	ug/L	U	LB<RL; TB<RL; Sur<LCL (J)
C2WP-WC-W-20220325	SW8260B	Styrene	19	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	tert-Butylbenzene	26	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Tetrachloroethene	8.4	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Toluene	5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	trans-1,2-Dichloroethene	3.3	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	trans-1,3-Dichloropropene	9.2	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Trichloroethene	6.6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Trichlorofluoromethane	12	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Vinyl acetate	44	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Vinyl chloride	1.3	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Xylenes, Total	26	ug/L	J	Sur<LCL
C2WP-WC-W-20220325	SW8270C	4-Nitrophenol	1.7	ug/L	UJ	CCV<LCL
C2WP-WC-W-20220325	SW8270C	Benzoic acid	1.3	ug/L	UJ	CCV<LCL
C2WP-WC-W-20220325	SW8270C	Hexachlorocyclopentadiene	0.14	ug/L	UJ	LCS<LCL
C2WP-WC-W-20220325	SW8270C	Pyridine	1	ug/L	R	LCS<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0079	mg/Kg	UJ	LCS<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2,4-Dichlorophenol	0.017	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2,4-Dimethylphenol	0.037	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2-Chlorophenol	0.0024	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2-Methylphenol	0.006	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2-Nitrophenol	0.0038	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	3 & 4 Methylphenol	0.0091	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	Benzoic acid	0.74	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	Phenol	0.014	mg/Kg	UJ	Sur<LCL
C2WS-02-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2WS-04-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.036	mg/Kg	UJ	LCS<LCL
C2WS-04-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0014	mg/Kg	UJ	LCS<LCL
C2WS-05-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.015	mg/Kg	UJ	LCS<LCL
C2WS-05-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	1,2,4-Trichlorobenzene	0.0069	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	1,2-Dichlorobenzene	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	1,3-Dichlorobenzene	0.0055	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	1,4-Dichlorobenzene	0.0095	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	1-Methylnaphthalene	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.015	mg/Kg	UJ	LCS<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2,4-Dichlorophenol	0.032	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2,4-Dimethylphenol	0.069	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2,4-Dinitrotoluene	0.049	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2,6-Dinitrotoluene	0.017	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Chloronaphthalene	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Chlorophenol	0.0046	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Methylnaphthalene	0.01	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Methylphenol	0.011	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Nitroaniline	0.017	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Nitrophenol	0.0071	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	3 & 4 Methylphenol	0.017	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WS-06-0.0-0.5-20220512	SW8270C	3,3'-Dichlorobenzidine	0.097	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	3-Nitroaniline	0.11	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	4-Bromophenyl phenyl ether	0.01	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	4-Chloroaniline	0.15	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	4-Chlorophenyl phenyl ether	0.0072	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	4-Nitroaniline	0.057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Azobenzene	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Benzoic acid	1.4	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Benzyl alcohol	0.057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	bis (2-chloroisopropyl) ether	0.007	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Bis(2-chloroethoxy)methane	0.021	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Bis(2-chloroethyl)ether	0.0089	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Bis(2-ethylhexyl) phthalate	0.082	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Butyl benzyl phthalate	0.059	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Carbazole	0.33	mg/Kg	J	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Dibenz(a,h)anthracene	0.043	mg/Kg	J	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Dibenzofuran	0.014	mg/Kg	J	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Diethyl phthalate	0.025	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Dimethyl phthalate	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Di-n-butyl phthalate	0.031	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Di-n-octyl phthalate	0.075	mg/Kg	J	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Hexachlorobenzene	0.017	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Hexachlorobutadiene	0.017	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Hexachlorocyclopentadiene	0.0089	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Hexachloroethane	0.0049	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Isophorone	0.0097	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Nitrobenzene	0.023	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	N-Nitrosodi-n-propylamine	0.025	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	N-Nitrosodiphenylamine	0.0092	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Phenol	0.026	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW6020	Arsenic	8.9	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW6020	Barium	270	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW6020	Beryllium	0.62	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW6020	Iron	36000	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW6020	Manganese	1700	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	1,2,4-Trichlorobenzene	0.0079	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	1,2-Dichlorobenzene	0.0066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	1,3-Dichlorobenzene	0.0063	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	1,4-Dichlorobenzene	0.011	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	1-Methylnaphthalene	0.025	mg/Kg	J	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.017	mg/Kg	UJ	LCS<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2,4-Dichlorophenol	0.037	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2,4-Dimethylphenol	0.079	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2,4-Dinitrotoluene	0.057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2,6-Dinitrotoluene	0.02	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Chloronaphthalene	0.0066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Chlorophenol	0.0053	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Methylnaphthalene	0.016	mg/Kg	J	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Methylphenol	0.013	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Nitroaniline	0.02	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Nitrophenol	0.0082	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	3 & 4 Methylphenol	0.02	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	3,3'-Dichlorobenzidine	0.11	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	3-Nitroaniline	0.13	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	4-Bromophenyl phenyl ether	0.012	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	4-Chloroaniline	0.18	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	4-Chlorophenyl phenyl ether	0.0083	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	4-Nitroaniline	0.066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Acenaphthylene	0.22	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Anthracene	0.69	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Azobenzene	0.0066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Benzo[a]anthracene	1.1	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Benzo[b]fluoranthene	1.3	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Benzoic acid	1.6	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Benzyl alcohol	0.066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	bis (2-chloroisopropyl) ether	0.008	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Bis(2-chloroethoxy)methane	0.024	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Bis(2-chloroethyl)ether	0.01	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WS-06-0.5-1.5-20220512	SW8270C	Bis(2-ethylhexyl) phthalate	0.094	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Butyl benzyl phthalate	0.067	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Carbazole	1.2	mg/Kg	J	FD>RPD; Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Chrysene	3.2	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Dibenz(a,h)anthracene	0.073	mg/Kg	J	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Dibenzofuran	0.096	mg/Kg	J	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Diethyl phthalate	0.029	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Dimethyl phthalate	0.0066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Di-n-butyl phthalate	0.036	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Di-n-octyl phthalate	0.016	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Fluoranthene	11	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Fluorene	0.16	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Hexachlorobenzene	0.02	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Hexachlorobutadiene	0.02	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Hexachlorocyclopentadiene	0.01	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Hexachloroethane	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Isophorone	0.011	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Nitrobenzene	0.026	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	N-Nitrosodi-n-propylamine	0.029	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	N-Nitrosodiphenylamine	0.011	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Pentachlorophenol	4.2	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Phenanthrene	5.4	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Phenol	0.03	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Pyrene	6.7	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW6020	Arsenic	6.2	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW6020	Barium	190	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW6020	Beryllium	0.45	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW6020	Iron	28000	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW6020	Manganese	1100	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	2,4,6-Trichlorophenol	0.0078	mg/Kg	UJ	LCS<LCL
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Acenaphthylene	0.084	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Anthracene	0.11	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Benzo[a]anthracene	0.32	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Benzo[b]fluoranthene	0.53	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Carbazole	0.24	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Chrysene	0.88	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Fluoranthene	2.7	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Fluorene	0.019	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Pentachlorophenol	1.4	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Phenanthrene	0.54	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Pyrene	1.8	mg/Kg	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Arsenic	8.6	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Barium	110	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Beryllium	0.55	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Chromium	14	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Cobalt	7.5	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Copper	31	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Iron	26000	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Lead	24	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Manganese	590	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Molybdenum	1.2	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Nickel	11	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Vanadium	60	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Zinc	54	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW8270C	Benzo[b]fluoranthene	0.28	ug/L	J	LCSRPD
C2WS-06-GW-20220512	SW8270C	Benzoic acid	1.3	ug/L	UJ	LCS<LCL
C2WS-06-GW-20220512-FD	SW6020	Arsenic	37	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Barium	770	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Beryllium	3.1	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Chromium	80	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Cobalt	51	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Copper	160	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Iron	120000	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Lead	240	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Manganese	4700	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Molybdenum	3.5	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Nickel	63	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Vanadium	330	ug/L	J	FD>RPD

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WS-06-GW-20220512-FD	SW6020	Zinc	270	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW8270C	Benzo[b]fluoranthene	0.23	ug/L	J	LCSRPD
C2WS-06-GW-20220512-FD	SW8270C	Benzoic acid	1.4	ug/L	UJ	LCS<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2,4,5-Trichlorophenol	0.0045	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0071	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2,4-Dichlorophenol	0.015	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2,4-Dimethylphenol	0.033	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2,4-Dinitrophenol	0.32	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2-Chlorophenol	0.0022	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2-Methylphenol	0.0054	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2-Nitrophenol	0.0034	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	3 & 4 Methylphenol	0.0082	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	4,6-Dinitro-2-methylphenol	0.055	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	4-Chloro-3-methylphenol	0.018	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	4-Nitrophenol	0.095	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	Benzoic acid	0.67	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	Pentachlorophenol	0.18	mg/Kg	J	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	Phenol	0.013	mg/Kg	UJ	Sur<LCL
C2WS-08-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0017	mg/Kg	UJ	LCS<LCL
C2WS-08-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2WS-08-1.5-2.5-20220512	SW6020	Barium	220	mg/Kg	J	MS<LCL
C2WS-08-1.5-2.5-20220512	SW6020	Iron	27000	mg/Kg	J	MS>UCL; SD>UCL
C2WS-08-1.5-2.5-20220512	SW6020	Manganese	230	mg/Kg	J	MS>UCL; SD>UCL
C2WS-08-1.5-2.5-20220512	SW6020	Vanadium	63	mg/Kg	J	SD>UCL
C2WS-08-1.5-2.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2WS-08-1.5-2.5-20220512	SW8270C	2,4-Dinitrophenol	0.073	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-08-1.5-2.5-20220512	SW8270C	4-Chloroaniline	0.017	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-08-1.5-2.5-20220512	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-08-1.5-2.5-20220512	SW8270C	Pyridine	0.02	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-09-0.0-0.5-20220512	SW8270C	Diethyl phthalate	0.0051	mg/Kg	U	LB<RL
C2WS-09-0.0-0.5-20220512	SW8270C	Pyridine	0.025	mg/Kg	UJ	LCS<LCL
C2WS-10-0.0-0.5-20220512	SW8270C	Benzo[b]fluoranthene	0.011	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512	SW8270C	Chrysene	0.014	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512	SW8270C	Diethyl phthalate	0.0039	mg/Kg	U	LB<RL
C2WS-10-0.0-0.5-20220512	SW8270C	Fluoranthene	0.031	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512	SW8270C	Phenanthrene	0.0045	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512	SW8270C	Pyrene	0.022	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512	SW8270C	Pyridine	0.018	mg/Kg	UJ	LCS<LCL
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Benzo[b]fluoranthene	0.031	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Chrysene	0.047	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Fluoranthene	0.17	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Phenanthrene	0.05	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Pyrene	0.1	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
C2WS-11-0.0-0.5-20220511	SW6020	Iron	27000	mg/Kg	J	MS<LCL; SD>UCL
C2WS-11-0.0-0.5-20220511	SW6020	Manganese	200	mg/Kg	J	SD>UCL
C2WS-11-0.0-0.5-20220511	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2WS-11-0.0-0.5-20220511	SW8270C	4-Chloroaniline	0.016	mg/Kg	UJ	MS<LCL
C2WS-11-0.0-0.5-20220511	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-11-0.0-0.5-20220511	SW8270C	Hexachlorocyclopentadiene	0.00092	mg/Kg	UJ	SD<LCL
C2WS-11-0.5-1.5-20220511	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2WS-12-0.0-0.5-20220511	SW8270C	2,4,6-Trichlorophenol	0.0014	mg/Kg	UJ	LCS<LCL
C2WS-12-0.5-1.5-20220511	SW8270C	2,4,6-Trichlorophenol	0.0014	mg/Kg	UJ	LCS<LCL
C2WS-12-2.5-3.5-20220511	SW8270C	2,4,6-Trichlorophenol	0.0014	mg/Kg	UJ	LCS<LCL
C2WS-12-5.0-6.0-20220511	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C2WS-13-0.0-0.5-20220512	SW8270C	Chrysene	2	mg/Kg	J	Sur<LCL
C2WS-13-0.0-0.5-20220512	SW8270C	Fluoranthene	6.2	mg/Kg	J	Sur<LCL
C2WS-13-0.0-0.5-20220512	SW8270C	Phenanthrene	1.5	mg/Kg	J	Sur<LCL
C2WS-13-0.0-0.5-20220512	SW8270C	Pyrene	3.8	mg/Kg	J	Sur<LCL
C2WS-13-0.0-0.5-20220512	SW8270C	Pyridine	0.02	mg/Kg	UJ	LCS<LCL
C2WS-13-0.5-2.0-20220512	SW6020	Barium	130	mg/Kg	J	MS>UCL
C2WS-13-0.5-2.0-20220512	SW6020	Iron	32000	mg/Kg	J	MS>UCL; SD>UCL
C2WS-13-0.5-2.0-20220512	SW6020	Manganese	1100	mg/Kg	J	MS>UCL; SD<LCL
C2WS-13-0.5-2.0-20220512	SW6020	Vanadium	50	mg/Kg	J	MS>UCL; SD>UCL
C2WS-13-0.5-2.0-20220512	SW8270C	4-Chloroaniline	0.017	mg/Kg	UJ	MS<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	Azobenzene	0.00063	mg/Kg	UJ	SD<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	Benzyl alcohol	0.0063	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WS-13-0.5-2.0-20220512	SW8270C	Diethyl phthalate	0.007	mg/Kg	U	LB<RL
C2WS-13-0.5-2.0-20220512	SW8270C	Fluoranthene	0.041	mg/Kg	J	MS>UCL; SD>UCL
C2WS-13-0.5-2.0-20220512	SW8270C	Hexachlorocyclopentadiene	0.00097	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	Hexachloroethane	0.00054	mg/Kg	UJ	SD<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	N-Nitrosodi-n-propylamine	0.0028	mg/Kg	UJ	SD<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	Pyrene	0.021	mg/Kg	J	MS>UCL; SD>UCL
C2WS-13-0.5-2.0-20220512	SW8270C	Pyridine	0.02	mg/Kg	UJ	LCS<LCL; SD<LCL
C2WS-13-2.0-3.0-20220512	SW8270C	Pyridine	0.021	mg/Kg	UJ	LCS<LCL
C2WS-14-0.0-0.5-20220512	SW8270C	Pyridine	0.4	mg/Kg	UJ	LCS<LCL
C2WS-15-0.0-0.5-20220512	SW8270C	Diethyl phthalate	0.003	mg/Kg	U	LB<RL
C2WS-15-0.0-0.5-20220512	SW8270C	Pyridine	0.018	mg/Kg	UJ	LCS<LCL
C2WS-15-0.5-1.5-20220512	SW6020	Chromium	12	mg/Kg	J	FD>RPD
C2WS-15-0.5-1.5-20220512	SW6020	Lead	12	mg/Kg	J	FD>RPD
C2WS-15-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.016	mg/Kg	UJ	LCS<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	2,4-Dichlorophenol	0.035	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	2,4-Dimethylphenol	0.075	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	2-Chlorophenol	0.005	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	2-Methylphenol	0.012	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	2-Nitrophenol	0.0077	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	3 & 4 Methylphenol	0.019	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	Benzoic acid	1.5	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	Phenol	0.029	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW6020	Chromium	15	mg/Kg	J	FD>RPD
C2WS-15-0.5-1.5-20220512-FD	SW6020	Lead	19	mg/Kg	J	FD>RPD
C2WS-15-0.5-1.5-20220512-FD	SW8270C	1,2,4-Trichlorobenzene	0.0072	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	1,2-Dichlorobenzene	0.006	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	1,3-Dichlorobenzene	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	1,4-Dichlorobenzene	0.0099	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	1-Methylnaphthalene	0.016	mg/Kg	J	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2,4,6-Trichlorophenol	0.016	mg/Kg	UJ	LCS<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2,4-Dichlorophenol	0.034	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2,4-Dimethylphenol	0.072	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2,4-Dinitrotoluene	0.052	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2,6-Dinitrotoluene	0.018	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Chloronaphthalene	0.006	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Chlorophenol	0.0048	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Methylnaphthalene	0.011	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Methylphenol	0.012	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Nitroaniline	0.018	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Nitrophenol	0.0074	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	3 & 4 Methylphenol	0.018	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	3,3'-Dichlorobenzidine	0.1	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	3-Nitroaniline	0.12	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	4-Bromophenyl phenyl ether	0.011	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	4-Chloroaniline	0.16	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	4-Chlorophenyl phenyl ether	0.0075	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	4-Nitroaniline	0.06	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Azobenzene	0.006	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Benzoic acid	1.5	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Benzyl alcohol	0.06	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	bis (2-chloroisopropyl) ether	0.0073	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Bis(2-chloroethoxy)methane	0.022	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Bis(2-chloroethyl)ether	0.0092	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.085	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Butyl benzyl phthalate	0.061	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Carbazole	0.99	mg/Kg	J	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Dibenz(a,h)anthracene	0.069	mg/Kg	J	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Dibenzofuran	0.051	mg/Kg	J	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Diethyl phthalate	0.026	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Dimethyl phthalate	0.006	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Di-n-butyl phthalate	0.032	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Di-n-octyl phthalate	0.014	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Fluoranthene	25	mg/Kg	J	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Hexachlorobenzene	0.018	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Hexachlorobutadiene	0.018	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Hexachlorocyclopentadiene	0.0092	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Hexachloroethane	0.0052	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Isophorone	0.01	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Nitrobenzene	0.024	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	N-Nitrosodi-n-propylamine	0.026	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	N-Nitrosodiphenylamine	0.0096	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Phenol	0.028	mg/Kg	UJ	Sur<LCL
C2WS-15-1.5-2.5-20220512	SW8270C	Pyridine	0.34	mg/Kg	UJ	LCS<LCL
C2WS-16-0.0-0.5-20220512	SW8270C	Diethyl phthalate	0.0029	mg/Kg	U	LB<RL
C2WS-16-0.0-0.5-20220512	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
C2WS-16-0.5-1.5-20220512	SW8270C	Diethyl phthalate	0.0035	mg/Kg	U	LB<RL
C2WS-16-0.5-1.5-20220512	SW8270C	Pyridine	0.017	mg/Kg	UJ	LCS<LCL
C2WS-WC-S-20220513	SW8270C	Benzoic acid	0.75	mg/Kg	UJ	LCS<LCL
C2WS-WC-S-20220513	SW8270C	Diethyl phthalate	0.015	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW6020	Arsenic	6.9	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502	SW6020	Barium	120	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502	SW6020	Chromium	40	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502	SW6020	Nickel	10	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502	SW6020	Zinc	78	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502	SW8260B	1,2,4-Trimethylbenzene	25	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8260B	1,3,5-Trimethylbenzene	13	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8260B	Isopropylbenzene	13	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8260B	m-Xylene & p-Xylene	21	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8260B	o-Xylene	13	ug/Kg	U	LB<RL; TB<RL
IGBP-01-0.0-0.5-20220502	SW8260B	Vinyl chloride	26	ug/Kg	UJ	ICVS<LCL
IGBP-01-0.0-0.5-20220502	SW8260B	Xylenes, Total	34	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8270C	1-Methylnaphthalene	0.0071	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502	SW8270C	2,4-Dinitrophenol	0.67	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270C	4-Chloroaniline	0.15	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270C	Benzoic acid	1.4	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270C	Bis(2-ethylhexyl) phthalate	0.18	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502	SW8270C	Hexachlorocyclopentadiene	0.0088	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270C	Naphthalene	0.011	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502	SW8270C	Pyridine	0.18	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	1-Methylnaphthalene	0.0055	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	2-Methylnaphthalene	0.014	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Acenaphthene	0.00069	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Acenaphthylene	0.00057	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Benzo[a]anthracene	0.002	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Benzo[a]pyrene	0.00096	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Naphthalene	0.0099	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Phenanthrene	0.0038	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000024	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,4,7,8-HxCDD	0.0000089	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,4,7,8-HxCDF	0.0000031	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,6,7,8-HxCDF	0.0000024	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,7,8,9-HxCDF	0.0000029	mg/Kg	U	EB<RL; LB<RL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,7,8-PeCDF	0.0000016	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-0.0-0.5-20220502-FD	SW6020	Arsenic	9	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502-FD	SW6020	Barium	150	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502-FD	SW6020	Chromium	57	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502-FD	SW6020	Nickel	14	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502-FD	SW6020	Zinc	130	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502-FD	SW8260B	1,2,4-Trimethylbenzene	30	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	1,3,5-Trimethylbenzene	13	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	Isopropylbenzene	15	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	m-Xylene & p-Xylene	42	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	o-Xylene	21	ug/Kg	U	LB<RL; TB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	p-Isopropyltoluene	28	ug/Kg	U	LB<RL; TB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	tert-Butylbenzene	13	ug/Kg	U	LB<RL; TB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	Vinyl chloride	29	ug/Kg	UJ	ICVS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	Xylenes, Total	63	ug/Kg	UJ	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	1-Methylnaphthalene	0.015	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2,4-Dichlorophenol	0.03	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2,4-Dimethylphenol	0.065	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2,4-Dinitrophenol	0.64	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2-Chlorophenol	0.0043	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2-Methylphenol	0.011	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2-Nitrophenol	0.0067	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	3 & 4 Methylphenol	0.016	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	4-Chloroaniline	0.15	mg/Kg	UJ	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Benzoic acid	1.3	mg/Kg	UJ	LCS<LCL; Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.13	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Hexachlorocyclopentadiene	0.0084	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Naphthalene	0.018	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Phenol	0.025	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Pyridine	0.17	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	1-Methylnaphthalene	0.0099	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	2-Methylnaphthalene	0.024	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Acenaphthene	0.00065	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Acenaphthylene	0.00054	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Benzo[a]anthracene	0.0019	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Benzo[a]pyrene	0.00091	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Naphthalene	0.017	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Phenanthrene	0.006	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8290	1,2,3,4,7,8-HxCDD	0.0000009	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8290	1,2,3,4,7,8-HxCDF	0.00000043	mg/Kg	UJ	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8290	1,2,3,6,7,8-HxCDF	0.00000024	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-0.0-0.5-20220502-FD	SW8290	1,2,3,7,8,9-HxCDF	0.00000032	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
IGBP-01-0.0-0.5-20220502-FD	SW8290	1,2,3,7,8-PeCDD	0.00000056	mg/Kg	UJ	EMPC
IGBP-01-0.0-0.5-20220502-FD	SW8290	2,3,4,6,7,8-HxCDF	0.00000021	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW6020	Nickel	7.5	mg/Kg	U	EB<RL
IGBP-01-0.5-1.5-20220502	SW8015B-E	CA Diesel Range Organics (C10-C28)	15	mg/Kg	U	EB>RL
IGBP-01-0.5-1.5-20220502	SW8260B	Vinyl chloride	22	ug/Kg	UJ	ICVS<LCL
IGBP-01-0.5-1.5-20220502	SW8270C	2,4-Dinitrophenol	0.067	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270C	4-Chloroaniline	0.015	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270C	Hexachlorocyclopentadiene	0.00088	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270C	Naphthalene	0.00072	mg/Kg	J	LCSRPD
IGBP-01-0.5-1.5-20220502	SW8270C	Pyridine	0.018	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	1-Methylnaphthalene	0.0003	mg/Kg	J	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	2-Methylnaphthalene	0.00062	mg/Kg	J	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Acenaphthene	0.000069	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Acenaphthylene	0.000057	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Benzo[a]anthracene	0.0002	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Benzo[a]pyrene	0.000096	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Naphthalene	0.00055	mg/Kg	J	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Phenanthrene	0.00019	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000015	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000039	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000027	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,4,7,8-HxCDF	0.00000002	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,6,7,8-HxCDF	0.00000015	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,7,8,9-HxCDF	0.00000029	mg/Kg	U	EB<RL; LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	OCDF	0.00000052	mg/Kg	U	EB<RL; LB<RL
IGBP-01-2.5-3.5-20220513	SW8011	1,2,3-Trichloropropane	0.000065	mg/Kg	UJ	HTa>UCL
IGBP-01-2.5-3.5-20220513	SW8011	1,2-Dibromo-3-Chloropropane	0.0000098	mg/Kg	UJ	HTa>UCL
IGBP-01-2.5-3.5-20220513	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
IGBP-01-2.5-3.5-20220513	SW8270C	2,6-Dinitrotoluene	0.0017	mg/Kg	UJ	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	2-Chlorophenol	0.00044	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	2-Methylnaphthalene	0.00098	mg/Kg	UJ	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	2-Nitroaniline	0.0017	mg/Kg	UJ	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	3,3'-Dichlorobenzidine	0.0093	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	4-Chloroaniline	0.015	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	4-Chlorophenyl phenyl ether	0.0007	mg/Kg	UJ	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	4-Nitroaniline	0.0056	mg/Kg	UJ	SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Acenaphthylene	0.00056	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Azobenzene	0.00056	mg/Kg	UJ	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	LCS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Diethyl phthalate	0.0025	mg/Kg	UJ	LB<RL
IGBP-01-2.5-3.5-20220513	SW8270C	N-Nitrosodi-n-propylamine	0.0024	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Phenanthrene	0.00077	mg/Kg	J	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Phenol	0.0026	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Pyridine	0.018	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000028	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000021	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,4,7,8-HxCDD	0.00000042	mg/Kg	U	EB<RL; LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,4,7,8-HxCDF	0.00000058	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,6,7,8-HxCDF	0.00000037	mg/Kg	UJ	EMPC; LB<RL (U)

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,7,8,9-HxCDD	0.00000043	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,7,8,9-HxCDF	0.00000028	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,7,8-PeCDF	0.00000036	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	2,3,4,6,7,8-HxCDF	0.00000028	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	OCDD	0.000011	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	OCDF	0.0000047	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
IGBP-01-5.0-6.0-20220513	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
IGBP-01-5.0-6.0-20220513	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
IGBP-01-5.0-6.0-20220513	SW8270C	2,4-Dichlorophenol	0.015	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	2,4-Dimethylphenol	0.033	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	2-Chlorophenol	0.0022	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	2-Methylphenol	0.0054	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	2-Nitrophenol	0.0034	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	3 & 4 Methylphenol	0.0082	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	Benzoic acid	0.67	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL; Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	Phenol	0.013	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270SIM	1-Methylnaphthalene	0.0011	mg/Kg	J	Sur>UCL
IGBP-01-5.0-6.0-20220513	SW8270SIM	2-Methylnaphthalene	0.0029	mg/Kg	J	Sur>UCL
IGBP-01-5.0-6.0-20220513	SW8270SIM	Naphthalene	0.0017	mg/Kg	J	Sur>UCL
IGBP-01-5.0-6.0-20220513	SW8270SIM	Pyrene	0.0018	mg/Kg	J	Sur>UCL
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000014	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000036	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,4,7,8-HxCDD	0.00000044	mg/Kg	U	EB<RL; LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,4,7,8-HxCDF	0.00000031	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,6,7,8-HxCDD	0.00000067	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,6,7,8-HxCDF	0.00000031	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,7,8,9-HxCDD	0.00000061	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,7,8,9-HxCDF	0.00000003	mg/Kg	U	EB<RL; LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,7,8-PeCDF	0.00000035	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	2,3,4,6,7,8-HxCDF	0.00000021	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	2,3,4,7,8-PeCDF	0.00000022	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	OCDD	0.000042	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	OCDF	0.0000021	mg/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8015B-E	CA Diesel Range Organics (C10-C28)	53	mg/Kg	U	EB>RL
IGBP-02-0.0-0.5-20220502	SW8260B	1,2,4-Trimethylbenzene	30	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	1,3,5-Trimethylbenzene	24	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	Isopropylbenzene	16	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	m-Xylene & p-Xylene	51	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	o-Xylene	34	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	p-Isopropyltoluene	40	ug/Kg	U	LB<RL; TB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	sec-Butylbenzene	22	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	tert-Butylbenzene	18	ug/Kg	U	LB<RL; TB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	Vinyl chloride	26	ug/Kg	UJ	ICVS<LCL
IGBP-02-0.0-0.5-20220502	SW8260B	Xylenes, Total	85	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8270C	1-Methylnaphthalene	0.016	mg/Kg	UJ	LCSRPD
IGBP-02-0.0-0.5-20220502	SW8270C	2,4-Dichlorophenol	0.031	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	2,4-Dimethylphenol	0.067	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	2,4-Dinitrophenol	0.66	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	2-Chlorophenol	0.0045	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	2-Methylphenol	0.011	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	2-Nitrophenol	0.007	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	3 & 4 Methylphenol	0.017	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	4-Chloroaniline	0.15	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	Benzoic acid	1.4	mg/Kg	UJ	LCS<LCL; Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	Dibenzofuran	0.035	mg/Kg	J	LCSRPD
IGBP-02-0.0-0.5-20220502	SW8270C	Hexachlorocyclopentadiene	0.0086	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	Naphthalene	0.078	mg/Kg	J	LCSRPD
IGBP-02-0.0-0.5-20220502	SW8270C	Phenol	0.04	mg/Kg	J	LCSRPD; Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	Pyridine	0.18	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	1-Methylnaphthalene	0.013	mg/Kg	J	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	2-Methylnaphthalene	0.014	mg/Kg	J	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	Acenaphthene	0.00067	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	Acenaphthylene	0.0011	mg/Kg	J	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	Benzo[a]anthracene	0.002	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	Benzo[a]pyrene	0.00094	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	Naphthalene	0.075	mg/Kg	J	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
IGBP-02-0-0-0.5-20220502	SW8270SIM	Phenanthrene	0.026	mg/Kg	J	LCS<LCL
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,4,6,7,8-HpCDF	0.00004	mg/Kg	J	EMPC
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,4,7,8-HxCDF	0.0000048	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,6,7,8-HxCDF	0.0000051	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,7,8,9-HxCDD	0.0000047	mg/Kg	J	Sur<LCL
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,7,8,9-HxCDF	0.000001	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,7,8-PeCDF	0.0000067	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-02-0-0-0.5-20220502	SW8290	2,3,4,6,7,8-HxCDF	0.0000031	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-02-0-0-0.5-20220502	SW8290	2,3,7,8-TCDD	0.0000081	mg/Kg	UJ	EMPC
IGBP-02-0-0-0.5-20220502	SW8290	OCDF	0.0000038	mg/Kg	UJ	EMPC
IGBP-20220502-EB	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000021	ug/L	UJ	EMPC
IGBP-20220502-EB	SW8290	1,2,3,4,7,8-HxCDD	0.0000017	ug/L	UJ	EMPC
IGBP-20220502-EB	SW8290	1,2,3,7,8,9-HxCDD	0.0000046	ug/L	UJ	EMPC
IGBP-C1-0-0-0.5-20220502	SW8015B-E	CA Diesel Range Organics (C10-C28)	69	mg/Kg	U	EB>RL
IGBP-C1-0-0-0.5-20220502	SW8260B	1,2,4-Trimethylbenzene	28	ug/Kg	U	LB<RL
IGBP-C1-0-0-0.5-20220502	SW8260B	1,3,5-Trimethylbenzene	15	ug/Kg	U	LB<RL
IGBP-C1-0-0-0.5-20220502	SW8260B	m-Xylene & p-Xylene	45	ug/Kg	U	LB<RL
IGBP-C1-0-0-0.5-20220502	SW8260B	o-Xylene	21	ug/Kg	U	LB<RL; TB<RL
IGBP-C1-0-0-0.5-20220502	SW8260B	p-Isopropyltoluene	18	ug/Kg	U	LB<RL; TB<RL
IGBP-C1-0-0-0.5-20220502	SW8260B	Vinyl chloride	25	ug/Kg	UJ	ICVS<LCL
IGBP-C1-0-0-0.5-20220502	SW8260B	Xylenes, Total	66	ug/Kg	U	LB<RL
IGBP-C1-0-0-0.5-20220502	SW8270C	2,4-Dinitrophenol	0.65	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270C	4-Chloroaniline	0.15	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270C	Benzoic acid	1.4	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270C	Hexachlorocyclopentadiene	0.0085	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270C	Naphthalene	0.019	mg/Kg	J	LCSRPD
IGBP-C1-0-0-0.5-20220502	SW8270C	Pyridine	0.17	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	1-Methylnaphthalene	0.0027	mg/Kg	J	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	2-Methylnaphthalene	0.0065	mg/Kg	J	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Acenaphthene	0.00066	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Acenaphthylene	0.00055	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Benzo[a]anthracene	0.002	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Benzo[a]pyrene	0.00093	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Naphthalene	0.018	mg/Kg	J	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Phenanthrene	0.0035	mg/Kg	J	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8290	1,2,3,7,8,9-HxCDF	0.0000032	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
IGBP-C1-0-0-0.5-20220502	SW8290	1,2,3,7,8-PeCDF	0.0000062	mg/Kg	U	LB<RL
IGBP-C1-0-0-0.5-20220502	SW8290	2,3,7,8-TCDD	0.0000059	mg/Kg	UJ	EMPC
IGBP-C2-0-0-0.5-20220502	SW6020	Antimony	3.2	mg/Kg	J	LabDupRPD
IGBP-C2-0-0-0.5-20220502	SW6020	Arsenic	86	mg/Kg	J	MS<LCL; SD<LCL; LabDupRPD
IGBP-C2-0-0-0.5-20220502	SW6020	Chromium	130	mg/Kg	J	MS<LCL; SD<LCL; LabDupRPD
IGBP-C2-0-0-0.5-20220502	SW6020	Copper	200	mg/Kg	J	MS<LCL; SD<LCL; LabDupRPD
IGBP-C2-0-0-0.5-20220502	SW6020	Lead	25	mg/Kg	J	LabDupRPD
IGBP-C2-0-0-0.5-20220502	SW8260B	1,1,2,2-Tetrachloroethane	13	ug/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8260B	1,3,5-Trimethylbenzene	17	ug/Kg	U	LB<RL
IGBP-C2-0-0-0.5-20220502	SW8260B	m-Xylene & p-Xylene	32	ug/Kg	U	LB<RL
IGBP-C2-0-0-0.5-20220502	SW8260B	o-Xylene	16	ug/Kg	U	LB<RL; TB<RL
IGBP-C2-0-0-0.5-20220502	SW8260B	p-Isopropyltoluene	29	ug/Kg	U	LB<RL; TB<RL
IGBP-C2-0-0-0.5-20220502	SW8260B	Vinyl acetate	77	ug/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8260B	Vinyl chloride	31	ug/Kg	UJ	ICVS<LCL
IGBP-C2-0-0-0.5-20220502	SW8260B	Xylenes, Total	48	ug/Kg	U	LB<RL
IGBP-C2-0-0-0.5-20220502	SW8270C	1,4-Dichlorobenzene	0.0098	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	1-Methylnaphthalene	0.0091	mg/Kg	J	LCSRPD
IGBP-C2-0-0-0.5-20220502	SW8270C	2,4-Dichlorophenol	0.033	mg/Kg	UJ	SD<LCL; Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2,4-Dimethylphenol	0.071	mg/Kg	UJ	SD<LCL; Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2,4-Dinitrophenol	0.69	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2,6-Dinitrotoluene	0.018	mg/Kg	UJ	LCSRPD; MS<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2-Chlorophenol	0.0047	mg/Kg	UJ	MS<LCL; Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2-Methylnaphthalene	0.014	mg/Kg	J	SD>UCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2-Methylphenol	0.012	mg/Kg	UJ	Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2-Nitrophenol	0.0073	mg/Kg	UJ	MS<LCL; Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	3 & 4 Methylphenol	0.018	mg/Kg	UJ	MS<LCL; Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	3,3'-Dichlorobenzidine	0.099	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	3-Nitroaniline	0.12	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	4-Chloroaniline	0.16	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	4-Nitroaniline	0.059	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
IGBP-C2-0.0-0.5-20220502	SW8270C	Azobenzene	0.0059	mg/Kg	UJ	LCSRPD; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Benzoic acid	1.4	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL; Sur<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Carbazole	0.0086	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Hexachlorocyclopentadiene	0.0091	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Naphthalene	0.043	mg/Kg	J	LCSRPD; MSRPD; SD>UCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Nitrobenzene	0.024	mg/Kg	UJ	MS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	N-Nitrosodi-n-propylamine	0.026	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Phenol	0.027	mg/Kg	UJ	Sur<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Pyridine	0.19	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	1-Methylnaphthalene	0.0071	mg/Kg	J	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	2-Methylnaphthalene	0.011	mg/Kg	J	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Acenaphthene	0.00071	mg/Kg	UJ	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Acenaphthylene	0.0029	mg/Kg	J	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Benzo[a]anthracene	0.0021	mg/Kg	UJ	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Benzo[a]pyrene	0.00099	mg/Kg	UJ	LCS<LCL; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Naphthalene	0.042	mg/Kg	J	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Phenanthrene	0.012	mg/Kg	J	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,4,6,7,8-HpCDD	0.000042	mg/Kg	J	MS>UCL; MSRPD
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,4,6,7,8-HxCDF	0.000004	mg/Kg	UJ	EMPC
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,4,7,8-HxCDD	0.00000086	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,4,7,8-HxCDF	0.00000089	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,6,7,8-HxCDF	0.00000034	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,7,8,9-HxCDF	0.00000029	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,7,8-PeCDF	0.00000032	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	2,3,4,6,7,8-HxCDF	0.00000029	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	OCDD	0.00019	mg/Kg	J	MS>UCL; MSRPD; SD>UCL
IGBP-WC-5-20220513	SW8011	1,2,3-Trichloropropane	0.00007	mg/Kg	UJ	HTa>UCL
IGBP-WC-5-20220513	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
IGBP-WC-5-20220513	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
IGBP-WC-5-20220513	SW8270C	Benzoic acid	0.68	mg/Kg	UJ	LCS<LCL
IGBP-WC-5-20220513	SW8270SIM	1-Methylnaphthalene	0.014	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	2-Methylnaphthalene	0.029	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Acenaphthylene	0.0068	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Anthracene	0.0037	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Benzo[a]anthracene	0.0023	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Chrysene	0.0042	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Fluoranthene	0.012	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Naphthalene	0.072	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Phenanthrene	0.022	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Pyrene	0.017	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000019	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-WC-5-20220513	SW8290	1,2,3,4,7,8-HxCDD	0.00000073	mg/Kg	U	EB<RL; LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,4,7,8-HxCDF	0.0000004	mg/Kg	U	LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,6,7,8-HxCDD	0.0000015	mg/Kg	U	LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,6,7,8-HxCDF	0.00000029	mg/Kg	U	LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,7,8,9-HxCDD	0.0000016	mg/Kg	U	LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,7,8,9-HxCDF	0.00000036	mg/Kg	UJ	LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,7,8-PeCDF	0.00000033	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-WC-5-20220513	SW8290	2,3,4,6,7,8-HxCDF	0.00000024	mg/Kg	U	LB<RL
IGBP-WC-5-20220513	SW8290	2,3,7,8-TCDF	0.00000037	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-WC-5-20220513	SW8290	OCDF	0.0000025	mg/Kg	U	LB<RL
IGSR-01-0.0-0.5-20220503	SW6020	Antimony	0.099	mg/Kg	J	MS<LCL; SD<LCL
IGSR-01-0.0-0.5-20220503	SW6020	Silver	0.03	mg/Kg	J	MSRPD; SD<LCL
IGSR-02-5.0-6.0-20220513	SW6020	Zinc	41	mg/Kg	J	FD>RPD
IGSR-02-5.0-6.0-20220513-FD	SW6020	Zinc	29	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW1311/SW6010B	Lead, TCLP	8.3	mg/L	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6010B-STLC	Lead	240	mg/L	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Arsenic	2.4	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Barium	120	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Chromium	7.8	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Cobalt	11	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Iron	33000	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Lead	1100	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Manganese	860	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Nickel	7.4	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Vanadium	89	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Zinc	230	mg/Kg	J	FD>RPD

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
IGSR-03-0.0-0.5-20220503	SW8270SIM	Benzo[a]pyrene	0.047	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW8270SIM	Benzo[b]fluoranthene	0.046	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW8270SIM	Fluoranthene	0.047	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW1311/SW6010B	Lead, TCLP	4	mg/L	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6010B-STLC	Lead	190	mg/L	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Arsenic	3.1	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Barium	180	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Chromium	11	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Cobalt	17	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Iron	47000	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Lead	840	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Manganese	1200	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Nickel	11	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Vanadium	130	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Zinc	560	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW8270SIM	Benzo[a]pyrene	0.022	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW8270SIM	Benzo[b]fluoranthene	0.017	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW8270SIM	Fluoranthene	0.024	mg/Kg	J	FD>RPD
IGSR-03-5.0-6.0-20220513	SW6020	Barium	240	mg/Kg	J	FD>RPD
IGSR-03-5.0-6.0-20220513	SW6020	Manganese	2700	mg/Kg	J	FD>RPD
IGSR-03-5.0-6.0-20220513-FD	SW6020	Barium	110	mg/Kg	J	FD>RPD
IGSR-03-5.0-6.0-20220513-FD	SW6020	Manganese	1600	mg/Kg	J	FD>RPD
IGSR-05-0.0-0.5-20220503	SW6010B	Boron	6.8	mg/Kg	J	MS<LCL; SD<LCL
IGSR-05-0.0-0.5-20220503	SW6020	Antimony	0.05	mg/Kg	J	MS<LCL; MSRPD; SD<LCL
IGSR-05-0.0-0.5-20220503	SW6020	Arsenic	3.1	mg/Kg	J	MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Barium	130	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Beryllium	0.74	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Cadmium	0.14	mg/Kg	J	MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Chromium	8.4	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Cobalt	19	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Copper	62	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Lead	4.4	mg/Kg	J	MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Manganese	1200	mg/Kg	J	SD<LCL
IGSR-05-0.0-0.5-20220503	SW6020	Molybdenum	0.25	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Nickel	8.9	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Selenium	4	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Vanadium	120	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Zinc	79	mg/Kg	J	MS<LCL; MSRPD; SD>UCL
IGSR-08-1.0-1.5-20220503	SW6020	Manganese	560	mg/Kg	J	FD>RPD
IGSR-08-1.0-1.5-20220503-FD	SW6020	Manganese	380	mg/Kg	J	FD>RPD
IGSR-09-1.0-1.5-20220506	SW6020	Vanadium	88	mg/Kg	J	FD>RPD
IGSR-09-1.0-1.5-20220506-FD	SW6020	Vanadium	110	mg/Kg	J	FD>RPD
IGSR-13-1.0-1.5-20220506	SW6010B	Boron	5.9	mg/Kg	UJ	MS<LCL; SD<LCL
IGSR-13-1.0-1.5-20220506	SW6020	Barium	190	mg/Kg	J	MS<LCL; SD<LCL
IGSR-13-1.0-1.5-20220506	SW6020	Iron	38000	mg/Kg	J	MS>UCL; SD>UCL
IGSR-13-1.0-1.5-20220506	SW6020	Manganese	1100	mg/Kg	J	MS<LCL; SD<LCL
IGSR-16-1.0-1.5-20220505	SW6020	Barium	180	mg/Kg	J	MS<LCL; SD<LCL
IGSR-16-1.0-1.5-20220505	SW6020	Iron	41000	mg/Kg	J	MS>UCL; SD>UCL
IGSR-16-1.0-1.5-20220505	SW6020	Manganese	1300	mg/Kg	J	MS<LCL; SD<LCL
IGSR-21-1.0-1.5-20220505	SW6020	Barium	180	mg/Kg	J	FD>RPD
IGSR-21-1.0-1.5-20220505	SW6020	Lead	15	mg/Kg	J	FD>RPD
IGSR-21-1.0-1.5-20220505-FD	SW6020	Barium	140	mg/Kg	J	FD>RPD
IGSR-21-1.0-1.5-20220505-FD	SW6020	Lead	10	mg/Kg	UJ	FD>RPD
IGSR-25-0.5-1.5-20220513	SW6010B	Boron	3.1	mg/Kg	UJ	SD<LCL
IGSR-25-0.5-1.5-20220513	SW6020	Barium	180	mg/Kg	J	MS>UCL; SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Chromium	17	mg/Kg	J	SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Copper	16	mg/Kg	J	SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Iron	34000	mg/Kg	J	MS>UCL; SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Manganese	1400	mg/Kg	J	SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Nickel	17	mg/Kg	J	SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Vanadium	75	mg/Kg	J	MS>UCL; SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Zinc	60	mg/Kg	J	MS>UCL; SD>UCL
IGSR-27-0.5-1.5-20220513	SW8270SIM	Naphthalene	0.0032	mg/Kg	J	Sur>UCL
IGSR-28-1.0-1.5-20220505	SW6020	Lead	5.9	mg/Kg	J	FD>RPD
IGSR-28-1.0-1.5-20220505-FD	SW6020	Lead	15	mg/Kg	J	FD>RPD
JBRA-01-0.0-0.5-20220504	SW6020	Barium	200	mg/Kg	J	MS<LCL; SD>UCL
JBRA-01-0.0-0.5-20220504	SW6020	Iron	31000	mg/Kg	J	MS<LCL; SD>UCL
JBRA-01-0.0-0.5-20220504	SW6020	Manganese	770	mg/Kg	J	MS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-01-0.0-0.5-20220504	SW6020	Nickel	35	mg/Kg	J	MS>UCL
JBRA-01-0.0-0.5-20220504	SW6020	Vanadium	98	mg/Kg	J	MS<LCL
JBRA-01-0.0-0.5-20220504	SW6020	Zinc	130	mg/Kg	J	LabDupRPD; MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00084	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00043	mg/Kg	UJ	MS<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00074	mg/Kg	UJ	MS<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00076	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1-Dichloroethene	0.0016	mg/Kg	UJ	MS<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1-Dichloropropene	0.00043	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.00086	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2,3-Trichloropropene	0.0014	mg/Kg	UJ	SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.0006	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0023	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2-Dibromoethane	0.00029	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0019	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,3-Dichloropropane	0.00033	mg/Kg	UJ	SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	2-Chlorotoluene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	4-Chlorotoluene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Benzene	0.00056	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Bromobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Bromochloromethane	0.00036	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Bromodichloromethane	0.00026	mg/Kg	UJ	MS<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Bromoform	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Bromomethane	0.001	mg/Kg	J	LC<LCL; MS<LCL; SD<LCL; Sur>UCL
JBRA-01-0.0-0.5-20220504	SW8260B	Carbon disulfide	0.00029	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Chlorobenzene	0.00036	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.00086	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00029	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Dibromochloromethane	0.0008	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Dibromomethane	0.0006	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Dichlorodifluoromethane	0.001	mg/Kg	J	Sur>UCL
JBRA-01-0.0-0.5-20220504	SW8260B	Ethylbenzene	0.00059	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Hexachlorobutadiene	0.00086	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Isopropylbenzene	0.00066	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Methylene Chloride	0.014	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Naphthalene	0.0026	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	n-Butylbenzene	0.0009	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	N-Propylbenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	o-Xylene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	p-Isopropyltoluene	0.00057	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	sec-Butylbenzene	0.00096	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Styrene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	tert-Butylbenzene	0.00094	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Tetrachloroethene	0.00057	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Toluene	0.0019	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.00057	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.00086	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Trichloroethene	0.00043	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Trichlorofluoromethane	0.00043	mg/Kg	UJ	MS<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Vinyl acetate	0.0021	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Xylenes, Total	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	3,3'-Dichlorobenzidine	0.0098	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	3-Nitroaniline	0.012	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	4-Chloroaniline	0.016	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	4-Nitroaniline	0.0059	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	Azobenzene	0.00059	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LC<LCL; MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000082	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000004	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000005	mg/Kg	UJ	LB<RL
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,4,7,8-HxCDF	0.00000017	mg/Kg	UJ	EMPC; LB<RL (U)

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,7,8,9-HxCDD	0.00000052	mg/Kg	U	LB<RL
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000044	mg/Kg	U	LB<RL
JBRA-01-0.0-0.5-20220504	SW8290	2,3,4,7,8-PeCDF	0.00000018	mg/Kg	U	LB<RL
JBRA-01-0.0-0.5-20220504	SW8290	2,3,7,8-TCDD	0.00000013	mg/Kg	UJ	EMPC
JBRA-01-0.0-0.5-20220504	SW8290	OCDF	0.00000013	mg/Kg	U	LB<RL
JBRA-01-1.0-1.5-20220504	SW6020	Barium	200	mg/Kg	J	LabDupRPD; MS<LCL
JBRA-01-1.0-1.5-20220504	SW6020	Iron	30000	mg/Kg	J	MS>UCL; SD>UCL
JBRA-01-1.0-1.5-20220504	SW6020	Manganese	670	mg/Kg	J	LabDupRPD; MS>UCL; SD>UCL
JBRA-01-1.0-1.5-20220504	SW6020	Nickel	34	mg/Kg	J	MS>UCL; SD>UCL
JBRA-01-1.0-1.5-20220504	SW6020	Zinc	55	mg/Kg	J	SD>UCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00065	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1-Dichloroethane	0.00024	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1-Dichloroethene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1-Dichloropropene	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00053	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.002	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2-Dibromoethane	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2-Dichloroethane	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2-Dichloropropane	0.0005	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,3-Dichloropropane	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	2,2-Dichloropropane	0.00096	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	2-Butanone (MEK)	0.011	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	2-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	2-Hexanone	0.0049	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	4-Chlorotoluene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0075	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Acetone	0.011	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Benzene	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Bromobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Bromochloromethane	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Bromodichloromethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Bromoform	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Bromomethane	0.00026	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Carbon disulfide	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Carbon tetrachloride	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Chlorobenzene	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Chloroethane	0.00094	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Chloroform	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Chloromethane	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Dibromochloromethane	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Dibromomethane	0.00053	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Dichlorodifluoromethane	0.00061	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Ethylbenzene	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Hexachlorobutadiene	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Isopropylbenzene	0.00058	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Methyl tert-butyl ether	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Naphthalene	0.0023	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	n-Butylbenzene	0.00079	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	N-Propylbenzene	0.00095	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	p-Isopropyltoluene	0.0005	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	sec-Butylbenzene	0.00084	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-01-1.0-1.5-20220504	SW8260B	Styrene	0.00093	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	tert-Butylbenzene	0.00083	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Tetrachloroethene	0.0005	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Toluene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.0005	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Trichloroethene	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Trichlorofluoromethane	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Vinyl acetate	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Vinyl chloride	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8270C	Pyridine	0.018	mg/Kg	UJ	LCS<LCL
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000024	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000017	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000034	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,6,7,8-HxCDF	0.00000011	mg/Kg	UJ	EMPC
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,7,8,9-HxCDD	0.00000021	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000026	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-1.0-1.5-20220504	SW8290	2,3,7,8-TCDD	0.00000013	mg/Kg	UJ	EMPC
JBRA-01-1.0-1.5-20220504	SW8290	2,3,7,8-TCDF	0.000000057	mg/Kg	UJ	EMPC
JBRA-01-1.0-1.5-20220504	SW8290	OCDF	0.00000064	mg/Kg	UJ	LB<RL
JBRA-01-2.0-3.0-20220504	SW8260B	Acetone	0.051	mg/Kg	J	LCS>UCL; Sur>UCL
JBRA-01-2.0-3.0-20220504	SW8260B	Bromomethane	0.00029	mg/Kg	UJ	LCS<LCL
JBRA-01-2.0-3.0-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000086	mg/Kg	U	LB<RL
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000022	mg/Kg	U	LB<RL
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000024	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,4,7,8-HxCDF	0.00000011	mg/Kg	U	LB<RL
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,6,7,8-HxCDD	0.00000017	mg/Kg	UJ	EMPC
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,7,8,9-HxCDD	0.00000013	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000022	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-2.0-3.0-20220504	SW8290	2,3,4,6,7,8-HxCDF	0.000000081	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-2.0-3.0-20220504	SW8290	OCDF	0.00000057	mg/Kg	U	LB<RL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00069	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00061	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1-Dichloroethene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1-Dichloropropene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2-Dibromoethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2-Dichloroethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2-Dichloropropane	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.00095	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,3-Dichloropropane	0.00027	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	2,2-Dichloropropane	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	2-Hexanone	0.0046	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.007	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Acetone	0.01	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Benzene	0.00046	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Bromochloromethane	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Bromodichloromethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Bromoform	0.00098	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Bromomethane	0.00025	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Carbon disulfide	0.00023	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-01-3.0-3.5-20220504	SW8260B	Carbon tetrachloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Chlorobenzene	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Chloroethane	0.00088	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Chloroform	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Chloromethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Dibromochloromethane	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Dibromomethane	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Dichlorodifluoromethane	0.00057	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Ethylbenzene	0.00048	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Hexachlorobutadiene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Isopropylbenzene	0.00054	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Methyl tert-butyl ether	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Naphthalene	0.0021	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	n-Butylbenzene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	N-Propylbenzene	0.00089	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	p-Isopropyltoluene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	sec-Butylbenzene	0.00078	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Styrene	0.00087	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	tert-Butylbenzene	0.00077	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Tetrachloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Toluene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Trichloroethene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Trichlorofluoromethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Vinyl chloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000099	mg/Kg	UJ	LB<RL
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000025	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000028	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000032	mg/Kg	UJ	LB<RL
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,6,7,8-HxCDD	0.00000017	mg/Kg	UJ	EMPC
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,7,8,9-HxCDD	0.00000019	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000045	mg/Kg	UJ	LB<RL
JBRA-01-3.0-3.5-20220504	SW8290	2,3,4,6,7,8-HxCDF	0.00000013	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-3.0-3.5-20220504	SW8290	2,3,7,8-TCDD	0.00000012	mg/Kg	UJ	EMPC
JBRA-01-3.0-3.5-20220504	SW8290	OCDD	0.00000036	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8290	OCDF	0.00000072	mg/Kg	UJ	LB<RL
JBRA-02-0.0-0.5-20220504	SW8011	1,2,3-Trichloropropane	0.000097	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8011	1,2-Dibromo-3-Chloropropane	0.000015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8011	Ethylene Dibromide	0.000018	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00091	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00092	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1-Dichloroethane	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1-Dichloroethene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1-Dichloropropene	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00073	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0021	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0028	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2-Dibromoethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0023	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2-Dichloroethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2-Dichloropropane	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,3-Dichloropropane	0.0004	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-0.0-0.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	2,2-Dichloropropane	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	2-Butanone (MEK)	0.016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	2-Chlorotoluene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	2-Hexanone	0.0068	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	4-Chlorotoluene	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Acetone	0.015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Benzene	0.00068	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Bromobenzene	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Bromochloromethane	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Bromodichloromethane	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Bromoform	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Bromomethane	0.001	mg/Kg	J	LCS<LCL; Sur<LCL; Sur>UCL
JBRA-02-0.0-0.5-20220504	SW8260B	Carbon disulfide	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Carbon tetrachloride	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Chlorobenzene	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Chloroethane	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Chloroform	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Chloromethane	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Dibromochloromethane	0.00098	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Dibromomethane	0.00073	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Dichlorodifluoromethane	0.00085	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Ethylbenzene	0.00071	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Hexachlorobutadiene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Isopropylbenzene	0.0008	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Methyl tert-butyl ether	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Methylene Chloride	0.017	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	m-Xylene & p-Xylene	0.002	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Naphthalene	0.0031	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	n-Butylbenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	N-Propylbenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	o-Xylene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	p-Isopropyltoluene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	sec-Butylbenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Styrene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	tert-Butylbenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Tetrachloroethene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Toluene	0.0023	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Trichloroethene	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Trichlorofluoromethane	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Vinyl acetate	0.0026	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Vinyl chloride	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Xylenes, Total	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	1,2,4-Trichlorobenzene	0.00089	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	1,2-Dichlorobenzene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	1,3-Dichlorobenzene	0.00071	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	1-Methylnaphthalene	0.0085	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4,5-Trichlorophenol	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4,6-Trichlorophenol	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4-Dichlorophenol	0.0041	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4-Dimethylphenol	0.0089	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4-Dinitrophenol	0.086	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4-Dinitrotoluene	0.0064	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,6-Dinitrotoluene	0.0022	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Chloronaphthalene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Chlorophenol	0.00059	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Methylnaphthalene	0.01	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Methylphenol	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Nitroaniline	0.0022	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Nitrophenol	0.00092	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	3 & 4 Methylphenol	0.043	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	3,3'-Dichlorobenzidine	0.012	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-0.0-0.5-20220504	SW8270C	3-Nitroaniline	0.015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4,6-Dinitro-2-methylphenol	0.015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Bromophenyl phenyl ether	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Chloro-3-methylphenol	0.0049	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Chloroaniline	0.02	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Chlorophenyl phenyl ether	0.00093	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Nitroaniline	0.0074	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Nitrophenol	0.025	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Acenaphthene	0.00068	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Acenaphthylene	0.0027	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Anthracene	0.0024	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Azobenzene	0.028	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzo[a]anthracene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzo[a]pyrene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzo[b]fluoranthene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzo[g,h,i]perylene	0.0027	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzo[k]fluoranthene	0.0021	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzoic acid	0.18	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzyl alcohol	0.0074	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	bis (2-chloroisopropyl) ether	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Bis(2-chloroethoxy)methane	0.0027	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Bis(2-chloroethyl)ether	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Butyl benzyl phthalate	0.0075	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Carbazole	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Chrysene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Dibenz[a,h]anthracene	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Dibenzofuran	0.077	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Diethyl phthalate	0.0032	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Dimethyl phthalate	0.0022	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Di-n-butyl phthalate	0.004	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Di-n-octyl phthalate	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Fluoranthene	0.0024	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Fluorene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Hexachlorobenzene	0.0022	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Hexachlorobutadiene	0.0022	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Hexachlorocyclopentadiene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Hexachloroethane	0.00064	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Indeno[1,2,3-cd]pyrene	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Isophorone	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Naphthalene	0.29	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Nitrobenzene	0.003	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	N-Nitrosodi-n-propylamine	0.0032	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	N-Nitrosodiphenylamine	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Pentachlorophenol	0.0093	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Phenanthrene	0.022	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Pyrene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Pyridine	0.023	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000011	mg/Kg	U	LB<RL
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000092	mg/Kg	U	LB<RL
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000003	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.0000057	mg/Kg	U	LB<RL
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,6,7,8-HxCDD	0.0000042	mg/Kg	UJ	EMPC
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,7,8,9-HxCDD	0.0000041	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.0000057	mg/Kg	U	LB<RL
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,7,8-PeCDF	0.0000064	mg/Kg	UJ	EMPC
JBRA-02-0.0-0.5-20220504	SW8290	2,3,4,6,7,8-HxCDF	0.0000037	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-0.0-0.5-20220504	SW8290	2,3,7,8-TCDD	0.0000033	mg/Kg	UJ	EMPC
JBRA-02-0.0-0.5-20220504	SW8290	OCDD	0.0000042	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8290	OCDF	0.0000087	mg/Kg	U	LB<RL
JBRA-02-1.0-1.5-20220504	SW6020	Antimony	1.5	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW6020	Beryllium	0.41	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW6020	Lead	18	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW6020	Manganese	420	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW6020	Zinc	130	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00069	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0011	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-1.0-1.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00061	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1-Dichloroethene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1-Dichloropropene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2-Dibromoethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2-Dichloroethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2-Dichloropropane	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.00095	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,3-Dichloropropane	0.00027	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	2,2-Dichloropropane	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	2-Hexanone	0.0046	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Acetone	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Benzene	0.00046	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Bromochloromethane	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Bromodichloromethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Bromoform	0.00098	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Bromomethane	0.00025	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Carbon disulfide	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Carbon tetrachloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Chlorobenzene	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Chloroethane	0.00088	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Chloroform	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Chloromethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Dibromochloromethane	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Dibromomethane	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Dichlorodifluoromethane	0.00057	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Ethylbenzene	0.00048	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Hexachlorobutadiene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Isopropylbenzene	0.00054	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Methyl tert-butyl ether	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Naphthalene	0.0021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	n-Butylbenzene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	N-Propylbenzene	0.00089	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	p-Isopropyltoluene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	sec-Butylbenzene	0.00078	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Styrene	0.00087	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	tert-Butylbenzene	0.00077	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Tetrachloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Toluene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Trichloroethene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Trichlorofluoromethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Vinyl chloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8270C	Naphthalene	0.027	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-02-1.0-1.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000016	mg/Kg	J	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-1.0-1.5-20220504	SW8290	1,2,3,7,8-PeCDD	0.00000049	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8290	OCDD	0.0000056	mg/Kg	UJ	EMPC; Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8290	OCDF	0.00000099	mg/Kg	U	LB<RL
JBRA-02-1.0-1.5-20220504-FD	SW6020	Antimony	0.56	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW6020	Beryllium	0.51	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW6020	Lead	7.4	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW6020	Manganese	520	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW6020	Zinc	64	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1,1,2-Tetrachloroethane	0.00061	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1,1-Trichloroethane	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1,2,2-Tetrachloroethane	0.00094	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00054	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1,2-Trichloroethane	0.00055	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1-Dichloroethane	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1-Dichloroethene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1-Dichloropropene	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2,3-Trichlorobenzene	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2,3-Trichloropropane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2,4-Trichlorobenzene	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2,4-Trimethylbenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2-Dibromo-3-Chloropropane	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2-Dibromoethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2-Dichloroethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2-Dichloropropane	0.00042	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,3,5-Trimethylbenzene	0.00084	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,3-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,3-Dichloropropane	0.00024	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,4-Dichlorobenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	2,2-Dichloropropane	0.0008	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	2-Butanone (MEK)	0.0093	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	2-Chlorotoluene	0.00097	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	2-Hexanone	0.0041	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	4-Chlorotoluene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Acetone	0.009	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Benzene	0.00041	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Bromobenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Bromochloromethane	0.00026	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Bromodichloromethane	0.00019	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Bromoform	0.00087	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Bromomethane	0.00057	mg/Kg	U	LB<RL; LCS<LCL; Sur<LCL; Sur>UCL (J)
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Carbon disulfide	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Carbon tetrachloride	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Chlorobenzene	0.00026	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Chloroethane	0.00078	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Chloroform	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Chloromethane	0.00097	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	cis-1,2-Dichloroethene	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	cis-1,3-Dichloropropene	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Dibromochloromethane	0.00058	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Dibromomethane	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Dichlorodifluoromethane	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Ethylbenzene	0.00043	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Hexachlorobutadiene	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Isopropylbenzene	0.00048	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Methyl tert-butyl ether	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Methylene Chloride	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	m-Xylene & p-Xylene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Naphthalene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	n-Butylbenzene	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	N-Propylbenzene	0.00079	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	o-Xylene	0.00096	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	p-Isopropyltoluene	0.00042	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	sec-Butylbenzene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Styrene	0.00077	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	tert-Butylbenzene	0.00069	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Tetrachloroethene	0.00042	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Toluene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	trans-1,2-Dichloroethene	0.00042	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	trans-1,3-Dichloropropene	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Trichloroethene	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Trichloroethene	0.00031	mg/Kg	UJ	LCS<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Trichlorofluoromethane	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Vinyl acetate	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Vinyl chloride	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Xylenes, Total	0.00096	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8270C	Naphthalene	0.007	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW8270C	Pyridine	0.02	mg/Kg	UJ	LCS<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000091	mg/Kg	U	LB<RL
JBRA-02-1.0-1.5-20220504-FD	SW8290	1,2,3,4,7,8-HxCDD	0.0000003	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-1.0-1.5-20220504-FD	SW8290	1,2,3,4,7,8-HxCDF	0.0000002	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-1.0-1.5-20220504-FD	SW8290	1,2,3,7,8,9-HxCDF	0.00000022	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-1.0-1.5-20220504-FD	SW8290	2,3,7,8-TCDD	0.00000011	mg/Kg	UJ	EMPC
JBRA-02-1.0-1.5-20220504-FD	SW8290	OCDD	0.0000043	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8290	OCDF	0.0000017	mg/Kg	U	LB<RL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00069	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00061	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1-Dichloroethene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1-Dichloropropene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2-Dibromoethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2-Dichloroethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2-Dichloropropane	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.00094	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,3-Dichloropropane	0.00027	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	2,2-Dichloropropane	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	2-Hexanone	0.0045	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.007	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Acetone	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Benzene	0.00045	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Bromochloromethane	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Bromodichloromethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Bromoform	0.00098	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Bromomethane	0.00024	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Carbon disulfide	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Carbon tetrachloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Chlorobenzene	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Chloroethane	0.00087	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Chloroform	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Chloromethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Dibromochloromethane	0.00065	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Dibromomethane	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Dichlorodifluoromethane	0.00057	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Ethylbenzene	0.00048	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Hexachlorobutadiene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Isopropylbenzene	0.00054	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Methyl tert-butyl ether	0.00035	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-3.0-3.5-20220504	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Naphthalene	0.0021	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	n-Butylbenzene	0.00073	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	N-Propylbenzene	0.00088	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	p-Isopropyltoluene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	sec-Butylbenzene	0.00078	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Styrene	0.00086	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	tert-Butylbenzene	0.00077	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Tetrachloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Toluene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Trichloroethene	0.00035	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Trichlorofluoromethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Vinyl chloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-02-3.0-3.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000047	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
JBRA-02-3.0-3.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000032	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
JBRA-02-3.0-3.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000038	mg/Kg	UJ	EMPC; LB<RL(U)
JBRA-02-3.0-3.5-20220504	SW8290	2,3,7,8-TCDF	0.00000029	mg/Kg	UJ	EMPC
JBRA-02-3.0-3.5-20220504	SW8290	OCDD	0.0000016	mg/Kg	UJ	EMPC; Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8290	OCDF	0.00000037	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
JBRA-03-0.0-0.5-20220504	SW6020	Arsenic	1.8	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Barium	84	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Chromium	19	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Cobalt	7.2	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Copper	18	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Iron	13000	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Lead	5.4	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Manganese	280	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Nickel	13	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Vanadium	37	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Zinc	37	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1-Dichloroethane	0.00024	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1-Dichloroethene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1-Dichloropropene	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.00076	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00053	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.002	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2-Dibromoethane	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2-Dichloroethane	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2-Dichloropropane	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,3-Dichloropropane	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	2,2-Dichloropropane	0.00097	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	2-Butanone (MEK)	0.011	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	2-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	2-Hexanone	0.0049	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	4-Chlorotoluene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0076	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Acetone	0.011	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Benzene	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Bromobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Bromochloromethane	0.00032	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-03-0.0-0.5-20220504	SW8260B	Bromodichloromethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Bromoform	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Bromomethane	0.00027	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Carbon disulfide	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Carbon tetrachloride	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Chlorobenzene	0.00032	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Chloroethane	0.00095	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Chloroform	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Chloromethane	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.00076	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Dibromochloromethane	0.00071	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Dibromomethane	0.00053	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Dichlorodifluoromethane	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Ethylbenzene	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Hexachlorobutadiene	0.00076	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Isopropylbenzene	0.00058	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Methyl tert-butyl ether	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Methylene Chloride	0.013	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Naphthalene	0.0023	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	n-Butylbenzene	0.0008	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	N-Propylbenzene	0.00096	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	p-Isopropyltoluene	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	sec-Butylbenzene	0.00085	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Styrene	0.00094	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	tert-Butylbenzene	0.00084	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Tetrachloroethene	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Toluene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.00076	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Trichloroethene	0.00038	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Trichlorofluoromethane	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Vinyl acetate	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Vinyl chloride	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000013	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000089	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000096	mg/Kg	U	LB<RL
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,4,7,8-HxCDF	0.00000075	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000078	mg/Kg	U	LB<RL
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,7,8-PeCDD	0.00000021	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,7,8-PeCDF	0.00000025	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	2,3,4,6,7,8-HxCDF	0.00000065	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	2,3,4,7,8-PeCDF	0.00000041	mg/Kg	U	LB<RL
JBRA-03-0.0-0.5-20220504	SW8290	2,3,7,8-TCDF	0.00000073	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504-FD	SW6020	Arsenic	3.8	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Barium	160	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Chromium	36	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Cobalt	14	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Copper	30	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Iron	24000	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Lead	11	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Manganese	520	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Nickel	24	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Vanadium	70	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Zinc	70	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW8260B	Bromomethane	0.00026	mg/Kg	UJ	LCS<LCL
JBRA-03-0.0-0.5-20220504-FD	SW8260B	Trichloroethene	0.00038	mg/Kg	UJ	LCS<LCL
JBRA-03-0.0-0.5-20220504-FD	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-03-0.0-0.5-20220504-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000012	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504-FD	SW8290	1,2,3,4,7,8-HxCDD	0.00000034	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-03-0.0-0.5-20220504-FD	SW8290	1,2,3,6,7,8-HxCDD	0.00000029	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504-FD	SW8290	1,2,3,7,8,9-HxCDD	0.00000038	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-03-0.0-0.5-20220504-FD	SW8290	1,2,3,7,8,9-HxCDF	0.00000023	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-03-0.0-0.5-20220504-FD	SW8290	2,3,4,6,7,8-HxCDF	0.00000003	mg/Kg	UJ	EMPC; LB<RL (U)

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-03-0.0-0.5-20220504-FD	SW8290	2,3,4,7,8-PeCDF	0.0000003	mg/Kg	U	LB<RL
JBRA-03-0.0-0.5-20220504-FD	SW8290	2,3,7,8-TCDD	0.00000018	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504-FD	SW8290	2,3,7,8-TCDF	0.00000081	mg/Kg	UJ	EMPC
JBRA-03-1.0-1.5-20220504	SW8260B	Bromomethane	0.00026	mg/Kg	UJ	LCS<LCL
JBRA-03-1.0-1.5-20220504	SW8260B	Trichloroethene	0.00037	mg/Kg	UJ	LCS<LCL
JBRA-03-1.0-1.5-20220504	SW8270C	Pyridine	0.018	mg/Kg	UJ	LCS<LCL
JBRA-03-1.0-1.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.000001	mg/Kg	U	LB<RL
JBRA-03-1.0-1.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000025	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-03-1.0-1.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000033	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-03-1.0-1.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000027	mg/Kg	U	LB<RL
JBRA-03-1.0-1.5-20220504	SW8290	2,3,7,8-TCDD	0.00000014	mg/Kg	UJ	EMPC
JBRA-03-1.0-1.5-20220504	SW8290	OCDD	0.00000032	mg/Kg	UJ	Sur<LCL
JBRA-03-1.0-1.5-20220504	SW8290	OCDF	0.00000051	mg/Kg	U	LB<RL
JBRA-03-1.5-2.5-20220504	SW8260B	Bromomethane	0.00026	mg/Kg	UJ	LCS<LCL
JBRA-03-1.5-2.5-20220504	SW8260B	Trichloroethene	0.00037	mg/Kg	UJ	LCS<LCL
JBRA-03-1.5-2.5-20220504	SW8270C	Pyridine	0.02	mg/Kg	UJ	LCS<LCL
JBRA-03-1.5-2.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000013	mg/Kg	U	LB<RL; Sur<LCL (J)
JBRA-03-1.5-2.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000044	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
JBRA-03-1.5-2.5-20220504	SW8290	1,2,3,4,7,8,9-HxCDF	0.00000035	mg/Kg	U	LB<RL
JBRA-03-1.5-2.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000035	mg/Kg	U	LB<RL
JBRA-03-1.5-2.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000048	mg/Kg	U	LB<RL
JBRA-03-1.5-2.5-20220504	SW8290	2,3,7,8-TCDD	0.00000014	mg/Kg	UJ	EMPC
JBRA-03-1.5-2.5-20220504	SW8290	OCDD	0.00000052	mg/Kg	UJ	EMPC; Sur<LCL
JBRA-03-1.5-2.5-20220504	SW8290	OCDF	0.00000011	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
JBRA-20220504-TB-S	SW8260B	1,1,1,2-Tetrachloroethane	0.00059	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1,1-Trichloroethane	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1,2,2-Tetrachloroethane	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1,2-Trichloroethane	0.00053	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1-Dichloroethane	0.00019	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1-Dichloroethene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1-Dichloropropene	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2,3-Trichlorobenzene	0.0006	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2,3-Trichloropropane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2,4-Trichlorobenzene	0.00042	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2,4-Trimethylbenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2-Dibromo-3-Chloropropane	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2-Dibromoethane	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2-Dichloroethane	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2-Dichloropropane	0.0004	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,3,5-Trimethylbenzene	0.00081	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,3-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,3-Dichloropropane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,4-Dichlorobenzene	0.00098	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	2,2-Dichloropropane	0.00077	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	2-Butanone (MEK)	0.0089	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	2-Chlorotoluene	0.00093	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	2-Hexanone	0.0039	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	4-Chlorotoluene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	4-Methyl-2-pentanone (MIBK)	0.006	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Acetone	0.0086	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Benzene	0.00039	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Bromobenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Bromochloromethane	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Bromodichloromethane	0.00018	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Bromoform	0.00084	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Bromomethane	0.00021	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-20220504-TB-S	SW8260B	Carbon disulfide	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Carbon tetrachloride	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Chlorobenzene	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Chloroethane	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Chloroform	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Chloromethane	0.00093	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	cis-1,2-Dichloroethene	0.0006	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	cis-1,3-Dichloropropene	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Dibromochloromethane	0.00056	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Dibromomethane	0.00042	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-20220504-TB-S	SW8260B	Dichlorodifluoromethane	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Ethylbenzene	0.00041	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Hexachlorobutadiene	0.0006	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Isopropylbenzene	0.00046	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Methyl tert-butyl ether	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Methylene Chloride	0.0099	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	m-Xylene & p-Xylene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Naphthalene	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	n-Butylbenzene	0.00063	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	N-Propylbenzene	0.00076	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	o-Xylene	0.00092	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	p-Isopropyltoluene	0.0004	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	sec-Butylbenzene	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Styrene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	tert-Butylbenzene	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Tetrachloroethene	0.0004	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Toluene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	trans-1,2-Dichloroethene	0.0004	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	trans-1,3-Dichloropropene	0.0006	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Trichloroethene	0.0003	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-20220504-TB-S	SW8260B	Trichlorofluoromethane	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Vinyl acetate	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Vinyl chloride	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Xylenes, Total	0.00092	mg/Kg	UJ	Sur<LCL
JBRA-GW01-20220504	SW6020	Lead	9.6	ug/L	J	FD>RPD
JBRA-GW01-20220504	SW6020	Manganese	87	ug/L	J	FD>RPD
JBRA-GW01-20220504	SW8270C	4,6-Dinitro-2-methylphenol	0.53	ug/L	UJ	LCS<LCL
JBRA-GW01-20220504	SW8270C	Hexachlorocyclopentadiene	0.13	ug/L	UJ	LCS<LCL
JBRA-GW01-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000019	ug/L	UJ	EMPC; LB<RL (U)
JBRA-GW01-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000011	ug/L	UJ	EMPC
JBRA-GW01-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.0000025	ug/L	UJ	EMPC; LB<RL (U)
JBRA-GW01-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.0000024	ug/L	U	LB<RL
JBRA-GW01-20220504	SW8290	OCDD	0.0000057	ug/L	UJ	EMPC
JBRA-GW01-20220504-FD	SW6020	Lead	12	ug/L	J	FD>RPD
JBRA-GW01-20220504-FD	SW6020	Manganese	110	ug/L	J	FD>RPD
JBRA-GW01-20220504-FD	SW8270C	4,6-Dinitro-2-methylphenol	0.53	ug/L	UJ	LCS<LCL
JBRA-GW01-20220504-FD	SW8270C	Diethyl phthalate	0.23	ug/L	U	LB<RL
JBRA-GW01-20220504-FD	SW8270C	Hexachlorocyclopentadiene	0.13	ug/L	UJ	LCS<LCL
JBRA-GW01-20220504-FD	SW8290	1,2,3,4,7,8-HxCDD	0.0000024	ug/L	U	LB<RL
JBRA-GW01-20220504-FD	SW8290	1,2,3,7,8,9-HxCDF	0.0000013	ug/L	UJ	EMPC; LB<RL (U)
JBRA-GW01-20220504-FD	SW8290	OCDD	0.0000051	ug/L	UJ	EMPC
JBRA-WC-S-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00065	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1,1-Trichloroethane	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00058	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1,2-Trichloroethane	0.00059	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1-Dichloroethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1-Dichloroethene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1-Dichloropropene	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2,3-Trichlorobenzene	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2,3-Trichloropropane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2-Dibromoethane	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2-Dichloropropane	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,3,5-Trimethylbenzene	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,3-Dichlorobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,3-Dichloropropane	0.00026	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	2,2-Dichloropropane	0.00085	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	2-Butanone (MEK)	0.0099	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	2-Chlorotoluene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	2-Hexanone	0.0043	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	4-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0067	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-WC-S-20220504	SW8260B	Acetone	0.0096	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Benzene	0.00043	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Bromochloromethane	0.00028	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Bromodichloromethane	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Bromoform	0.00093	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Bromomethane	0.00023	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-WC-S-20220504	SW8260B	Carbon disulfide	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Carbon tetrachloride	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Chlorobenzene	0.00028	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Chloroethane	0.00083	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Chloroform	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Chloromethane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	cis-1,2-Dichloroethene	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	cis-1,3-Dichloropropene	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Dibromochloromethane	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Dibromomethane	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Dichlorodifluoromethane	0.00054	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Ethylbenzene	0.00045	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Hexachlorobutadiene	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Isopropylbenzene	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Methyl tert-butyl ether	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Methylene Chloride	0.011	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	m-Xylene & p-Xylene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Naphthalene	0.002	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	n-Butylbenzene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	N-Propylbenzene	0.00084	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	o-Xylene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	p-Isopropyltoluene	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	sec-Butylbenzene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Styrene	0.00082	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	tert-Butylbenzene	0.00073	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Tetrachloroethene	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Toluene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	trans-1,2-Dichloroethene	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	trans-1,3-Dichloropropene	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Trichloroethene	0.00033	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-WC-S-20220504	SW8260B	Trichlorofluoromethane	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Vinyl chloride	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Xylenes, Total	0.001	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8270C	Pyridine	0.02	mg/Kg	UJ	LCS<LCL
JBRA-WC-S-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000013	mg/Kg	U	LB<RL
JBRA-WC-S-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000003	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-WC-S-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000028	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-WC-S-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000024	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-WC-S-20220504	SW8290	2,3,7,8-TCDD	0.00000016	mg/Kg	UJ	EMPC
JBRA-WC-S-20220504	SW8290	OCDD	0.000003	mg/Kg	UJ	EMPC; Sur<LCL
JBRA-WC-S-20220504	SW8290	OCDF	0.00000062	mg/Kg	U	LB<RL

Notes:

- CCV<LCL = continuing calibration verification recovery less than the lower control limit
- CCV>UCL = continuing calibration verification recovery greater than the upper control limit
- EB<RL = analyte detected less than five times associated equipment blank concentration
- EB>RL = analyte detected greater than five times associated equipment blank concentration
- EMPC = estimated maximum possible concentration
- FD>RPD = field duplicate relative percent difference greater than acceptance criterion
- HTa>UCL = sample analysis holding time exceeded the method specified control limit
- HTp>UCL = sample preparation holding time exceeded the method specified control limit
- ICVS<LCL = Initial calibration verification recovery less than the lower control limit
- ICVS>UCL = Initial calibration verification 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
- LCSRPD = laboratory control sample/laboratory control sample duplicate relative percent difference greater than acceptance criterion

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
----------	--------	---------	--------------	-------	-----------------------	-------------------

mg/Kg = milligrams per kilogram

mg/L = milligrams per liter

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

SD<LCL = matrix spike duplicate recovery less than the lower control limit

SD>UCL = matrix spike duplicate recovery greater than the upper control limit

STLC = Soluble Threshold Limit Concentration

Sur<LCL = surrogate recovery less than the lower control limit

Sur>UCL = surrogate recovery greater than the upper control limit

TCLP = Toxicity Characteristic Leaching Procedure

TB<RL = analyte detected less than five times associated trip blank concentration

ug/Kg = micrograms per kilogram

ug/L = micrograms per liter

4. References

Jacobs Engineering Group Inc. (Jacobs). 2021a. *California Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Jacobs Engineering Group Inc. (Jacobs). 2021b. *Oregon Site Investigation Work Plan*. Prepared for PacifiCorp. November.

U.S. Environmental Protection Agency (EPA). 2020a. *National Functional Guidelines for Organic Superfund Methods Data Review*. November.

U.S. Environmental Protection Agency (EPA). 2020b. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. November.

5. Signature Page

This Data Quality Evaluation Report has been validated by the following Senior Chemist.



February 22, 2023

Mark Fesler
Senior Chemist
Jacobs Engineering Group Inc.

Attachment
Samples Associated with Data Quality Evaluation
Report

Samples Associated with Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C2UT-02-12-20220308	08-Mar-22	N	SOIL
C2UT-02-16-20220308	08-Mar-22	N	SOIL
C2UT-02-18-20220308	08-Mar-22	N	SOIL
C2UT-02-PCB-20220308	08-Mar-22	N	SOIL
C2UT-02W-17.5-20220308	08-Mar-22	N	SOIL
C2UT-02W-17.5-20220308-FD	08-Mar-22	FD	SOIL
C2WP-01-0.5-20220308	08-Mar-22	N	SOIL
C2WP-01-2.5-20220308	08-Mar-22	N	SOIL
C2WP-01-5.0-20220308	08-Mar-22	N	SOIL
C2WP-02-0.5-20220308	08-Mar-22	N	SOIL
C2WP-02-0.5-20220308-FD	08-Mar-22	FD	SOIL
C2WP-02-1.5-20220308	08-Mar-22	N	SOIL
C2WP-02-3.5-20220308	08-Mar-22	N	SOIL
C2WP-02-6.0-20220308	08-Mar-22	N	SOIL
C2WP-03-0.5-20220308	08-Mar-22	N	SOIL
C2WP-03-2.5-20220308	08-Mar-22	N	SOIL
C2WP-03-5.0-20220308	08-Mar-22	N	SOIL
C2WP-04-0.5-20220308	08-Mar-22	N	SOIL
C2WP-04-1.5-20220308	08-Mar-22	N	SOIL
C2WP-04-3.5-20220308	08-Mar-22	N	SOIL
C2WP-04-6.0-20220308	08-Mar-22	N	SOIL
C2WP-05-0.5-20220308	08-Mar-22	N	SOIL
C2WP-05-2.5-20220308	08-Mar-22	N	SOIL
C2WP-05-5.0-20220308	08-Mar-22	N	SOIL
C2WP-06-0.5-20220308	08-Mar-22	N	SOIL
C2WP-06-0.5-20220308-FD	08-Mar-22	FD	SOIL
C2WP-06-1.5-20220308	08-Mar-22	N	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C2WP-06-3.5-20220308	08-Mar-22	N	SOIL
C2WP-06-6.0-20220308	08-Mar-22	N	SOIL
C2WP-07-0.5-20220308	08-Mar-22	N	SOIL
C2WP-07-2.5-20220308	08-Mar-22	N	SOIL
C2WP-07-5.0-20220308	08-Mar-22	N	SOIL
C2WP-20220308-EB	08-Mar-22	EB	WATER
C2WP-20220308-TB-G	08-Mar-22	TB	WATER
C2WP-20220308-TB-S	08-Mar-22	TB	SOIL
C2WP-PCB-20220308	08-Mar-22	N	SOIL
C2WP-WC-20220308	08-Mar-22	N	SOIL
C2BP-01-0.5-20220309	09-Mar-22	N	SOIL
C2BP-01-2.5-20220309	09-Mar-22	N	SOIL
C2BP-02-0.5-20220309	09-Mar-22	N	SOIL
C2BP-02-1.5-20220309	09-Mar-22	N	SOIL
C2BP-02-1.5-20220309-FD	09-Mar-22	FD	SOIL
C2BP-02-2.5-20220309	09-Mar-22	N	SOIL
C2BP-03-0.5-20220309	09-Mar-22	N	SOIL
C2BP-03-1.5-20220309	09-Mar-22	N	SOIL
C2BP-03-2.5-20220309	09-Mar-22	N	SOIL
C2BP-06-0.5-20220309	09-Mar-22	N	SOIL
C2BP-06-1.5-20220309	09-Mar-22	N	SOIL
C2BP-06-2.5-20220309	09-Mar-22	N	SOIL
C2BP-12-0.5-20220309	09-Mar-22	N	SOIL
C2BP-12-1.5-20220309	09-Mar-22	N	SOIL
C2BP-12-2.5-20220309	09-Mar-22	N	SOIL
C2BP-12-2.5-20220309-FD	09-Mar-22	FD	SOIL
C2BP-WC2-20220309	09-Mar-22	N	SOIL
C2TF-01-1.0-20220309	09-Mar-22	N	SOIL
C2TF-01-2.0-20220309	09-Mar-22	N	SOIL

Sample ID	Sample Date	Sample Type	Matrix
C2TF-20220309-TB-S	09-Mar-22	TB	SOIL
C2UT-02W-20220309	09-Mar-22	N	WATER
C2UT-02W-20220309-FD	09-Mar-22	FD	WATER
C2UT-20220309-EB	09-Mar-22	EB	WATER
C2UT-20220309-TB-W	09-Mar-22	TB	WATER
C1DP-01-0.5-20220310	10-Mar-22	N	SOIL
C1DP-01-1.5-2022310	10-Mar-22	N	SOIL
C1DP-01-2.5-20220310	10-Mar-22	N	SOIL
C1DP-02-0.5-20220310	10-Mar-22	N	SOIL
C1DP-02-0.5-20220310-FD	10-Mar-22	FD	SOIL
C1DP-02-1.5-20220310	10-Mar-22	N	SOIL
C1DP-02-2.5-20220310	10-Mar-22	N	SOIL
C1DP-03-0.5-20220310	10-Mar-22	N	SOIL
C1DP-03-1.5-20220310	10-Mar-22	N	SOIL
C1DP-03-3.5-20220310	10-Mar-22	N	SOIL
C1DP-03-6.0-20220310	10-Mar-22	N	SOIL
C1DP-20220310-EB	10-Mar-22	EB	WATER
C1DP-WC1-20220310	10-Mar-22	N	SOIL
C2BP-04-0.5-20220310	10-Mar-22	N	SOIL
C2BP-04-1.5-20220310	10-Mar-22	N	SOIL
C2BP-04-2.5-20220310	10-Mar-22	N	SOIL
C2BP-05-0.5-20220310	10-Mar-22	N	SOIL
C2BP-05-1.5-20220310	10-Mar-22	N	SOIL
C2BP-05-2.5-20220310	10-Mar-22	N	SOIL
C2BP-07-0.5-20220310	10-Mar-22	N	SOIL
C2BP-07-1.5-20220310	10-Mar-22	N	SOIL
C2BP-07-2.5-20220310	10-Mar-22	N	SOIL
C2BP-08-0.5-20220310	10-Mar-22	N	SOIL
C2BP-08-1.5-20220310	10-Mar-22	N	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C2BP-08-1.5-20220310-FD	10-Mar-22	FD	SOIL
C2BP-08-2.5-20220310	10-Mar-22	N	SOIL
C2BP-08-3.5-20220310	10-Mar-22	N	SOIL
C2BP-09-0.5-20220310	10-Mar-22	N	SOIL
C2BP-09-1.5-20220310	10-Mar-22	N	SOIL
C2BP-09-2.5-20220310	10-Mar-22	N	SOIL
C2BP-09-3.5-20220310	10-Mar-22	N	SOIL
C2BP-10-0.5-20220310	10-Mar-22	N	SOIL
C2BP-10-0.5-20220310-FD	10-Mar-22	FD	SOIL
C2BP-10-1.5-20220310	10-Mar-22	N	SOIL
C2BP-10-3.5-20220310	10-Mar-22	N	SOIL
C2BP-10-6.0-20220310	10-Mar-22	N	SOIL
C2BP-11-0.5-20220310	10-Mar-22	N	SOIL
C2BP-11-1.5-20220310	10-Mar-22	N	SOIL
C2BP-11-2.5-20220310	10-Mar-22	N	SOIL
C2BP-11-3.5-20220310	10-Mar-22	N	SOIL
C2BP-20220310-EB	10-Mar-22	EB	WATER
C2BP-20220310-TB-S	10-Mar-22	TB	SOIL
C2BP-20220310-TB-W	10-Mar-22	TB	WATER
C2BP-PCB-202200310	10-Mar-22	N	SOIL
C2BP-WC-20220310	10-Mar-22	N	SOIL
C2BP-WC3-20220310	10-Mar-22	N	SOIL
C2TF-03-1.5-20220310	10-Mar-22	N	SOIL
C2TF-03-1.5-20220310-FD	10-Mar-22	FD	SOIL
C1DP-04-0.5-20220311	11-Mar-22	N	SOIL
C1DP-04-1.5-20220311	11-Mar-22	N	SOIL
C1DP-04-2.5-20220311	11-Mar-22	N	SOIL
C1DP-05-0.5-20220311	11-Mar-22	N	SOIL
C1DP-05-1.5-20220311	11-Mar-22	N	SOIL

Sample ID	Sample Date	Sample Type	Matrix
C1DP-05-2.5-20220311	11-Mar-22	N	SOIL
C1DP-06-0.5-20220311	11-Mar-22	N	SOIL
C1DP-06-1.5-20220311	11-Mar-22	N	SOIL
C1DP-06-1.5-20220311-FD	11-Mar-22	FD	SOIL
C1DP-06-4.5-20220311	11-Mar-22	N	SOIL
C1DP-06-6.0-20220311	11-Mar-22	N	SOIL
C1DP-07-0.5-20220311	11-Mar-22	N	SOIL
C1DP-07-1.5-20220311	11-Mar-22	N	SOIL
C1DP-07-2.5-20220311	11-Mar-22	N	SOIL
C1DP-08-0.5-20220311	11-Mar-22	N	SOIL
C1DP-08-1.5-20220311	11-Mar-22	N	SOIL
C1DP-08-2.5-20220311	11-Mar-22	N	SOIL
C1DP-09-0.5-20220311	11-Mar-22	N	SOIL
C1DP-09-1.5-20220311	11-Mar-22	N	SOIL
C1DP-09-2.5-20220311	11-Mar-22	N	SOIL
C1DP-10-0.5-20220311	11-Mar-22	N	SOIL
C1DP-10-1.5-20220311	11-Mar-22	N	SOIL
C1DP-10-2.5-20220311	11-Mar-22	N	SOIL
C1DP-11-0.5-20220311	11-Mar-22	N	SOIL
C1DP-11-1.5-20220311	11-Mar-22	N	SOIL
C1DP-11-2.5-20220311	11-Mar-22	N	SOIL
C1DP-12-0.5-20220311	11-Mar-22	N	SOIL
C1DP-12-0.5-20220311-FD	11-Mar-22	FD	SOIL
C1DP-12-1.5-20220311	11-Mar-22	N	SOIL
C1DP-12-2.5-20220311	11-Mar-22	N	SOIL
C1DP-13-0.5-20220311	11-Mar-22	N	SOIL
C1DP-13-1.5-20220311	11-Mar-22	N	SOIL
C1DP-13-1.5-20220311-FD	11-Mar-22	FD	SOIL
C1DP-13-6.0-20220311	11-Mar-22	N	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C1DP-14-0.5-20220311	11-Mar-22	N	SOIL
C1DP-14-1.5-20220311	11-Mar-22	N	SOIL
C1DP-14-6.0-20220311	11-Mar-22	N	SOIL
C1DP-15-0.5-20220311	11-Mar-22	N	SOIL
C1DP-15-1.5-20220311	11-Mar-22	N	SOIL
C1DP-15-6.0-20220311	11-Mar-22	N	SOIL
C1DP-16-0.5-20220311	11-Mar-22	N	SOIL
C1DP-16-1.5-20220311	11-Mar-22	N	SOIL
C1DP-16-2.5-20220311	11-Mar-22	N	SOIL
C1DP-17-0.5-20220311	11-Mar-22	N	SOIL
C1DP-17-1.5-20220311	11-Mar-22	N	SOIL
C1DP-17-1.5-20220311-FD	11-Mar-22	FD	SOIL
C1DP-17-2.5-20220311	11-Mar-22	N	SOIL
C1DP-20220311-EB	11-Mar-22	EB	WATER
C1DP-20220311-TB-GW	11-Mar-22	TB	WATER
C1DP-20220311-TB-S	11-Mar-22	TB	SOIL
C1DP-PCB-20220311	11-Mar-22	N	SOIL
C1DP-WC2-20220311	11-Mar-22	N	SOIL
C1DP-WC3-20220311	11-Mar-22	N	SOIL
C1DP-WC4-20220311	11-Mar-22	N	SOIL
C2BP-WC-W-20220325	25-Mar-22	N	WATER
C2CB-WC-S-20220325	25-Mar-22	N	SOIL
C2CB-WC-W-20220325	25-Mar-22	N	WATER
C2TF-WC-S-20220325	25-Mar-22	N	SOIL
C2TF-WC-W-20220325	25-Mar-22	N	WATER
C2UT-WC-S-20220325	25-Mar-22	N	SOIL
C2UT-WC-W-20220325	25-Mar-22	N	WATER
C2WP-WC-W-20220325	25-Mar-22	N	WATER
TB-S-20220325	25-Mar-22	TB	SOIL

Sample ID	Sample Date	Sample Type	Matrix
TB-W-20220325	25-Mar-22	TB	WATER
IGBP-01-0.0-0.5-20220502	02-May-22	N	SOIL
IGBP-01-0.0-0.5-20220502-FD	02-May-22	FD	SOIL
IGBP-01-0.5-1.5-20220502	02-May-22	N	SOIL
IGBP-02-0.0-0.5-20220502	02-May-22	N	SOIL
IGBP-20220502-EB	02-May-22	EB	WATER
IGBP-C1-0.0-0.5-20220502	02-May-22	N	SOIL
IGBP-C2-0.0-0.5-20220502	02-May-22	N	SOIL
Trip Blank 20220502	02-May-22	TB	SOIL
IGSR-01-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-01-0.5-1.0-20220503	03-May-22	N	SOIL
IGSR-02-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-02-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-02-3.0-3.5-20220503	03-May-22	N	SOIL
IGSR-03-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-03-0.0-0.5-20220503-FD	03-May-22	FD	SOIL
IGSR-03-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-04-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-04-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-04-1.5-2.0-20220503	03-May-22	N	SOIL
IGSR-05-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-05-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-06-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-06-1.0-1.25-20220503	03-May-22	N	SOIL
IGSR-07-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-07-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-08-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-08-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-08-1.0-1.5-20220503-FD	03-May-22	FD	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
IGSR-20220503-EB	03-May-22	EB	WATER
JBRA-01-0.0-0.5-20220504	04-May-22	N	SOIL
JBRA-01-1.0-1.5-20220504	04-May-22	N	SOIL
JBRA-01-2.0-3.0-20220504	04-May-22	N	SOIL
JBRA-01-3.0-3.5-20220504	04-May-22	N	SOIL
JBRA-02-0.0-0.5-20220504	04-May-22	N	SOIL
JBRA-02-1.0-1.5-20220504	04-May-22	N	SOIL
JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SOIL
JBRA-02-3.0-3.5-20220504	04-May-22	N	SOIL
JBRA-03-0.0-0.5-20220504	04-May-22	N	SOIL
JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SOIL
JBRA-03-1.0-1.5-20220504	04-May-22	N	SOIL
JBRA-03-1.5-2.5-20220504	04-May-22	N	SOIL
JBRA-20220504-TB-S	04-May-22	TB	SOIL
JBRA-20220504-TB-W	04-May-22	TB	WATER
JBRA-GW01-20220504	04-May-22	N	WATER
JBRA-GW01-20220504-FD	04-May-22	FD	WATER
JBRA-PCB-20220504	04-May-22	N	SOIL
JBRA-WC-S-20220504	04-May-22	N	SOIL
IGSR-14-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-14-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-15-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-15-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-16-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-16-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-17-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-17-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-18-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-18-1.0-1.5-20220505	05-May-22	N	SOIL

Sample ID	Sample Date	Sample Type	Matrix
IGSR-19-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-19-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-19-2.0-2.5-20220505	05-May-22	N	SOIL
IGSR-20220505-EB	05-May-22	EB	WATER
IGSR-21-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-21-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-21-1.0-1.5-20220505-FD	05-May-22	FD	SOIL
IGSR-22-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-22-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-23-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-23-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-24-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-24-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-26-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-26-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-28-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-28-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-28-1.0-1.5-20220505-FD	05-May-22	FD	SOIL
JBRA-20220505-EB	05-May-22	EB	WATER
IGSR-09-0.0-0.5-20220506	06-May-22	N	SOIL
IGSR-09-1.0-1.5-20220506	06-May-22	N	SOIL
IGSR-09-1.0-1.5-20220506-FD	06-May-22	FD	SOIL
IGSR-11-0.0-0.5-20220506	06-May-22	N	SOIL
IGSR-11-1.0-1.5-20220506	06-May-22	N	SOIL
IGSR-12-0.0-0.5-20220506	06-May-22	N	SOIL
IGSR-12-1.0-1.5-20220506	06-May-22	N	SOIL
IGSR-13-0.0-0.5-20220506	06-May-22	N	SOIL
IGSR-13-1.0-1.5-20220506	06-May-22	N	SOIL
IGSR-20220506-EB	06-May-22	EB	WATER

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C2UT-10-0.0-5.0-20220509	09-May-22	N	SOIL
C2UT-10-10.0-15.0-20220509	09-May-22	N	SOIL
C2UT-10-15.0-17.0-20220509	09-May-22	N	SOIL
C2UT-10-5.0-10.0-20220509	09-May-22	N	SOIL
C2UT-11-0.0-5.0-20220509	09-May-22	N	SOIL
C2UT-11-5.0-10.0-20220509	09-May-22	N	SOIL
C2UT-12-0.0-5.0-20220509	09-May-22	N	SOIL
C2UT-12-10.0-15.0-20220509	09-May-22	N	SOIL
C2UT-12-15.0-20.0-20220509	09-May-22	N	SOIL
C2UT-12-15.0-20.0-20220509-FD	09-May-22	FD	SOIL
C2UT-12-20.0-21.0-20220509	09-May-22	N	SOIL
C2UT-12-5.0-10.0-20220509	09-May-22	N	SOIL
C2UT-14-0.0-5.0-20220509	09-May-22	N	SOIL
C2UT-14-10.0-15.0-20220509	09-May-22	N	SOIL
C2UT-14-15.0-20.0-20220509	09-May-22	N	SOIL
C2UT-14-20.0-23.0-20220509	09-May-22	N	SOIL
C2UT-14-5.0-10.0-20220509	09-May-22	N	SOIL
C2UT-14-GW-20220509	09-May-22	N	WATER
C2UT-20220509-TB-S	09-May-22	TB	SOIL
C2UT-20220509-TB-W	09-May-22	TB	WATER
C2CB-09-0.0-5.0-20220510	10-May-22	N	SOIL
C2CB-09-5.0-10.0-20220510	10-May-22	N	SOIL
C2CB-10-0.0-5.0-20220510	10-May-22	N	SOIL
C2CB-10-10.0-15.0-20220510	10-May-22	N	SOIL
C2CB-10-15.0-20.0-20220510	10-May-22	N	SOIL
C2CB-10-20.0-25.0-20220510	10-May-22	N	SOIL
C2CB-10-5.0-10.0-20220510	10-May-22	N	SOIL
C2CB-11-0.0-5.0-20220510	10-May-22	N	SOIL
C2CB-11-10.0-15.0-20220510	10-May-22	N	SOIL

Sample ID	Sample Date	Sample Type	Matrix
C2CB-11-10.0-15.0-20220510-FD	10-May-22	FD	SOIL
C2CB-11-15.0-20.0-20220510	10-May-22	N	SOIL
C2CB-11-20.0-23.0-20220510	10-May-22	N	SOIL
C2CB-11-5.0-10.0-20220510	10-May-22	N	SOIL
C2CB-14-0.0-5.0-20220510	10-May-22	N	SOIL
C2CB-14-5.0-10.0-20220510	10-May-22	N	SOIL
C2CB-20220510-EB	10-May-22	EB	WATER
C2CB-20220510-TB-S	10-May-22	TB	SOIL
C2CB-20220510-TB-W	10-May-22	TB	WATER
C2CB-PCB-20220510	10-May-22	N	SOIL
C2UT-10-GW-20220510	10-May-22	N	WATER
C2UT-12-GW-20220510	10-May-22	N	WATER
C2UT-12-GW-20220510-FD	10-May-22	FD	WATER
C2UT-13-0.0-5.0-20220510	10-May-22	N	SOIL
C2UT-13-10.0-15.0-20220510	10-May-22	N	SOIL
C2UT-13-15.0-20.0-20220510	10-May-22	N	SOIL
C2UT-13-20.0-25.0-20220510	10-May-22	N	SOIL
C2UT-13-5.0-10.0-20220510	10-May-22	N	SOIL
C2UT-20220510-EB	10-May-22	EB	WATER
C2UT-PCB-20220510	10-May-22	N	SOIL
C2CB-08-0.0-5.0-20220511	11-May-22	N	SOIL
C2CB-08-10.0-15.0-20220511	11-May-22	N	SOIL
C2CB-08-5.0-10.0-20220511	11-May-22	N	SOIL
C2CB-08-GW-20220511	11-May-22	N	WATER
C2CB-10-GW-20220511	11-May-22	N	WATER
C2CB-10-GW-20220511-FD	11-May-22	FD	WATER
C2CB-12-0.0-5.0-20220511	11-May-22	N	SOIL
C2CB-12-5.0-10.0-20220511	11-May-22	N	SOIL
C2CB-12-5.0-10.0-20220511-FD	11-May-22	FD	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C2CB-13-0.5-5.0-20220511	11-May-22	N	SOIL
C2CB-13-10.0-15.0-20220511	11-May-22	N	SOIL
C2CB-13-15.0-20.0-20220511	11-May-22	N	SOIL
C2CB-13-15.0-20.0-20220511-FD	11-May-22	FD	SOIL
C2CB-13-20.0-23.0-20220511	11-May-22	N	SOIL
C2CB-13-5.0-10.0-20220511	11-May-22	N	SOIL
C2CB-20220511-EB	11-May-22	EB	WATER
C2UT-13-GW-20220510	11-May-22	N	WATER
C2WS-11-0.0-0.5-20220511	11-May-22	N	SOIL
C2WS-11-0.5-1.5-20220511	11-May-22	N	SOIL
C2WS-12-0.0-0.5-20220511	11-May-22	N	SOIL
C2WS-12-0.5-1.5-20220511	11-May-22	N	SOIL
C2WS-12-2.5-3.5-20220511	11-May-22	N	SOIL
C2WS-12-5.0-6.0-20220511	11-May-22	N	SOIL
C2UT-20220512-TB-S	12-May-22	TB	SOIL
C2UT-20220512-TB-W	12-May-22	TB	WATER
C2WS-02-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-02-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-04-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-04-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-05-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-05-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-06-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-06-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-06-0.5-1.5-20220512-FD	12-May-22	FD	SOIL
C2WS-06-GW-20220512	12-May-22	N	WATER
C2WS-06-GW-20220512-FD	12-May-22	FD	WATER
C2WS-07-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-08-0.0-0.5-20220512	12-May-22	N	SOIL

Sample ID	Sample Date	Sample Type	Matrix
C2WS-08-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-08-1.5-2.5-20220512	12-May-22	N	SOIL
C2WS-09-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-10-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-10-0.0-0.5-20220512-FD	12-May-22	FD	SOIL
C2WS-13-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-13-0.5-2.0-20220512	12-May-22	N	SOIL
C2WS-13-2.0-3.0-20220512	12-May-22	N	SOIL
C2WS-14-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-15-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-15-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-15-0.5-1.5-20220512-FD	12-May-22	FD	SOIL
C2WS-15-1.5-2.5-20220512	12-May-22	N	SOIL
C2WS-16-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-16-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-20220512-EB	12-May-22	EB	WATER
C2WS-PCB-20220512	12-May-22	N	SOIL
C2WS-04-GW-20220513	13-May-22	N	WATER
C2WS-WC-S-20220513	13-May-22	N	SOIL
C2WS-WC-W-20220513	13-May-22	N	WATER
IGBP-01-2.5-3.5-20220513	13-May-22	N	SOIL
IGBP-01-5.0-6.0-20220513	13-May-22	N	SOIL
IGBP-20220513-EB	13-May-22	EB	WATER
IGBP-20220513-TB-S	13-May-22	TB	SOIL
IGBP-20220513-TB-W	13-May-22	TB	WATER
IGBP-PCB-20220513	13-May-22	N	SOIL
IGBP-WC-S-20220513	13-May-22	N	SOIL
IGSR-02-5.0-6.0-20220513	13-May-22	N	SOIL
IGSR-02-5.0-6.0-20220513-FD	13-May-22	FD	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
IGSR-03-2.5-3.5-20220513	13-May-22	N	SOIL
IGSR-03-5.0-6.0-20220513	13-May-22	N	SOIL
IGSR-03-5.0-6.0-20220513-FD	13-May-22	FD	SOIL
IGSR-10-0.0-0.5-20220513	13-May-22	N	SOIL
IGSR-10-0.5-1.5-20220513	13-May-22	N	SOIL
IGSR-10-2.5-3.5-20220513	13-May-22	N	SOIL
IGSR-10-5.0-6.0-20220513	13-May-22	N	SOIL
IGSR-20-0.0-0.5-20220513	13-May-22	N	SOIL
IGSR-20-0.5-1.5-20220513	13-May-22	N	SOIL
IGSR-20-2.5-3.5-20220513	13-May-22	N	SOIL
IGSR-20220513-EB	13-May-22	EB	WATER
IGSR-20-5.0-6.0-20220513	13-May-22	N	SOIL
IGSR-25-0.0-0.5-20220513	13-May-22	N	SOIL
IGSR-25-0.5-1.5-20220513	13-May-22	N	SOIL
IGSR-25-2.5-3.5-20220513	13-May-22	N	SOIL
IGSR-25-5.0-6.0-20220513	13-May-22	N	SOIL
IGSR-27-0.0-0.5-20220513	13-May-22	N	SOIL
IGSR-27-0.5-1.5-20220513	13-May-22	N	SOIL
IGSR-27-2.5-3.5-20220513	13-May-22	N	SOIL
IGSR-WC-S-20220513	13-May-22	N	SOIL
C2WS-WC-W-20220514	14-May-22	N	WATER

Notes:

EB = equipment blank

FD = field duplicate

N = regular sample

TB = trip blank

Appendix E
Human Health and Leaching to Groundwater
Risk Evaluation Tables

J.C. Boyle Recreation Area Evaluation of COPCs for Human Health and Leaching to Groundwater.

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	OR Human Health SL ^a (mg/kg)	Exceeds OR Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	OR Leaching to Groundwater SL ^a (mg/kg)	Exceeds OR Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health
CALC	2,3,7,8-TCDD Toxic Equiv	TEQ-MO	4.5E-06	4.7E-06	No	NA	No	6.81E-06	No	2,3,7,8-TCDD
CALC	Benzo[a]pyrene Equivale	BaPEqZero	5.4E-03	1.1E-01	No	NA	No	NA	NA	Benzo(a)pyrene
SW6010B	Boron	7440-42-8	6.5E+01	1.6E+04	No	NA	No	NA	NA	
SW6020	Antimony	7440-36-0	4.4E+01	3.1E+01	Yes	0.67	Yes	NA	NA	
SW6020	Arsenic	7440-38-2	8.6E+00	1.9E+01	No	19	No	NA	NA	
SW6020	Barium	7440-39-3	2.3E+02	1.5E+04	No	630	No	NA	NA	
SW6020	Beryllium	7440-41-7	6.0E-01	1.6E+02	No	2.1	No	NA	NA	
SW6020	Cadmium	7440-43-9	5.8E-01	7.8E+01	No	0.54	No	NA	NA	
SW6020	Chromium	7440-47-3	5.3E+01	1.2E+05	No	200	No	NA	NA	Chromium III
SW6020	Cobalt	7440-48-4	4.7E+01	2.3E+01	Yes	--	Yes	NA	NA	
SW6020	Copper	7440-50-8	1.5E+02	3.1E+03	No	73	No	NA	NA	
SW6020	Iron	7439-89-6	4.0E+04	5.5E+04	No	NA	No	NA	NA	
SW6020	Lead	7439-92-1	9.7E+02	4.0E+02	Yes	34	Yes	3.4E+01	Yes	
SW6020	Manganese	7439-96-5	8.5E+02	2.1E+03	No	2100	No	NA	NA	
SW6020	Molybdenum	7439-98-7	1.4E+00	3.9E+02	No	NA	No	NA	NA	
SW6020	Nickel	7440-02-0	3.5E+01	1.5E+03	No	110	No	NA	NA	
SW6020	Selenium	7782-49-2	3.0E+00	3.9E+02	No	0.52	No	NA	NA	
SW6020	Silver	7440-22-4	1.6E-01	3.9E+02	No	0.17	No	NA	NA	
SW6020	Thallium	7440-28-0	1.6E-01	2.8E+00	No	2.8	No	NA	NA	
SW6020	Vanadium	7440-62-2	9.8E+01	3.9E+02	No	280	No	NA	NA	
SW6020	Zinc	7440-66-6	3.6E+03	2.3E+04	No	170	No	NA	NA	
SW7471A	Mercury	7439-97-6	1.0E-02	2.3E+01	No	0.24	No	NA	NA	
SW8260B	Acetone	67-64-1	5.1E-02	6.1E+04	No	NA	No	NA	NA	
SW8260B	Bromomethane	74-83-9	1.0E-03	4.6E+01	No	NA	No	8.3E-02	No	
SW8260B	Dichlorodifluoromethan	75-71-8	1.0E-03	8.7E+01	No	NA	No	NA	NA	
SW8270C	1-Methylnaphthalene	90-12-0	8.5E-03	1.8E+01	No	NA	No	NA	NA	
SW8270C	2-Methylnaphthalene	91-57-6	1.0E-02	2.4E+02	No	NA	No	NA	NA	
SW8270C	3 & 4-Methylphenol (m,	65794-96-9	1.3E-01	NA	No	NA	No	NA	NA	
SW8270C	Acenaphthylene	208-96-8	2.7E-03	1.8E+03	No	NA	No	NA	NA	Pyrene
SW8270C	Azobenzene	103-33-3	2.8E-02	5.6E+00	No	NA	No	NA	NA	
SW8270C	Benzo(a)pyrene	50-32-8	4.3E-03	1.1E-01	No	NA	No	4.4E+00	No	
SW8270C	Benzo(b)fluoranthene	205-99-2	6.5E-03	1.1E+00	No	NA	No	NA	NA	
SW8270C	Benzoic Acid	65-85-0	8.4E-01	2.5E+05	No	NA	No	NA	NA	
SW8270C	Bis (2-ethylhexyl) phtha	117-81-7	2.9E-02	3.9E+01	No	NA	No	NA	NA	
SW8270C	Dibenzo(a,h)anthracene	53-70-3	1.7E-03	1.1E-01	No	NA	No	NA	NA	
SW8270C	Dibenzofuran	132-64-9	7.7E-02	7.8E+01	No	NA	No	NA	NA	
SW8270C	Diethylphthalate	84-66-2	5.3E-03	5.1E+04	No	NA	No	NA	NA	
SW8270C	Dimethylphthalate	131-11-3	2.2E-03	NA	No	NA	No	NA	NA	
SW8270C	Fluoranthene	206-44-0	4.4E-03	2.4E+03	No	NA	No	NA	NA	
SW8270C	Indeno(1,2,3-cd)pyrene	193-39-5	4.4E-03	1.1E+00	No	NA	No	NA	NA	
SW8270C	Naphthalene	91-20-3	2.9E-01	5.3E+00	No	NA	No	7.7E-02	Yes	
SW8270C	N-Nitrosodiphenylamine	86-30-6	4.8E-03	1.1E+02	No	NA	No	1.0E+01	No	
SW8270C	Phenanthrene	85-01-8	2.2E-02	1.8E+03	No	NA	No	NA	NA	Pyrene
SW8270C	Phenol	108-95-2	1.3E-01	1.9E+04	No	NA	No	NA	NA	
SW8270C	Pyrene	129-00-0	4.1E-03	1.8E+03	No	NA	No	NA	NA	
SW8290	1,2,3,4,6,7,8-HpCDD	35822-46-9	4.8E-06	NA ^d	No	NA	No	NA	NA	
SW8290	1,2,3,4,7,8-HxCDF	70648-26-9	5.2E-07	NA ^d	No	NA	No	NA	NA	
SW8290	1,2,3,6,7,8-HxCDD	57653-85-7	9.4E-07	NA ^d	No	NA	No	NA	NA	
SW8290	1,2,3,6,7,8-HxCDF	57117-44-9	5.0E-07	NA ^d	No	NA	No	NA	NA	
SW8290	1,2,3,7,8,9-HxCDD	19408-74-3	9.8E-07	NA ^d	No	NA	No	NA	NA	
SW8290	1,2,3,7,8-PeCDD	40321-76-4	3.1E-07	NA ^d	No	NA	No	NA	NA	
SW8290	1,2,3,7,8-PeCDF	57117-41-6	2.1E-07	NA ^d	No	NA	No	NA	NA	

J.C. Boyle Recreation Area Evaluation of COPCs for Human Health and Leaching to Groundwater.

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	OR Human Health SL ^a (mg/kg)	Exceeds OR Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	OR Leaching to Groundwater SL ^a (mg/kg)	Exceeds OR Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health
SW8290	2,3,4,7,8-PeCDF	57117-31-4	6.5E-07	NA ^d	No	NA	No	NA	NA	
SW8290	2,3,7,8-TCDF	51207-31-9	3.9E-06	NA ^d	No	NA	No	NA	NA	
SW8290	OCDD	3268-87-9	2.0E-05	NA ^d	No	NA	No	NA	NA	
SW8290	OCDF	39001-02-0	3.5E-06	NA ^d	No	NA	No	NA	NA	
SW8290	OCDD	3268-87-9	2.2E-03	NA ^d	No	NA	No	NA	NA	
SW8290	OCDF	39001-02-0	2.2E-04	NA ^d	No	NA	No	NA	NA	

Notes:

^a The screening levels used for human health are the the minimum ODEQ (2018) RBCs for residential soil for direct contact and outdoor inhalation pathways. If no RBCs are available, the EPA (2022) Residential Soil RSL was used. Background values are used if available and if higher. The screening levels used for leaching to groundwater are the ODEQ (2018) RBCs for residential leaching to groundwater.

^b Background concentrations for metals in soil in Cascade Range (ODEQ 2013)

^c Human health COPCs are analytes that exceed the human health SL and the background value, if available.

^d Evaluated using Total 2,3,7,8-TCDD, calculated using toxicity equivalent values.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

mg/kg = milligrams per kilogram

NA = not available or not applicable

SL = screening level

J.C. Boyle Dispersed Recreation Area Evaluation of COPCs for COPCs in Groundwater for Human Health

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Groundwater (µg/L)	OR Human Health SL ^a (µg/L)	Exceeds OR Human Health SL (COPC)?	Surrogate Chemicals
CALC	2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-MO	2.50E-07	9.1E-08	Yes	2,3,7,8-TCDD
SW6020	Antimony	7440-36-0	3.5	6.0E+00	No	
SW6020	Arsenic	7440-38-2	3.7	0.052	Yes	
SW6020	Barium	7440-39-3	67	2000	No	
SW6020	Beryllium	7440-41-7	0.31	4	No	
SW6020	Cadmium	7440-43-9	0.2	5	No	
SW6020	Chromium	7440-47-3	22	100	No	
SW6020	Cobalt	7440-48-4	4.6	6	No	
SW6020	Copper	7440-50-8	22	800	No	
SW6020	Iron	7439-89-6	14000	14000	No	
SW6020	Lead	7439-92-1	9.6	15	No	
SW6020	Manganese	7439-96-5	87	430	No	
SW6020	Molybdenum	7439-98-7	0.58	100	No	
SW6020	Nickel	7440-02-0	15	390	No	
SW6020	Silver	7440-22-4	0.029	94	No	
SW6020	Vanadium	7440-62-2	56	86	No	
SW6020	Zinc	7440-66-6	99	6000	No	
SW8290	1,2,3,4,7,8-HxCDF	70648-26-9	1.40E-06	NA ^b	No	
SW8290	1,2,3,6,7,8-HxCDF	57117-44-9	1.10E-06	NA ^b	No	

Notes:

^a The screening levels used for human health are the the ODEQ (2018) RBCs for residential tapwater. If no RBCs are available, the EPA (2022) tapwater RSL was used.

^b Evaluated using Total 2,3,7,8-TCDD, calculated using toxicity equivalent values.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

µg/L = micrograms per liter

NA = not available or not applicable

SL = screening level

ProUCL Input 0 to 2 Feet Below Ground Surface

Antimony	d_Antimony	Cobalt	d_Cobalt	Lead	d_Lead	Naphthalene	d_Naphthalene	LOC_NAME	START_DEPTH	END_DEPTH
0.29	1	20	1	18	1	0.00059	0	JBRA-01	0	0.5
0.11	1	20	1	5.4	1	0.0007	1	JBRA-01	1	1.5
44	1	47	1	970	1	0.29	1	JBRA-02	0	0.5
1.5	1	15	1	18	1	0.027	1	JBRA-02	1	1.5
0.33	1	14	1	11	1	0.00059	0	JBRA-03	0	0.5
0.081	1	19	1	3.7	1	0.00058	0	JBRA-03	1	1.5
0.068	1	9	1	2.8	1	0.00091	1	JBRA-03	1.5	2.5

ProUCL Input 0 to 10 Feet Below Ground Surface

Antimony	d_Antimony	Cobalt	d_Cobalt	Lead	d_Lead	Naphthalene	d_Naphthalene	LOC_NAME	START_DEPTH	END_DEPTH
0.29	1	20	1	18	1	0.00059	0	JBRA-01	0	0.5
0.11	1	20	1	5.4	1	0.0007	1	JBRA-01	1	1.5
0.088	1	14	1	4	1	0.00065	1	JBRA-01	2	3
0.15	1	14	1	8.2	1	0.0014	1	JBRA-01	3	3.5
44	1	47	1	970	1	0.29	1	JBRA-02	0	0.5
1.5	1	15	1	18	1	0.027	1	JBRA-02	1	1.5
1.1	1	11	1	64	1	0.004	1	JBRA-02	3	3.5
0.33	1	14	1	11	1	0.00059	0	JBRA-03	0	0.5
0.081	1	19	1	3.7	1	0.00058	0	JBRA-03	1	1.5
0.068	1	9	1	2.8	1	0.00091	1	JBRA-03	1.5	2.5

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 2 Feet Below Ground Surface

UCL Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation ProUCL 5.2 8/23/2022 4:45:16 PM
 From File JCBoyle_ProUCL_Input.xls
 Full Precision OFF
 Confidence Coefficient 95%
 Number of Bootstrap Operations 2000

Antimony

General Statistics

Total Number of Observations	7	Number of Distinct Observations	7
		Number of Missing Observations	0
Minimum	0.068	Mean	6.626
Maximum	44	Median	0.29
SD	16.49	Std. Error of Mean	6.232
Coefficient of Variation	2.489	Skewness	2.641

Note: Sample size is small (e.g., <10), if data are collected using incremental sampling methodology (ISM) approach, refer also to ITRC Tech Reg Guide on ISM (ITRC 2020 and ITRC 2012) for additional guidance, but note that ITRC may recommend the t-UCL or the Chebyshev UCL for small sample sizes (n < 7).

The Chebyshev UCL often results in gross overestimates of the mean.

Refer to the ProUCL 5.2 Technical Guide for a discussion of the Chebyshev UCL.

Normal GOF Test

Shapiro Wilk Test Statistic	0.475
1% Shapiro Wilk Critical Value	0.73
Lilliefors Test Statistic	0.479
1% Lilliefors Critical Value	0.35

Shapiro Wilk GOF Test

Data Not Normal at 1% Significance Level

Lilliefors GOF Test

Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Assuming Normal Distribution

95% Normal UCL

95% Student's-t UCL 18.74

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL (Chen-1995) 23.52

95% Modified-t UCL (Johnson-1978) 19.77

Gamma GOF Test

A-D Test Statistic	1.143
5% A-D Critical Value	0.799
K-S Test Statistic	0.361
5% K-S Critical Value	0.338

Anderson-Darling Gamma GOF Test

Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov Gamma GOF Test

Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 2 Feet Below Ground Surface

k hat (MLE)	0.262	k star (bias corrected MLE)	0.245
Theta hat (MLE)	25.25	Theta star (bias corrected MLE)	27.02
nu hat (MLE)	3.673	nu star (bias corrected)	3.432
MLE Mean (bias corrected)	6.626	MLE Sd (bias corrected)	13.38
		Approximate Chi Square Value (0.05)	0.511
Adjusted Level of Significance	0.0158	Adjusted Chi Square Value	0.269

Assuming Gamma Distribution

95% Approximate Gamma UCL	44.48	95% Adjusted Gamma UCL	84.41
---------------------------	-------	------------------------	-------

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.824
10% Shapiro Wilk Critical Value	0.838
Lilliefors Test Statistic	0.269
10% Lilliefors Critical Value	0.28

Shapiro Wilk Lognormal GOF Test

Data Not Lognormal at 10% Significance Level

Lilliefors Lognormal GOF Test

Data appear Lognormal at 10% Significance Level

Data appear Approximate Lognormal at 10% Significance Level

Note GOF tests may be unreliable for small sample sizes

Lognormal Statistics

Minimum of Logged Data	-2.688	Mean of logged Data	-0.795
Maximum of Logged Data	3.784	SD of logged Data	2.282

Assuming Lognormal Distribution

95% H-UCL	7520	90% Chebyshev (MVUE) UCL	9.208
95% Chebyshev (MVUE) UCL	12.11	97.5% Chebyshev (MVUE) UCL	16.13
99% Chebyshev (MVUE) UCL	24.04		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution

Nonparametric Distribution Free UCLs

95% CLT UCL	16.88	95% BCA Bootstrap UCL	25.24
95% Standard Bootstrap UCL	16.21	95% Bootstrap-t UCL	960.6
95% Hall's Bootstrap UCL	557.7	95% Percentile Bootstrap UCL	18.97
90% Chebyshev(Mean, Sd) UCL	25.32	95% Chebyshev(Mean, Sd) UCL	33.79
97.5% Chebyshev(Mean, Sd) UCL	45.54	99% Chebyshev(Mean, Sd) UCL	68.63

Suggested UCL to Use

Recommendation cannot be provided

Recommendations are not available due to the sample size and skew of the input data.

Consult with a statistician to evaluate the adequacy of your data to support your objectives or explore alternative estimation methods.

The calculated UCLs are based on assumptions that the data were collected in a random and unbiased manner.

Please verify the data were collected from random locations.

If the data were collected using judgmental or other non-random methods,

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 2 Feet Below Ground Surface

then contact a statistician to correctly calculate UCLs.

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Cobalt

General Statistics			
Total Number of Observations	7	Number of Distinct Observations	6
		Number of Missing Observations	0
Minimum	9	Mean	20.57
Maximum	47	Median	19
SD	12.31	Std. Error of Mean	4.654
Coefficient of Variation	0.599	Skewness	2.056

Note: Sample size is small (e.g., <10), if data are collected using incremental sampling methodology (ISM) approach, refer also to ITRC Tech Reg Guide on ISM (ITRC 2020 and ITRC 2012) for additional guidance, but note that ITRC may recommend the t-UCL or the Chebyshev UCL for small sample sizes (n < 7).

The Chebyshev UCL often results in gross overestimates of the mean.

Refer to the ProUCL 5.2 Technical Guide for a discussion of the Chebyshev UCL.

Normal GOF Test		Shapiro Wilk GOF Test	
Shapiro Wilk Test Statistic	0.755	Data appear Normal at 1% Significance Level	
1% Shapiro Wilk Critical Value	0.73	Lilliefors GOF Test	
Lilliefors Test Statistic	0.376	Data Not Normal at 1% Significance Level	
1% Lilliefors Critical Value	0.35		

Data appear Approximate Normal at 1% Significance Level

Note GOF tests may be unreliable for small sample sizes

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	29.62	95% Adjusted-CLT UCL (Chen-1995)	32.09
		95% Modified-t UCL (Johnson-1978)	30.22

Gamma GOF Test		Anderson-Darling Gamma GOF Test	
A-D Test Statistic	0.541	Detected data appear Gamma Distributed at 5% Significance Level	
5% A-D Critical Value	0.71	Kolmogorov-Smirnov Gamma GOF Test	
K-S Test Statistic	0.316	Data Not Gamma Distributed at 5% Significance Level	
5% K-S Critical Value	0.313		

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Note GOF tests may be unreliable for small sample sizes

Gamma Statistics			
k hat (MLE)	4.342	k star (bias corrected MLE)	2.576

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 2 Feet Below Ground Surface

Theta hat (MLE)	4.738	Theta star (bias corrected MLE)	7.985
nu hat (MLE)	60.78	nu star (bias corrected)	36.07
MLE Mean (bias corrected)	20.57	MLE Sd (bias corrected)	12.82
		Approximate Chi Square Value (0.05)	23.32
Adjusted Level of Significance	0.0158	Adjusted Chi Square Value	20.28

Assuming Gamma Distribution

95% Approximate Gamma UCL	31.81	95% Adjusted Gamma UCL	36.58
---------------------------	-------	------------------------	-------

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.913
10% Shapiro Wilk Critical Value	0.838
Lilliefors Test Statistic	0.285
10% Lilliefors Critical Value	0.28

Shapiro Wilk Lognormal GOF Test

Data appear Lognormal at 10% Significance Level

Lilliefors Lognormal GOF Test

Data Not Lognormal at 10% Significance Level

Data appear Approximate Lognormal at 10% Significance Level

Note GOF tests may be unreliable for small sample sizes

Lognormal Statistics

Minimum of Logged Data	2.197	Mean of logged Data	2.904
Maximum of Logged Data	3.85	SD of logged Data	0.504

Assuming Lognormal Distribution

95% H-UCL	34.45	90% Chebyshev (MVUE) UCL	31.98
95% Chebyshev (MVUE) UCL	37.26	97.5% Chebyshev (MVUE) UCL	44.59
99% Chebyshev (MVUE) UCL	58.99		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution

Nonparametric Distribution Free UCLs

95% CLT UCL	28.23	95% BCA Bootstrap UCL	31.57
95% Standard Bootstrap UCL	27.72	95% Bootstrap-t UCL	39.05
95% Hall's Bootstrap UCL	62.47	95% Percentile Bootstrap UCL	28.86
90% Chebyshev(Mean, Sd) UCL	34.53	95% Chebyshev(Mean, Sd) UCL	40.86
97.5% Chebyshev(Mean, Sd) UCL	49.64	99% Chebyshev(Mean, Sd) UCL	66.88

Suggested UCL to Use

95% Student's-t UCL	29.62
---------------------	-------

When a data set follows an approximate distribution passing only one of the GOF tests, it is suggested to use a UCL based upon a distribution passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 2 Feet Below Ground Surface

Lead

General Statistics			
Total Number of Observations	7	Number of Distinct Observations	6
		Number of Missing Observations	0
Minimum	2.8	Mean	147
Maximum	970	Median	11
SD	363	Std. Error of Mean	137.2
Coefficient of Variation	2.469	Skewness	2.644

Note: Sample size is small (e.g., <10), if data are collected using incremental sampling methodology (ISM) approach, refer also to ITRC Tech Reg Guide on ISM (ITRC 2020 and ITRC 2012) for additional guidance, but note that ITRC may recommend the t-UCL or the Chebyshev UCL for small sample sizes (n < 7).

The Chebyshev UCL often results in gross overestimates of the mean.

Refer to the ProUCL 5.2 Technical Guide for a discussion of the Chebyshev UCL.

Normal GOF Test			
Shapiro Wilk Test Statistic	0.469	Shapiro Wilk GOF Test	
1% Shapiro Wilk Critical Value	0.73	Data Not Normal at 1% Significance Level	
Lilliefors Test Statistic	0.496	Lilliefors GOF Test	
1% Lilliefors Critical Value	0.35	Data Not Normal at 1% Significance Level	
Data Not Normal at 1% Significance Level			

Assuming Normal Distribution			
95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	413.6	95% Adjusted-CLT UCL (Chen-1995)	519.1
		95% Modified-t UCL (Johnson-1978)	436.4

Gamma GOF Test			
A-D Test Statistic	1.308	Anderson-Darling Gamma GOF Test	
5% A-D Critical Value	0.783	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.451	Kolmogorov-Smirnov Gamma GOF Test	
5% K-S Critical Value	0.335	Data Not Gamma Distributed at 5% Significance Level	
Data Not Gamma Distributed at 5% Significance Level			

Gamma Statistics			
k hat (MLE)	0.304	k star (bias corrected MLE)	0.269
Theta hat (MLE)	483.7	Theta star (bias corrected MLE)	546.7
nu hat (MLE)	4.254	nu star (bias corrected)	3.764
MLE Mean (bias corrected)	147	MLE Sd (bias corrected)	283.5
		Approximate Chi Square Value (0.05)	0.631
Adjusted Level of Significance	0.0158	Adjusted Chi Square Value	0.342

Assuming Gamma Distribution			
95% Approximate Gamma UCL	877.1	95% Adjusted Gamma UCL	1619

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 2 Feet Below Ground Surface

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.789
10% Shapiro Wilk Critical Value	0.838
Lilliefors Test Statistic	0.324
10% Lilliefors Critical Value	0.28

Shapiro Wilk Lognormal GOF Test

Data Not Lognormal at 10% Significance Level

Lilliefors Lognormal GOF Test

Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Lognormal Statistics

Minimum of Logged Data	1.03	Mean of logged Data	2.726
Maximum of Logged Data	6.877	SD of logged Data	1.973

Assuming Lognormal Distribution

95% H-UCL	22922	90% Chebyshev (MVUE) UCL	194.2
95% Chebyshev (MVUE) UCL	253.5	97.5% Chebyshev (MVUE) UCL	335.9
99% Chebyshev (MVUE) UCL	497.6		

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution

Nonparametric Distribution Free UCLs

95% CLT UCL	372.6	95% BCA Bootstrap UCL	556.6
95% Standard Bootstrap UCL	357.9	95% Bootstrap-t UCL	9766
95% Hall's Bootstrap UCL	6769	95% Percentile Bootstrap UCL	420
90% Chebyshev(Mean, Sd) UCL	558.6	95% Chebyshev(Mean, Sd) UCL	745
97.5% Chebyshev(Mean, Sd) UCL	1004	99% Chebyshev(Mean, Sd) UCL	1512

Suggested UCL to Use

Recommendation cannot be provided

The calculated UCLs are based on assumptions that the data were collected in a random and unbiased manner.

Please verify the data were collected from random locations.

**If the data were collected using judgmental or other non-random methods,
then contact a statistician to correctly calculate UCLs.**

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Naphthalene

General Statistics

Total Number of Observations	7	Number of Distinct Observations	6
Number of Detects	4	Number of Non-Detects	3
Number of Distinct Detects	4	Number of Distinct Non-Detects	2
Minimum Detect	7.0000E-4	Minimum Non-Detect	5.8000E-4

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 2 Feet Below Ground Surface

Maximum Detect	0.29	Maximum Non-Detect	5.9000E-4
Variance Detects	0.0198	Percent Non-Detects	42.86%
Mean Detects	0.0797	SD Detects	0.141
Median Detects	0.014	CV Detects	1.767
Skewness Detects	1.955	Kurtosis Detects	3.838
Mean of Logged Detects	-4.779	SD of Logged Detects	2.888

Note: Sample size is small (e.g., <10), if data are collected using incremental sampling methodology (ISM) approach, refer also to ITRC Tech Reg Guide on ISM (ITRC 2020 and ITRC 2012) for additional guidance, but note that ITRC may recommend the t-UCL or the Chebyshev UCL for small sample sizes (n < 7).

The Chebyshev UCL often results in gross overestimates of the mean.

Refer to the ProUCL 5.2 Technical Guide for a discussion of the Chebyshev UCL.

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.694	Shapiro Wilk GOF Test
1% Shapiro Wilk Critical Value	0.687	Detected Data appear Normal at 1% Significance Level
Lilliefors Test Statistic	0.396	Lilliefors GOF Test
1% Lilliefors Critical Value	0.413	Detected Data appear Normal at 1% Significance Level

Detected Data appear Normal at 1% Significance Level

Note GOF tests may be unreliable for small sample sizes

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.0458	KM Standard Error of Mean	0.0437
90KM SD	0.1	95% KM (BCA) UCL	N/A
95% KM (t) UCL	0.131	95% KM (Percentile Bootstrap) UCL	N/A
95% KM (z) UCL	0.118	95% KM Bootstrap t UCL	N/A
90% KM Chebyshev UCL	0.177	95% KM Chebyshev UCL	0.236
97.5% KM Chebyshev UCL	0.319	99% KM Chebyshev UCL	0.481

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.405	Anderson-Darling GOF Test
5% A-D Critical Value	0.703	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.302	Kolmogorov-Smirnov GOF
5% K-S Critical Value	0.418	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Note GOF tests may be unreliable for small sample sizes

Gamma Statistics on Detected Data Only

k hat (MLE)	0.306	k star (bias corrected MLE)	0.243
Theta hat (MLE)	0.261	Theta star (bias corrected MLE)	0.328
nu hat (MLE)	2.445	nu star (bias corrected)	1.945
Mean (detects)	0.0797		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 2 Feet Below Ground Surface

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	7.0000E-4	Mean	0.0498
Maximum	0.29	Median	0.01
SD	0.106	CV	2.134
k hat (MLE)	0.388	k star (bias corrected MLE)	0.317
Theta hat (MLE)	0.128	Theta star (bias corrected MLE)	0.157
nu hat (MLE)	5.431	nu star (bias corrected)	4.437
Adjusted Level of Significance (β)	0.0158		
Approximate Chi Square Value (4.44, α)	0.901	Adjusted Chi Square Value (4.44, β)	0.518
95% Gamma Approximate UCL	0.245	95% Gamma Adjusted UCL	N/A

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.0458	SD (KM)	0.1
Variance (KM)	0.01	SE of Mean (KM)	0.0437
k hat (KM)	0.209	k star (KM)	0.215
nu hat (KM)	2.925	nu star (KM)	3.005
theta hat (KM)	0.219	theta star (KM)	0.213
80% gamma percentile (KM)	0.0624	90% gamma percentile (KM)	0.138
95% gamma percentile (KM)	0.231	99% gamma percentile (KM)	0.485

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (3.00, α)	0.374	Adjusted Chi Square Value (3.00, β)	0.192
95% KM Approximate Gamma UCL	0.368	95% KM Adjusted Gamma UCL	0.715

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.887	Shapiro Wilk GOF Test
10% Shapiro Wilk Critical Value	0.792	Detected Data appear Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.279	Lilliefors GOF Test
10% Lilliefors Critical Value	0.346	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Lognormal at 10% Significance Level

Note GOF tests may be unreliable for small sample sizes

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.0455	Mean in Log Scale	-8.415
SD in Original Scale	0.108	SD in Log Scale	5.048
95% t UCL (assumes normality of ROS data)	0.125	95% Percentile Bootstrap UCL	0.125
95% BCA Bootstrap UCL	0.166	95% Bootstrap t UCL	12.41
95% H-UCL (Log ROS)	5.280E+16		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.925	KM Geo Mean	0.00267
KM SD (logged)	2.308	95% Critical H Value (KM-Log)	7.723
KM Standard Error of Mean (logged)	1.007	95% H-UCL (KM -Log)	55.33
KM SD (logged)	2.308	95% Critical H Value (KM-Log)	7.723

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 2 Feet Below Ground Surface

KM Standard Error of Mean (logged) 1.007

DL/2 Statistics

DL/2 Normal

Mean in Original Scale 0.0456
SD in Original Scale 0.108
95% t UCL (Assumes normality) 0.125

DL/2 Log-Transformed

Mean in Log Scale -6.217
SD in Log Scale 2.718
95% H-Stat UCL 1814

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 1% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.131

The calculated UCLs are based on assumptions that the data were collected in a random and unbiased manner.

Please verify the data were collected from random locations.

If the data were collected using judgmental or other non-random methods,
then contact a statistician to correctly calculate UCLs.

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

UCL Statistics for Data Sets with Non-Detects

User Selected Options

Date/Time of Computation ProUCL 5.2 8/23/2022 4:41:55 PM
 From File JCBoyle_ProUCL_Input_a.xls
 Full Precision OFF
 Confidence Coefficient 95%
 Number of Bootstrap Operations 2000

Antimony

General Statistics

Total Number of Observations	10	Number of Distinct Observations	10
		Number of Missing Observations	0
Minimum	0.068	Mean	4.772
Maximum	44	Median	0.22
SD	13.79	Std. Error of Mean	4.361
Coefficient of Variation	2.89	Skewness	3.155

Normal GOF Test

Shapiro Wilk Test Statistic	0.393	Shapiro Wilk GOF Test
1% Shapiro Wilk Critical Value	0.781	Data Not Normal at 1% Significance Level
Lilliefors Test Statistic	0.494	Lilliefors GOF Test
1% Lilliefors Critical Value	0.304	Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Assuming Normal Distribution

95% Normal UCL

95% Student's-t UCL 12.77

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL (Chen-1995) 16.59
 95% Modified-t UCL (Johnson-1978) 13.49

Gamma GOF Test

A-D Test Statistic	1.723	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.824	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.345	Kolmogorov-Smirnov Gamma GOF Test
5% K-S Critical Value	0.289	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.275	k star (bias corrected MLE)	0.259
Theta hat (MLE)	17.35	Theta star (bias corrected MLE)	18.41
nu hat (MLE)	5.502	nu star (bias corrected)	5.184
MLE Mean (bias corrected)	4.772	MLE Sd (bias corrected)	9.372
		Approximate Chi Square Value (0.05)	1.238
Adjusted Level of Significance	0.0267	Adjusted Chi Square Value	0.938

Assuming Gamma Distribution

95% Approximate Gamma UCL	19.98	95% Adjusted Gamma UCL	26.37
---------------------------	-------	------------------------	-------

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.813	Shapiro Wilk Lognormal GOF Test
10% Shapiro Wilk Critical Value	0.869	Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.226	Lilliefors Lognormal GOF Test
10% Lilliefors Critical Value	0.241	Data appear Lognormal at 10% Significance Level

Data appear Approximate Lognormal at 10% Significance Level

Lognormal Statistics

Minimum of Logged Data	-2.688	Mean of logged Data	-0.98
Maximum of Logged Data	3.784	SD of logged Data	1.988

Assuming Lognormal Distribution

95% H-UCL	94.99	90% Chebyshev (MVUE) UCL	5.273
95% Chebyshev (MVUE) UCL	6.849	97.5% Chebyshev (MVUE) UCL	9.037
99% Chebyshev (MVUE) UCL	13.33		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution

Nonparametric Distribution Free UCLs

95% CLT UCL	11.95	95% BCA Bootstrap UCL	17.84
95% Standard Bootstrap UCL	11.54	95% Bootstrap-t UCL	204.5
95% Hall's Bootstrap UCL	178.9	95% Percentile Bootstrap UCL	13.41
90% Chebyshev(Mean, Sd) UCL	17.86	95% Chebyshev(Mean, Sd) UCL	23.78
97.5% Chebyshev(Mean, Sd) UCL	32.01	99% Chebyshev(Mean, Sd) UCL	48.17

Suggested UCL to Use

95% Student's-t UCL	12.77
---------------------	-------

The calculated UCLs are based on assumptions that the data were collected in a random and unbiased manner.

Please verify the data were collected from random locations.

If the data were collected using judgmental or other non-random methods,
then contact a statistician to correctly calculate UCLs.

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 10 Feet Below Ground Surface

Total Number of Observations	10	Number of Distinct Observations	7
		Number of Missing Observations	0
Minimum	9	Mean	18.3
Maximum	47	Median	14.5
SD	10.73	Std. Error of Mean	3.393
Coefficient of Variation	0.586	Skewness	2.494

Normal GOF Test

Shapiro Wilk Test Statistic	0.688
1% Shapiro Wilk Critical Value	0.781
Lilliefors Test Statistic	0.337
1% Lilliefors Critical Value	0.304

Shapiro Wilk GOF Test

Data Not Normal at 1% Significance Level

Lilliefors GOF Test

Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Assuming Normal Distribution

95% Normal UCL

95% Student's-t UCL	24.52
---------------------	-------

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL (Chen-1995)	26.74
95% Modified-t UCL (Johnson-1978)	24.97

Gamma GOF Test

A-D Test Statistic	0.768
5% A-D Critical Value	0.729
K-S Test Statistic	0.263
5% K-S Critical Value	0.267

Anderson-Darling Gamma GOF Test

Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov Gamma GOF Test

Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics

k hat (MLE)	4.866	k star (bias corrected MLE)	3.473
Theta hat (MLE)	3.761	Theta star (bias corrected MLE)	5.27
nu hat (MLE)	97.32	nu star (bias corrected)	69.46
MLE Mean (bias corrected)	18.3	MLE Sd (bias corrected)	9.82
		Approximate Chi Square Value (0.05)	51.27
Adjusted Level of Significance	0.0267	Adjusted Chi Square Value	48.57

Assuming Gamma Distribution

95% Approximate Gamma UCL	24.79	95% Adjusted Gamma UCL	26.17
---------------------------	-------	------------------------	-------

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.879
10% Shapiro Wilk Critical Value	0.869
Lilliefors Test Statistic	0.232
10% Lilliefors Critical Value	0.241

Shapiro Wilk Lognormal GOF Test

Data appear Lognormal at 10% Significance Level

Lilliefors Lognormal GOF Test

Data appear Lognormal at 10% Significance Level

Data appear Lognormal at 10% Significance Level

Lognormal Statistics

Minimum of Logged Data	2.197	Mean of logged Data	2.801
------------------------	-------	---------------------	-------

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 10 Feet Below Ground Surface

Maximum of Logged Data 3.85 SD of logged Data 0.449

Assuming Lognormal Distribution

95% H-UCL	25.1	90% Chebyshev (MVUE) UCL	25.78
95% Chebyshev (MVUE) UCL	29.3	97.5% Chebyshev (MVUE) UCL	34.19
99% Chebyshev (MVUE) UCL	43.79		

Nonparametric Distribution Free UCL Statistics
Data appear to follow a Discernible Distribution

Nonparametric Distribution Free UCLs

95% CLT UCL	23.88	95% BCA Bootstrap UCL	27
95% Standard Bootstrap UCL	23.57	95% Bootstrap-t UCL	32.4
95% Hall's Bootstrap UCL	46.52	95% Percentile Bootstrap UCL	24.1
90% Chebyshev(Mean, Sd) UCL	28.48	95% Chebyshev(Mean, Sd) UCL	33.09
97.5% Chebyshev(Mean, Sd) UCL	39.49	99% Chebyshev(Mean, Sd) UCL	52.06

Suggested UCL to Use

95% Adjusted Gamma UCL 26.17

When a data set follows an approximate distribution passing only one of the GOF tests, it is suggested to use a UCL based upon a distribution passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Lead

General Statistics

Total Number of Observations	10	Number of Distinct Observations	9
		Number of Missing Observations	0
Minimum	2.8	Mean	110.5
Maximum	970	Median	9.6
SD	302.5	Std. Error of Mean	95.67
Coefficient of Variation	2.738	Skewness	3.141

Normal GOF Test

Shapiro Wilk Test Statistic	0.408
1% Shapiro Wilk Critical Value	0.781
Lilliefors Test Statistic	0.461
1% Lilliefors Critical Value	0.304

Shapiro Wilk GOF Test

Data Not Normal at 1% Significance Level

Lilliefors GOF Test

Data Not Normal at 1% Significance Level

Data Not Normal at 1% Significance Level

Assuming Normal Distribution

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 10 Feet Below Ground Surface

95% Normal UCL

95% Student's-t UCL 285.9

95% UCLs (Adjusted for Skewness)

95% Adjusted-CLT UCL (Chen-1995) 369.4

95% Modified-t UCL (Johnson-1978) 301.7

Gamma GOF Test

A-D Test Statistic 1.654

5% A-D Critical Value 0.807

K-S Test Statistic 0.382

5% K-S Critical Value 0.287

Anderson-Darling Gamma GOF Test

Data Not Gamma Distributed at 5% Significance Level

Kolmogorov-Smirnov Gamma GOF Test

Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE) 0.334

Theta hat (MLE) 331.4

nu hat (MLE) 6.67

MLE Mean (bias corrected) 110.5

Adjusted Level of Significance 0.0267

k star (bias corrected MLE) 0.3

Theta star (bias corrected MLE) 368.2

nu star (bias corrected) 6.003

MLE Sd (bias corrected) 201.7

Approximate Chi Square Value (0.05) 1.641

Adjusted Chi Square Value 1.278

Assuming Gamma Distribution

95% Approximate Gamma UCL 404.2

95% Adjusted Gamma UCL 519.1

Lognormal GOF Test

Shapiro Wilk Test Statistic 0.827

10% Shapiro Wilk Critical Value 0.869

Lilliefors Test Statistic 0.251

10% Lilliefors Critical Value 0.241

Shapiro Wilk Lognormal GOF Test

Data Not Lognormal at 10% Significance Level

Lilliefors Lognormal GOF Test

Data Not Lognormal at 10% Significance Level

Data Not Lognormal at 10% Significance Level

Lognormal Statistics

Minimum of Logged Data 1.03

Maximum of Logged Data 6.877

Mean of logged Data 2.673

SD of logged Data 1.75

Assuming Lognormal Distribution

95% H-UCL 1099

95% Chebyshev (MVUE) UCL 176.7

99% Chebyshev (MVUE) UCL 339.1

90% Chebyshev (MVUE) UCL 137.3

97.5% Chebyshev (MVUE) UCL 231.5

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution

Nonparametric Distribution Free UCLs

95% CLT UCL 267.9

95% Standard Bootstrap UCL 259.1

95% Hall's Bootstrap UCL 2486

90% Chebyshev(Mean, Sd) UCL 397.5

95% BCA Bootstrap UCL 397.7

95% Bootstrap-t UCL 5522

95% Percentile Bootstrap UCL 297.3

95% Chebyshev(Mean, Sd) UCL 527.5

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 10 Feet Below Ground Surface

97.5% Chebyshev(Mean, Sd) UCL 708

99% Chebyshev(Mean, Sd) UCL 1062

Suggested UCL to Use

95% Student's-t UCL 285.9

The calculated UCLs are based on assumptions that the data were collected in a random and unbiased manner.

Please verify the data were collected from random locations.

If the data were collected using judgmental or other non-random methods,
then contact a statistician to correctly calculate UCLs.

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Naphthalene

General Statistics

Total Number of Observations	10	Number of Distinct Observations	9
Number of Detects	7	Number of Non-Detects	3
Number of Distinct Detects	7	Number of Distinct Non-Detects	2
Minimum Detect	6.5000E-4	Minimum Non-Detect	5.8000E-4
Maximum Detect	0.29	Maximum Non-Detect	5.9000E-4
Variance Detects	0.0116	Percent Non-Detects	30%
Mean Detects	0.0464	SD Detects	0.108
Median Detects	0.0014	CV Detects	2.325
Skewness Detects	2.604	Kurtosis Detects	6.82
Mean of Logged Detects	-5.507	SD of Logged Detects	2.296

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.511	Shapiro Wilk GOF Test
1% Shapiro Wilk Critical Value	0.73	Detected Data Not Normal at 1% Significance Level
Lilliefors Test Statistic	0.428	Lilliefors GOF Test
1% Lilliefors Critical Value	0.35	Detected Data Not Normal at 1% Significance Level

Detected Data Not Normal at 1% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.0326	KM Standard Error of Mean	0.0294
90KM SD	0.0861	95% KM (BCA) UCL	0.0881
95% KM (t) UCL	0.0866	95% KM (Percentile Bootstrap) UCL	0.0879
95% KM (z) UCL	0.081	95% KM Bootstrap t UCL	2.71
90% KM Chebyshev UCL	0.121	95% KM Chebyshev UCL	0.161
97.5% KM Chebyshev UCL	0.216	99% KM Chebyshev UCL	0.325

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.962	Anderson-Darling GOF Test
5% A-D Critical Value	0.79	Detected Data Not Gamma Distributed at 5% Significance Level

J.C. Boyle Dispersed Recreation Area - 2 ProUCL Output for 0 to 10 Feet Below Ground Surface

K-S Test Statistic	0.33	Kolmogorov-Smirnov GOF
5% K-S Critical Value	0.336	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level
Note GOF tests may be unreliable for small sample sizes

Gamma Statistics on Detected Data Only

k hat (MLE)	0.285	k star (bias corrected MLE)	0.258
Theta hat (MLE)	0.163	Theta star (bias corrected MLE)	0.18
nu hat (MLE)	3.996	nu star (bias corrected)	3.617
Mean (detects)	0.0464		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
 GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
 For such situations, GROS method may yield incorrect values of UCLs and BTVs
 This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	6.5000E-4	Mean	0.0355
Maximum	0.29	Median	0.007
SD	0.0898	CV	2.532
k hat (MLE)	0.354	k star (bias corrected MLE)	0.314
Theta hat (MLE)	0.1	Theta star (bias corrected MLE)	0.113
nu hat (MLE)	7.076	nu star (bias corrected)	6.287
Adjusted Level of Significance (β)	0.0267		
Approximate Chi Square Value (6.29, α)	1.788	Adjusted Chi Square Value (6.29, β)	1.404
95% Gamma Approximate UCL	0.125	95% Gamma Adjusted UCL	0.159

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.0326	SD (KM)	0.0861
Variance (KM)	0.00742	SE of Mean (KM)	0.0294
k hat (KM)	0.144	k star (KM)	0.167
nu hat (KM)	2.872	nu star (KM)	3.344
theta hat (KM)	0.227	theta star (KM)	0.195
80% gamma percentile (KM)	0.0386	90% gamma percentile (KM)	0.098
95% gamma percentile (KM)	0.176	99% gamma percentile (KM)	0.396

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (3.34, α)	0.481	Adjusted Chi Square Value (3.34, β)	0.334
95% KM Approximate Gamma UCL	0.227	95% KM Adjusted Gamma UCL	0.327

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.828	Shapiro Wilk GOF Test
10% Shapiro Wilk Critical Value	0.838	Detected Data Not Lognormal at 10% Significance Level
Lilliefors Test Statistic	0.25	Lilliefors GOF Test
10% Lilliefors Critical Value	0.28	Detected Data appear Lognormal at 10% Significance Level

Detected Data appear Approximate Lognormal at 10% Significance Level

Note GOF tests may be unreliable for small sample sizes

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.0325	Mean in Log Scale	-7.215
SD in Original Scale	0.0909	SD in Log Scale	3.352
95% t UCL (assumes normality of ROS data)	0.0851	95% Percentile Bootstrap UCL	0.0878
95% BCA Bootstrap UCL	0.119	95% Bootstrap t UCL	2.414
95% H-UCL (Log ROS)	3554		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-6.091	KM Geo Mean	0.00226
KM SD (logged)	1.989	95% Critical H Value (KM-Log)	5.37
KM Standard Error of Mean (logged)	0.68	95% H-UCL (KM -Log)	0.577
KM SD (logged)	1.989	95% Critical H Value (KM-Log)	5.37
KM Standard Error of Mean (logged)	0.68		

DL/2 Statistics

DL/2 Normal

Mean in Original Scale	0.0326
SD in Original Scale	0.0908
95% t UCL (Assumes normality)	0.0852

DL/2 Log-Transformed

Mean in Log Scale	-6.295
SD in Log Scale	2.264
95% H-Stat UCL	2.28

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Bootstrap t UCL	2.71	95% Hall's Bootstrap	0.577
------------------------	------	----------------------	-------

The calculated UCLs are based on assumptions that the data were collected in a random and unbiased manner.

Please verify the data were collected from random locations.

If the data were collected using judgmental or other non-random methods,
then contact a statistician to correctly calculate UCLs.

When a data set follows an approximate distribution passing only one of the GOF tests,
it is suggested to use a UCL based upon a distribution passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness using results from simulation studies.

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Appendix F
Ecological Risk Evaluation Tables

Table F-1. Ecological Screening Levels and Site-Specific Ecological Preliminary Remedial Goals for Soil Exposure Pathways

Class	Analyte	Ecological Screening Levels			Site-Specific EcoPRGs		
		Oregon Background Cascade Range (mg/kg)	No Effect ESL (mg/kg)	Wildlife Low Effect RSL (mg/kg)	EcoPRGs Developed?	Bird Low EcoPRG (mg/kg)	Mammal Low EcoPRG (mg/kg)
Metal	Antimony	0.67	0.27	2.7	Yes	--	342
Metal	Arsenic	19	6.8	31	No	--	--
Metal	Barium	630	110	1200	No	--	--
Metal	Beryllium	2.1	2.5	42	No	--	--
Metal	Boron	--	2	10	Yes	--	64
Metal	Cadmium	0.54	0.27	1.6	No	--	--
Metal	Chromium	200	23	73	No	--	--
Metal	Cobalt	--	13	170	No	--	--
Metal	Copper	73	14	43	Yes	320	980
Metal	Iron	--	--	--	No	--	--
Metal	Lead	34	11	23	Yes	721	4482
Metal	Manganese	2100	220	2700	No	--	--
Metal	Mercury	0.24	0.013	0.13	No	--	--
Metal	Molybdenum	--	2.6	26	No	--	--
Metal	Nickel	110	10	21	Yes	123	119
Metal	Selenium	0.52	0.52	1	Yes	6.1	6.1
Metal	Silver	0.17	2.6	26	No	--	--
Metal	Thallium	2.8	0.05	4.2	No	--	--
Metal	Vanadium	280	4.7	9.5	Yes	61	810
Metal	Zinc	170	46	120	Yes	1076	7743
DXN	1,2,3,4,6,7,8-HpCDD	--	1.0E-06	7.0E-06	No	--	--
DXN	1,2,3,4,7,8-HxCDF	--	1.6E-07	1.1E-06	No	--	--
DXN	1,2,3,6,7,8-HxCDD	--	1.3E-07	8.9E-07	No	--	--
DXN	1,2,3,6,7,8-HxCDF	--	1.6E-07	1.1E-06	No	--	--
DXN	1,2,3,7,8,9-HxCDD	--	1.3E-07	8.9E-07	No	--	--
DXN	1,2,3,7,8-PeCDD	--	4.2E-08	2.8E-07	No	--	--
DXN	1,2,3,7,8-PeCDF	--	9.7E-07	6.5E-06	No	--	--
DXN	2,3,4,7,8-PeCDF	--	9.7E-08	6.5E-07	No	--	--
DXN	2,3,7,8-TCDD TEQ Bird	--	5.2E-07	5.2E-06	No	--	--
DXN	2,3,7,8-TCDD TEQ Mammal	--	3.7E-08	2.5E-07	Yes	--	6.8E-06
DXN	2,3,7,8-TCDF	--	4.5E-07	3.0E-06	No	--	--
DXN	OCDD	--	4.5E-05	3.0E-04	No	--	--
DXN	OCDF	--	3.3E-05	2.2E-04	No	--	--
PAH	1-Methylnaphthalene	--	--	--	No	--	--
PAH	2-Methylnaphthalene	--	16	160	No	--	--
PAH	Acenaphthylene	--	120	1200	No	--	--
PAH	Benzo(a)anthracene	--	0.73	7.3	No	--	--
PAH	Benzo(a)pyrene	--	62	190	No	--	--
PAH	Benzo(b)fluoranthene	--	18	440	No	--	--
PAH	Dibenzo(a,h)anthracene	--	14	140	No	--	--
PAH	Fluoranthene	--	10	220	No	--	--
PAH	Indeno(1,2,3-cd)pyrene	--	71	710	No	--	--
PAH	Naphthalene	--	1	27	No	--	--
PAH	Phenanthrene	--	5.5	110	No	--	--
PAH	Pyrene	--	10	230	No	--	--
SVOC	3 & 4-Methylphenol (m,p-Cresol)	--	0.69	7	No	--	--
SVOC	Azobenzene	--	--	--	No	--	--
SVOC	Benzoic acid	--	1	10	No	--	--
SVOC	Bis (2-ethylhexyl) phthalate	--	0.02	0.2	No	--	--
SVOC	Dibenzofuran	--	6.1	61	No	--	--
SVOC	Diethyl phthalate	--	100	18000	No	--	--
SVOC	Dimethyl phthalate	--	10	400	No	--	--
SVOC	Hexachlorobutadiene	--	0.009	--	No	--	--
SVOC	N-Nitrosodiphenylamine	--	0.545	--	No	--	--
SVOC	Phenol	--	0.36	3.6	No	--	--
VOC	Acetone	--	1.2	6.3	No	--	--
VOC	Bromomethane	--	--	--	No	--	--
VOC	Dichlorodifluoromethane	--	--	--	No	--	--

Notes:

- = not applicable or not available
- DXN = dioxin/furan
- EcoPRG = ecological preliminary remedial goal
- PAH = polycyclic aromatic hydrocarbon
- SVOC = semivolatile organic compound
- VOC = volatile organic compound

Table F-2. Ecological Screening Levels for Water Exposure Pathways

Class	Analyte	No Effect Ecological Screening Levels (µg/L)			Low Effect Ecological Screening Levels (µg/L)		
		Chronic Aquatic Life ^a	Terrestrial Plants ^b	ODEQ Wildlife Ingestion ^c	ODEQ - Acute Aquatic Life ^a	Terrestrial Plants ^b	ODEQ Wildlife Ingestion ^c
Metal	Antimony	190	--	690	900	--	2300
Metal	Arsenic	150	1	560	340	10	5600
Metal	Barium	220	--	6100	2000	--	8800
Metal	Beryllium	11	500	2900	93	5000	29000
Metal	Cadmium	0.094	100	4800	0.49	1000	17000
Metal	Chromium	24	50	82	180	500	2000
Metal	Cobalt	19	60	89	120	600	1600
Metal	Copper	1.4	60	22000	2.3	600	33000
Metal	Iron	1000	10000	--	--	100000	--
Metal	Lead	0.54	20	78	14	200	780
Metal	Manganese	93	4000	6300	1700	40000	63000
Metal	Molybdenum	800	500	22000	7200	5000	120000
Metal	Nickel	16	500	890	140	5000	1400
Metal	Silver	0.1	100	31	0.3	1000	310
Metal	Vanadium	27	200	4500	79	2000	45000
Metal	Zinc	36	400	490000	360	4000	4900000
DXN	2,3,7,8-TCDD TEQ Bird	3.1E-09	--	0.0044	0.01	--	0.044
DXN	2,3,7,8-TCDD TEQ Mammal	3.1E-09	--	0.0044	0.01	--	0.044

Notes:

^a Risk-based concentrations for freshwater aquatic life (Table 2 Excel Version in ODEQ 2021).

^b Terrestrial plant effect levels for solutions (Efroymsen et al. 1997).

^c Risk-based concentrations for direct ingestion of water for birds and mammals (Table 1b in ODEQ 2020).

-- = not applicable or not available

µg/L = micrograms per liter

2,3,7,8-TCDD TEQ = 2,3,7,8-Tetrachlorodibenzo-P-dioxin toxic equivalent

DXN = dioxin/furan

ODEQ = Oregon Department of Environmental Quality

Table F-3. Toxicity Reference Values for Birds

COPEC	Derivation of No Effect TRV								Derivation of Low Effect TRV							
	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Effects	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Effects	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	Chicken, turkey, duck	4.05	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	EPA 2007b	1	4.05	Chicken, duck, turkey	34.9	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2007b	1	34.9
Lead	Japanese quail, chicken, kestrel, mallard	1.63	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	EPA 2005b	1	1.63	Japanese quail, chicken, kestrel	44.63	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2005b	1	44.63
Nickel	Duck, chicken	6.71	NOAEL	Chronic	Geometric mean of growth and reproduction NOAELs - used as TRV for EcoSSL value	EPA 2007c	1	6.71	Duck, chicken	18.6	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth	EPA 2007c	1	18.6
Selenium	Quail, kestrel, mallard, chicken	0.29	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	EPA 2007d	1	0.29	Quail, kestrel, mallard, chicken	0.819	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2007d	1	0.819
Vanadium	Chicken	0.344	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	EPA 2005c	1	0.34	Chicken	1.7	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2005c	1	1.7
Zinc	Chicken, quail, duck	66.1	NOAEL	Chronic	Geometric mean of growth and reproduction NOAELs - used as TRV for EcoSSL value	EPA 2007e	1	66.1	Chicken, quail, duck	171	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth	EPA 2007e	1	171

Notes:

^aUncertainty factors were applied to normalize the endpoints as follows:

Endpoint	Type	To Final No Effect Level TRV	To Final Low Effect Level TRV
		NOAEL	Chronic
LOAEL	Chronic	--	1

-- = not available, could not be located, or not applicable
 EcoSSL = ecological soil screening level
 EPA = U.S. Environmental Protection Agency
 LOAEL = lowest observed adverse effect level
 mg/kg-d = milligrams per kilogram body weight per day
 NOAEL = no observed adverse effect level
 TRV = toxicity reference value

Table F-4. Toxicity Reference Values for Mammals

COPEC	Derivation of No Effect TRV								Derivation of Low Effect TRV							
	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Comments	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Comments	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)
Antimony	Rat	0.059	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	EPA 2005a	1	0.059	Rat	2.76	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2005a	1	2.76
Boron	Rat	10.3	BMDL5	Chronic	Reproductive - reduced fetal body weight	EPA 2021	1	10.3	Rabbit	43.7	LOAEL	Chronic	Developmental effects	Heindel et al. 1994 in EPA 2021	1	43.7
Copper	Mink, mouse, rat, pig, rabbit, cattle	5.6	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	EPA 2007b	1	5.6	Mink, mouse, rat, pig, rabbit, cattle	82.7	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2007b	1	82.7
Lead	Hamster, mouse, rat	4.7	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	EPA 2005b	1	4.7	Hamster, mouse, Rat	186	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2005b	1	186
Nickel	Mouse, vole, rat, dog, cattle	7.7	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	EPA 2007c	1	7.7	Mouse, vole, rat, dog, cattle	14.8	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2007c	1	14.8
Selenium	Rat, mouse, pig	0.14	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	EPA 2007d	1	0.143	Rat, mouse, pig	0.66	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2007d	1	0.66
Vanadium	mouse/rat/sheep/pig	4.16	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	EPA 2005c	1	4.16	Mouse, rat, sheep, pig	9.40	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2005c	1	9.4
Zinc	Rat, pig, hamster, rabbit, mouse, cattle, sheep	75.40	NOAEL	Chronic	Geometric mean of NOAELs from reproduction and growth studies - used as the TRV for EcoSSL	EPA 2007e	1	75.4	Rat, pig, hamster, rabbit, mouse, cattle, sheep	298	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	EPA 2007e	1	298

Table F-4. Toxicity Reference Values for Mammals

COPEC	Derivation of No Effect TRV								Derivation of Low Effect TRV							
	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Comments	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Comments	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)
2,3,7,8-TCDD TEQ Mam	Rat	0.000001	NOAEL	Chronic	Reproduction - fertility and neonatal	Sample et al. 1996	1	0.000001	Rat	0.00001	LOAEL	Chronic	Reproduction - fertility and neonatal	Sample et al. 1996	1	0.00001

Notes:

^a Uncertainty factors were applied to normalize the endpoints as follows:

Endpoint	Type	To Final	To Final
		No Effect Level TRV	Low Effect
NOAEL/BMDL5	Chronic	1	--
LOAEL	Chronic	--	1

-- = not available, could not be located, or not applicable

2,3,7,8-TCDD TEQ = 2,3,7,8-Tetrachlorodibenzo-P-dioxin toxic equivalent

BMDL5 = benchmark dose level 5%

EPA = U.S. Environmental Protection Agency

LOAEL = lowest observed adverse effect level

mg/kg-d = milligrams per kilogram body weight per day

NOAEL = no observed adverse effect level

TRV = toxicity reference value

Table F-5. Bioaccumulation Factors and Uptake Regression Models for Terrestrial Exposures

Type	COPEC	Terrestrial Plants				Soil Invertebrate				Small Mammals			
		BAF	B0	B1	Source	BAF	B0	B1	Source	BAF	B0	B1	Source
Metal	Antimony	regression	-3.233	0.938	EPA 2007a	0.0073	--	--	LANL 2020	0.05*[invert]	--	--	EPA 2007a
Metal	Boron	4	--	--	Baes et al. 1984	1	--	--	default	0.000506	--	--	LANL 2020
Metal	Copper	regression	0.668	0.394	EPA 2007a	0.515	--	--	EPA 2007a	regression	2.042	0.144	EPA 2007a
Metal	Lead	0.117	--	--	LANL 2020	0.225	--	--	Sample et al. 1998	regression	0.0761	0.442	EPA 2007a
Metal	Nickel	0.0136	--	--	LANL 2020	0.778	--	--	LANL 2020	0.0021	--	--	LANL 2020
Metal	Selenium	regression	-0.677	1.104	EPA 2007a	regression	-0.08	0.733	EPA 2007a	regression	-0.415	0.466	EPA 2007a
Metal	Vanadium	0.00485	--	--	EPA 2007a	0.042	--	--	EPA 2007a	0.00019	--	--	LANL 2020
Metal	Zinc	regression	1.575	0.554	EPA 2007a	regression	4.449	0.328	EPA 2007a	regression	4.3632	0.071	EPA 2007a
DXN	2,3,7,8-TCDD TEQ Mammal	0.105	--	--	LANL 2020	9.5	--	--	LANL 2020	0.0937	--	--	LANL 2020

Notes:

-- = not applicable

2,3,7,8-TCDD TEQ = 2,3,7,8-Tetrachlorodibenzo-P-dioxin toxic equivalent

BAF = bioaccumulation factor

DXN = dioxin/furan

EPA = U.S. Environmental Protection Agency

Table F-6. Calculation of Ecological Preliminary Remedial Goals (EcoPRGs)

Analyte	Receptor	Food Intake (kg/kg-d) ^a	Area Use Factor	Exposure and Uptake Values												Uptake by Plants		Uptake by Invertebrates		Uptake by Small Mammals		Incidental Soil Ingestion		Total Daily Dosage (mg/kg-d)	TRVs		Target HQ		Receptor-specific EcoPRGs	
				Regression			Estimated Plant Concentration (mg/kg)	Regression			Estimated Small Mammal Concentration (mg/kg)	Diet Proportion	Dosage from Plants (mg/kg-d)	Diet Proportion	Dosage from Invertebrates (mg/kg-d)	Diet Proportion	from Small Mammals (mg/kg-d)	Diet Proportion	Incidental Soil Dosage (mg/kg-d)	No Effect TRV (mg/kg-d)	Low Effect TRV (mg/kg-d)	No Effect TRV-based HQ	Low Effect TRV-based HQ		No Effect EcoPRG (mg/kg)	Low Effect EcoPRG (mg/kg)				
				Plant BAF/Regression	B0	B1		Invertebrate BAF/Regression	B0	B1																	Small Mammal BAF/Regression	B0	B1	
Antimony	Hermit thrush	0.198	1	regression	-3.233	0.938	3.9E-02	0.0073	--	--	7.3E-03	0.05[invert]	--	--	3.7E-04	0.15	1.17E-03	0.85	1.23E-03	--	--	0.104	2.06E-02	2.30E-02	--	--	1.0	1.0	--	--
Antimony	Mourning dove	0.144	1	regression	-3.233	0.938	3.9E-02	0.0073	--	--	7.3E-03	0.05[invert]	--	--	3.7E-04	1	5.69E-03	--	--	--	--	0.061	8.80E-03	1.45E-02	--	--	1.0	1.0	--	--
Antimony	Red-tailed hawk	0.084	1	regression	-3.233	0.938	3.9E-02	0.0073	--	--	7.3E-03	0.05[invert]	--	--	3.7E-04	--	--	--	--	1	3.06E-05	0.024	2.01E-03	2.04E-03	--	--	1.0	1.0	--	--
Antimony	Deer mouse	0.170	1	regression	-3.233	0.938	9.4E+00	0.0073	--	--	2.5E+00	0.05[invert]	--	--	1.2E+01	1	1.60E+00	--	--	--	--	0.020	1.16E+00	2.76E+00	0.059	2.76	1.0	1.0	6	342
Antimony	Vagrant shrew	0.170	1	regression	-3.233	0.938	1.1E+01	0.0073	--	--	3.0E+00	0.05[invert]	--	--	1.5E+01	0.1	1.91E-01	0.9	4.62E+01	--	--	0.030	2.11E+00	2.76E+00	0.059	2.76	1.0	1.0	9	413
Antimony	Coyote	0.029	1	regression	-3.233	0.938	8.0E+01	0.0073	--	--	2.4E+01	0.05[invert]	--	--	1.2E+00	--	--	--	1	3.55E-02	0.028	2.72E+00	2.76E+00	0.059	2.76	1.0	1.0	71	3338	
Boron	Hermit thrush	0.198	1	4	--	--	4.0E+00	1	--	--	1.0E+00	0.000506	--	--	5.1E-04	0.15	1.19E-01	0.85	1.68E-01	--	--	0.104	2.06E-02	3.07E-01	--	--	1.0	1.0	--	--
Boron	Mourning dove	0.144	1	4	--	--	4.0E+00	1	--	--	1.0E+00	0.000506	--	--	5.1E-04	1	5.77E-01	--	--	--	--	0.061	8.80E-03	5.86E-01	--	--	1.0	1.0	--	--
Boron	Red-tailed hawk	0.084	1	4	--	--	4.0E+00	1	--	--	1.0E+00	0.000506	--	--	5.1E-04	--	--	--	1	4.25E-05	0.024	2.01E-03	2.06E-03	--	--	1.0	1.0	--	--	
Boron	Deer mouse	0.170	1	4	--	--	2.6E+02	1	--	--	6.4E+01	0.000506	--	--	3.2E-02	1	4.35E+01	--	--	--	--	0.020	2.17E-01	4.37E+01	10.3	43.7	1.0	1.0	15	64
Boron	Vagrant shrew	0.170	1	4	--	--	7.7E+02	1	--	--	1.9E+02	0.000506	--	--	9.8E-02	0.1	1.31E+01	0.9	2.96E+01	--	--	0.030	9.86E-01	4.37E+01	10.3	43.7	1.0	1.0	46	193
Boron	Coyote	0.029	1	4	--	--	2.1E+05	1	--	--	5.3E+04	0.000506	--	--	2.7E+01	--	--	--	1	7.76E-01	0.028	4.29E+01	4.37E+01	10.3	43.7	1.0	1.0	12397	52595	
Copper	Hermit thrush	0.198	1	regression	0.668	0.394	1.9E+01	0.515	--	--	1.6E+02	regression	2.042	0.1444	1.8E+01	0.15	5.62E-01	0.85	2.77E+01	--	--	0.104	6.59E+00	3.49E+01	4.05	34.9	1.0	1.0	36	320
Copper	Mourning dove	0.144	1	regression	0.668	0.394	4.7E+01	0.515	--	--	1.6E+03	regression	2.042	0.1444	2.5E+01	1	6.76E+00	--	--	--	--	0.061	2.81E+01	3.49E+01	4.05	34.9	1.0	1.0	201	3196
Copper	Red-tailed hawk	0.084	1	regression	0.668	0.394	8.8E+01	0.515	--	--	8.3E+03	regression	2.042	0.1444	3.1E+01	--	--	--	1	2.62E+00	0.024	3.23E+01	3.49E+01	4.05	34.9	1.0	1.0	1125	16026	
Copper	Deer mouse	0.170	1	regression	0.668	0.394	9.6E+01	0.515	--	--	1.0E+04	regression	2.042	0.1444	3.2E+01	1	1.63E+01	--	--	--	--	0.020	6.64E+01	8.27E+01	5.6	82.7	1.0	1.0	510	19531
Copper	Vagrant shrew	0.170	1	regression	0.668	0.394	2.9E+01	0.515	--	--	5.0E+02	regression	2.042	0.1444	2.1E+01	0.1	5.00E-01	0.9	7.72E+01	--	--	0.030	5.00E+00	8.27E+01	5.6	82.7	1.0	1.0	65	980
Copper	Coyote	0.029	1	regression	0.668	0.394	1.8E+02	0.515	--	--	5.1E+04	regression	2.042	0.1444	4.1E+01	--	--	--	1	1.18E+00	0.028	8.15E+01	8.27E+01	5.6	82.7	1.0	1.0	5899	99864	
Lead	Hermit thrush	0.198	1	0.117	--	--	8.4E+01	0.225	--	--	1.6E+02	regression	0.0761	0.4422	2.0E+01	0.15	2.50E+00	0.85	2.73E+01	--	--	0.104	1.48E+01	4.46E+01	1.63	44.63	1.0	1.0	26	721
Lead	Mourning dove	0.144	1	0.117	--	--	2.0E+02	0.225	--	--	3.9E+02	regression	0.0761	0.4422	2.9E+01	1	2.93E+01	--	--	--	--	0.061	1.53E+01	4.46E+01	1.63	44.63	1.0	1.0	63	1737
Lead	Red-tailed hawk	0.084	1	0.117	--	--	2.2E+03	0.225	--	--	4.2E+03	regression	0.0761	0.4422	8.4E+01	--	--	--	1	7.01E+00	0.024	3.76E+01	4.46E+01	1.63	44.63	1.0	1.0	272	18677	
Lead	Deer mouse	0.170	1	0.117	--	--	9.3E+02	0.225	--	--	1.8E+03	regression	0.0761	0.4422	5.7E+01	1	1.59E+02	--	--	--	--	0.020	2.72E+01	1.86E+02	4.7	186	1.0	1.0	202	7983
Lead	Vagrant shrew	0.170	1	0.117	--	--	5.2E+02	0.225	--	--	1.0E+03	regression	0.0761	0.4422	4.4E+01	0.1	8.91E+00	0.9	1.54E+02	--	--	0.030	2.29E+01	1.86E+02	4.7	186	1.0	1.0	113	4482
Lead	Coyote	0.029	1	0.117	--	--	2.6E+04	0.225	--	--	4.9E+04	regression	0.0761	0.4422	2.5E+02	--	--	--	1	7.23E+00	0.028	1.79E+02	1.86E+02	4.7	186	1.0	1.0	4215	219041	
Nickel	Hermit thrush	0.198	1	0.0136	--	--	1.7E+00	0.778	--	--	9.5E+01	0.0021	--	--	2.6E-01	0.15	4.94E-02	0.85	1.60E+01	--	--	0.104	2.52E+00	1.86E+01	6.71	18.6	2.8	1.0	44	123
Nickel	Mourning dove	0.144	1	0.0136	--	--	2.3E+01	0.778	--	--	1.3E+03	0.0021	--	--	3.6E+00	1	3.39E+00	--	--	--	--	0.061	1.52E+01	1.86E+01	6.71	18.6	2.8	1.0	623	1728
Nickel	Red-tailed hawk	0.084	1	0.0136	--	--	1.2E+02	0.778	--	--	6.6E+03	0.0021	--	--	1.8E+01	--	--	--	1	1.50E+00	0.024	1.71E+01	1.86E+01	6.71	18.6	2.8	1.0	3063	8492	
Nickel	Deer mouse	0.170	1	0.0136	--	--	3.5E+01	0.778	--	--	2.0E+03	0.0021	--	--	5.4E+00	1	5.99E+00	--	--	--	--	0.020	8.81E+00	1.48E+01	7.7	14.8	1.9	1.0	1348	2590
Nickel	Vagrant shrew	0.170	1	0.0136	--	--	1.6E+00	0.778	--	--	9.3E+01	0.0021	--	--	2.5E-01	0.1	2.75E-02	0.9	1.42E+01	--	--	0.030	6.07E-01	1.48E+01	7.7	14.8	1.9	1.0	62	119
Nickel	Coyote	0.029	1	0.0136	--	--	2.3E+02	0.778	--	--	1.3E+04	0.0021	--	--	3.5E+01	--	--	--	1	1.03E+00	0.028	1.38E+01	1.48E+01	7.7	14.8	1.9	1.0	8777	16869	
Selenium	Hermit thrush	0.198	1	regression	-0.677	1.104	3.7E+00	regression	-0.075	0.733	3.5E+00	regression	-0.4148	0.4658	1.5E+00	0.15	1.10E-01	0.85	5.84E-01	--	--	0.104	1.25E-01	8.19E-01	0.29	0.819	1.0	1.0	2	6.1
Selenium	Mourning dove	0.144	1	regression	-0.677	1.104	5.2E+00	regression	-0.075	0.733	4.3E+00	regression	-0.4148	0.4658	1.8E+00	1	7.47E-01	--	--	--	--	0.061	7.21E-02	8.19E-01	0.29	0.819	1.0	1.0	3	8.2
Selenium	Red-tailed hawk	0.084	1	regression	-0.677	1.104	1.1E+02	regression	-0.075	0.733	3.4E+01	regression	-0.4148	0.4658	6.5E+00	--	--	--	1	5.45E-01	0.024	2.73E-01	8.18E-01	0.29	0.819	1.0	1.0	24	135	
Selenium	Deer mouse	0.170	1	regression	-0.677	1.104	3.8E+00	regression	-0.075	0.733	3.5E+00	regression	-0.4148	0.4658	1.5E+00	1	6.39E-01	--	--	--	--	0.020	2.08E-02	6.60E-01	0.143	0.66	1.0	1.0	2	6.1
Selenium	Vagrant shrew	0.170	1	regression	-0.677	1.104	4.0E+00	regression	-0.075	0.733	3.7E+00	regression	-0.4148	0.4658	1.6E+00	0.1	6.81E-02	0.9	5.59E-01	--	--	0.030	3.31E-02	6.60E-01	0.143	0.66	1.0	1.0	1	6.5
Selenium	Coyote	0.029	1	regression	-0.677	1.104	4.0E+02	regression	-0.075	0.733	7.7E+01	regression	-0.4148	0.4658	1.1E+01	--	--	--	1	3.20E-01	0.028	3.40E-01	6.60E-01	0.143	0.66	1.0	1.0	41	417	
Vanadium	Hermit thrush	0.198	1	0.00485	--	--	3.0E-01	0.042	--	--	2.6E+00	0.00019	--	--	1.2E-02	0.15	8.81E-03	0.85	4.32E-01	--	--	0.104	1.26E+00	1.70E+00	0.344	1.7	1.0	1.0	12	61
Vanadium	Mourning dove	0.144	1	0.00485	--	--	8.7E-01	0.042	--	--	7.5E+00	0.00019	--	--	3.4E-02	1	1.25E-01	--	--	--	--	0.061	1.57E+00	1.70E+00	0.344	1.7	1.0	1.0	36	179
Vanadium	Red-tailed hawk	0.084	1	0.00485	--	--	4.1E+00	0.042	--	--	3.5E+01	0.00019	--	--	1.6E-01	--	--	--	1	1.34E-02	0.024	1.69E+00	1.70E+00	0.344	1.7	1.0	1.0	169	837	
Vanadium	Deer mouse	0.170	1	0.00485	--	--	1.																							

Table F-7. Area Use Factors for Ecological Receptors

Representative Species	Home Range (acres)	J.C. Boyle Recreation Area - 2	
		Exposure Area (acres)	Area Use Factor (AUF)
Hermit thrush	1.784	0.023	0.01289
Mourning dove	247	0.023	0.00009
Red-tailed hawk	193	0.023	0.00012
Coyote	70	0.023	0.00033
Deer mouse	2.34	0.023	0.00983
Vagrant shrew	1.07	0.023	0.02150

Notes:

Area Use Factor (AUF) is calculated by dividing the acreage of the exposure area by receptor's foraging range. If the foraging range is smaller than the site acreage, the AUF defaults to 1.

The AUFs for the hermit thrush and the vagrant shrew (highlighted in green) were selected for use in the risk estimates as these were the receptors with the lowest (most conservative) ecological preliminary remedial goals for the majority of analytes evaluated in Step 3.

Table F-8. Uncertainty Analysis

Assessment Element	Uncertainty	Magnitude of Impact	Direction of Impact
Problem Formulation			
Fate and Transport	It is assumed that chemical concentrations will not change over time, and that concentrations are constant during the exposure duration. Natural attenuation and/or other degradation processes may be significant in some areas resulting in an over-estimation of exposure.	Moderate	Over-estimation of exposure/risk
Representative Species	Representative species were selected to reduce uncertainty; however, differences among species including physiology, reproductive biology, and/or foraging habits can result in different exposures and sensitivities for different receptors.	Low	Over- or under-estimation of exposure/risk
Exposure Pathway Analysis	Exposure routes that are considered minor (inhalation and dermal exposure) were not included in the risk estimation. Although exposure via these routes still contributes to the total risk to each receptor, potential risks may be underestimated because these routes were not quantified.	Low	Under-estimation of exposure/risk
Analysis			
Wildlife Exposure Factors	Exposure parameters for birds and mammals were either modeled using allometric relationships (e.g., food ingestion rates) or were estimated using data from a similar species (soil ingestion rates). Use of modeling and surrogates is a potential source of uncertainty depending on the differences between site-exposures vs. laboratory exposures and differences in the selected representative species and the surrogate	Low	Over- or under-estimation of exposure/risk
Bioaccumulation Factors	Literature-based bioaccumulation factors and regression models were used to estimate bioaccumulation. These uptake rates may differ from site-specific rates.	Moderate	Over- or under-estimation of exposure/risk
Bioavailability	Bioavailability of analytes is assumed to be 100%. This likely overestimates risk from some analytes.	Low	Over-estimation of exposure/risk
Exposure Point Concentrations	Risks were estimated on a sample-specific basis. This provides a very conservative evaluation as representative species do not spend their entire lifetime at one sample location. Their actual exposure varies as they forage or travel in the vicinity of the site.	Moderate	Over-estimation of exposure/risk
Risk Characterization			
Risk Estimation	Potential ecological risks were quantified using the HQ approach. The magnitude of the HQ indicates potential for ecological risk, but is not an exact estimation of risk. For example, the actual risk from a chemical with an HQ of 70 could be less than that for a chemical with an HQ of 20 because of uncertainties involved in estimating exposure, selection of effects criteria (TRVs), or field conditions affecting exposure.	Moderate	Over- or under-estimation of risks

Notes:

HQ = hazard quotient

LOAEL = lowest observed adverse effect level

NOAEL = no observed adverse effect level

TRV = toxicity reference value

Table F-9. Ecological Risk Estimates for Soil Exposure Pathways

Site	Location ID	Sample ID	Sample Date	Sample Type	Matrix Code	Start Depth	End Depth	CAS_RN	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		EcoPRGs ^b		Area Use Factors ^c		Screening HQs		EcoPRG HQs		EcoPRG HQs		Summary								
																	No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal	Bkg HQ	No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird AUF	Mammal AUF	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-36-0	I	Metal	Antimony	mg/kg	44		Y	0.67	0.27	2.7	--	342	3E-04	0.0002	7E+01	2E+02	2E+01	--	1E-01	--	3E-05	7E+01	2E+02	2E+01	--	<1	--	<1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-36-0	I	Metal	Antimony	mg/kg	1.5	J	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	2E+00	6E+00	6E+01	--	4E-03	--	9E-07	2E+00	6E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-36-0	I	Metal	Antimony	mg/kg	1.1	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	2E+00	4E+00	4E+01	--	3E-03	--	7E-07	2E+00	4E+00	<1	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SO	1	1.5	7440-36-0	I	Metal	Antimony	mg/kg	0.56	J	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	8E-01	2E+00	2E-01	--	2E-03	--	4E-07	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SO	0	0.5	7440-36-0	I	Metal	Antimony	mg/kg	0.33	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	5E-01	1E+00	1E-01	--	1E-03	--	2E-07	<1	1E+00	<1	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-36-0	I	Metal	Antimony	mg/kg	0.29	J	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	4E-01	1E+00	1E-01	--	8E-04	--	2E-07	<1	1E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-36-0	I	Metal	Antimony	mg/kg	0.15	J	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	2E-01	6E-01	6E-02	--	4E-04	--	9E-08	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-36-0	I	Metal	Antimony	mg/kg	0.14	J	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	2E-01	5E-01	5E-02	--	4E-04	--	9E-08	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-36-0	I	Metal	Antimony	mg/kg	0.11	J	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	2E-01	4E-01	4E-02	--	3E-04	--	7E-08	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-2.0-3.0-20220504	04-May-22	N	SO	2	3	7440-36-0	I	Metal	Antimony	mg/kg	0.088	J	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	1E-01	3E-01	3E-02	--	3E-04	--	6E-08	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-36-0	I	Metal	Antimony	mg/kg	0.081	J	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	1E-01	3E-01	3E-02	--	2E-04	--	5E-08	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.5-2.5-20220504	04-May-22	N	SO	1.5	2.5	7440-36-0	I	Metal	Antimony	mg/kg	0.068	J	Y	0.67	0.27	2.7	--	342	3E-04	0.0002	1E-01	3E-01	3E-02	--	2E-04	--	4E-08	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-38-2	I	Metal	Arsenic	mg/kg	8.6	Y	19	6.8	31	--	--	--	--	--	--	5E-01	1E+00	3E-01	6E-02	2E-02	2E-05	5E-06	<1	1E+00	<1	step 2	step 2	step 2	step 2
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-38-2	I	Metal	Arsenic	mg/kg	4	Y	19	6.8	31	--	--	--	--	--	2E-01	6E-01	1E-01	3E-02	1E-02	8E-06	2E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-38-2	I	Metal	Arsenic	mg/kg	3.9	Y	19	6.8	31	--	--	--	--	--	2E-01	6E-01	1E-01	3E-02	1E-02	8E-06	2E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-38-2	I	Metal	Arsenic	mg/kg	3.9	Y	19	6.8	31	--	--	--	--	--	2E-01	6E-01	1E-01	3E-02	1E-02	8E-06	2E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SO	0	0.5	7440-38-2	I	Metal	Arsenic	mg/kg	3.8	J	Y	19	6.8	31	--	--	--	--	2E-01	6E-01	1E-01	3E-02	1E-02	8E-06	2E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-38-2	I	Metal	Arsenic	mg/kg	3.8	Y	19	6.8	31	--	--	--	--	--	2E-01	6E-01	1E-01	3E-02	1E-02	8E-06	2E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-38-2	I	Metal	Arsenic	mg/kg	3.7	Y	19	6.8	31	--	--	--	--	--	2E-01	5E-01	1E-01	3E-02	1E-02	7E-06	2E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SO	1	1.5	7440-38-2	I	Metal	Arsenic	mg/kg	3.6	Y	19	6.8	31	--	--	--	--	--	2E-01	5E-01	1E-01	2E-02	1E-02	7E-06	2E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-38-2	I	Metal	Arsenic	mg/kg	3.6	Y	19	6.8	31	--	--	--	--	--	2E-01	5E-01	1E-01	2E-02	1E-02	7E-06	2E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.5-2.5-20220504	04-May-22	N	SO	1.5	2.5	7440-38-2	I	Metal	Arsenic	mg/kg	2.1	Y	19	6.8	31	--	--	--	--	--	1E-01	3E-01	7E-02	1E-02	6E-03	4E-06	1E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-38-2	I	Metal	Arsenic	mg/kg	1.8	J	Y	19	6.8	31	--	--	--	--	9E-02	3E-01	6E-02	1E-02	5E-03	4E-06	1E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-39-3	I	Metal	Barium	mg/kg	230	Y	630	110	1200	--	--	--	--	--	4E-01	2E+00	2E-01	--	--	--	--	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-39-3	I	Metal	Barium	mg/kg	200	J	Y	630	110	1200	--	--	--	--	3E-01	2E+00	2E-01	--	--	--	--	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-39-3	I	Metal	Barium	mg/kg	200	J	Y	630	110	1200	--	--	--	--	3E-01	2E+00	2E-01	--	--	--	--	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SO	1	1.5	7440-39-3	I	Metal	Barium	mg/kg	180	Y	630	110	1200	--	--	--	--	--	3E-01	2E+00	2E-01	--	--	--	--	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-39-3	I	Metal	Barium	mg/kg	170	Y	630	110	1200	--	--	--	--	--	3E-01	2E+00	1E-01	--	--	--	--	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-39-3	I	Metal	Barium	mg/kg	160	Y	630	110	1200	--	--	--	--	--	3E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SO	0	0.5	7440-39-3	I	Metal	Barium	mg/kg	160	J	Y	630	110	1200	--	--	--	--	3E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-2.0-3.0-20220504	04-May-22	N	SO	2	3	7440-39-3	I	Metal	Barium	mg/kg	140	Y	630	110	1200	--	--	--	--	--	2E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-39-3	I	Metal	Barium	mg/kg	140	Y	630	110	1200	--	--	--	--	--	2E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-39-3	I	Metal	Barium	mg/kg	120	Y	630	110	1200	--	--	--	--	--	2E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1					

Table F-9. Ecological Risk Estimates for Soil Exposure Pathways

Site	Location ID	Sample ID	Sample Date	Sample Type	Matrix Code	Start Depth	End Depth	CAS_RN	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		EcoPRGs ^b		Area Use Factors ^c		Screening HQs		EcoPRG HQs		EcoPRG HQs		Summary								
																	No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal	Bkg HQ	No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird HQ	EcoPRG HQ	EcoPRG HQ	Bird AUF	Mammal AUF
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-48-4	I	Metal	Cobalt	mg/kg	20		Y	--	13	170	--	--	--	--	--	2E+00	1E-01	--	--	--	--	2E+00	<1	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-48-4	I	Metal	Cobalt	mg/kg	19		Y	--	13	170	--	--	--	--	--	1E+00	1E-01	--	--	--	--	1E+00	<1	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SO	1	1.5	7440-48-4	I	Metal	Cobalt	mg/kg	15		Y	--	13	170	--	--	--	--	--	1E+00	9E-02	--	--	--	--	1E+00	<1	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-2.0-3.0-20220504	04-May-22	N	SO	2	3	7440-48-4	I	Metal	Cobalt	mg/kg	14		Y	--	13	170	--	--	--	--	--	1E+00	8E-02	--	--	--	--	1E+00	<1	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-48-4	I	Metal	Cobalt	mg/kg	14		Y	--	13	170	--	--	--	--	--	1E+00	8E-02	--	--	--	--	1E+00	<1	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SO	0	0.5	7440-48-4	I	Metal	Cobalt	mg/kg	14	J	Y	--	13	170	--	--	--	--	--	1E+00	8E-02	--	--	--	--	1E+00	<1	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-48-4	I	Metal	Cobalt	mg/kg	13		Y	--	13	170	--	--	--	--	--	1E+00	8E-02	--	--	--	--	1E+00	<1	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-48-4	I	Metal	Cobalt	mg/kg	11		Y	--	13	170	--	--	--	--	--	8E-01	6E-02	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.5-2.5-20220504	04-May-22	N	SO	1.5	2.5	7440-48-4	I	Metal	Cobalt	mg/kg	9		Y	--	13	170	--	--	--	--	--	7E-01	5E-02	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-48-4	I	Metal	Cobalt	mg/kg	7.2	J	Y	--	13	170	--	--	--	--	--	6E-01	4E-02	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-50-8	I	Metal	Copper	mg/kg	150		Y	73	14	43	320	980	0.013	0.0215	2E+00	1E+01	3E+00	5E-01	2E-01	6E-03	3E-03	2E+00	1E+01	3E+00	<1	<1	<1	<1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-50-8	I	Metal	Copper	mg/kg	42		Y	73	14	43	320	980	0.013	0.0215	6E-01	3E+00	1E+00	1E-01	4E-02	2E-03	9E-04	<1	3E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-50-8	I	Metal	Copper	mg/kg	39		Y	73	14	43	320	980	0.013	0.0215	5E-01	3E+00	9E-01	1E-01	4E-02	2E-03	9E-04	<1	3E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-50-8	I	Metal	Copper	mg/kg	36		Y	73	14	43	320	980	0.013	0.0215	5E-01	3E+00	8E-01	1E-01	4E-02	1E-03	8E-04	<1	3E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-50-8	I	Metal	Copper	mg/kg	32		Y	73	14	43	320	980	0.013	0.0215	4E-01	2E+00	7E-01	1E-01	3E-02	1E-03	7E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SO	1	1.5	7440-50-8	I	Metal	Copper	mg/kg	32		Y	73	14	43	320	980	0.013	0.0215	4E-01	2E+00	7E-01	1E-01	3E-02	1E-03	7E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-50-8	I	Metal	Copper	mg/kg	30		Y	73	14	43	320	980	0.013	0.0215	4E-01	2E+00	7E-01	9E-02	3E-02	1E-03	7E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SO	0	0.5	7440-50-8	I	Metal	Copper	mg/kg	30	J	Y	73	14	43	320	980	0.013	0.0215	4E-01	2E+00	7E-01	9E-02	3E-02	1E-03	7E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-2.0-3.0-20220504	04-May-22	N	SO	2	3	7440-50-8	I	Metal	Copper	mg/kg	28		Y	73	14	43	320	980	0.013	0.0215	4E-01	2E+00	7E-01	9E-02	3E-02	1E-03	6E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-50-8	I	Metal	Copper	mg/kg	26		Y	73	14	43	320	980	0.013	0.0215	4E-01	2E+00	6E-01	8E-02	3E-02	1E-03	6E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.5-2.5-20220504	04-May-22	N	SO	1.5	2.5	7440-50-8	I	Metal	Copper	mg/kg	23		Y	73	14	43	320	980	0.013	0.0215	3E-01	2E+00	5E-01	7E-02	2E-02	9E-04	5E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-50-8	I	Metal	Copper	mg/kg	18	J	Y	73	14	43	320	980	0.013	0.0215	2E-01	1E+00	4E-01	6E-02	2E-02	7E-04	4E-04	<1	1E+00	<1	step 2	step 2	step 2	step 2	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7439-89-6	I	Metal	Iron	mg/kg	40000		Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7439-89-6	I	Metal	Iron	mg/kg	31000	J	Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7439-89-6	I	Metal	Iron	mg/kg	30000	J	Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7439-89-6	I	Metal	Iron	mg/kg	26000		Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7439-89-6	I	Metal	Iron	mg/kg	25000		Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SO	1	1.5	7439-89-6	I	Metal	Iron	mg/kg	25000		Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SO	0	0.5	7439-89-6	I	Metal	Iron	mg/kg	24000	J	Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-2.0-3.0-20220504	04-May-22	N	SO	2	3	7439-89-6	I	Metal	Iron	mg/kg	23000		Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7439-89-6	I	Metal	Iron	mg/kg	23000		Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7439-89-6	I	Metal	Iron	mg/kg	22000		Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.5-2.5-20220504	04-May-22	N	SO	1.5	2.5	7439-89-6	I	Metal	Iron	mg/kg	18000		Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7439-89-6	I	Metal	Iron	mg/kg	13000	J	Y	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7439-92-1	I	Metal	Lead	mg/kg	970		Y	34	11	23	721	4482	0.013	0.0215	3E+01	9E+01	4E+01	1E+00	2E-01	2E-02	5E-03	3E+01	9E+01	4E+01	1E+00	<1	<1	<1	<1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7439-92-1	I	Metal	Lead	mg/kg	64		Y	34	11	23	721	4482																	

Table F-9. Ecological Risk Estimates for Soil Exposure Pathways

Site	Location ID	Sample ID	Sample Date	Sample Type	Matrix Code	Start Depth	End Depth	CAS_RN	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		EcoPRGs ^b		Area Use Factors ^c		Screening HQs		EcoPRG HQs		EcoPRG HQs		Summary									
																	No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal	No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF	Mammal AUF			
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-02-0	I	Metal	Nickel	mg/kg	29		Y	110	10	21	123	119	0.013	0.0215	3E-01	3E+00	1E+00	2E-01	2E-01	3E-03	5E-03	<1	3E+00	1E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SO	1	1.5	7440-02-0	I	Metal	Nickel	mg/kg	28		Y	110	10	21	123	119	0.013	0.0215	3E-01	3E+00	1E+00	2E-01	2E-01	3E-03	5E-03	<1	3E+00	1E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-02-0	I	Metal	Nickel	mg/kg	28		Y	110	10	21	123	119	0.013	0.0215	3E-01	3E+00	1E+00	2E-01	2E-01	3E-03	5E-03	<1	3E+00	1E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-2.0-3.0-20220504	04-May-22	N	SO	2	3	7440-02-0	I	Metal	Nickel	mg/kg	27		Y	110	10	21	123	119	0.013	0.0215	2E-01	3E+00	1E+00	2E-01	2E-01	3E-03	5E-03	<1	3E+00	1E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-02-0	I	Metal	Nickel	mg/kg	26		Y	110	10	21	123	119	0.013	0.0215	2E-01	3E+00	1E+00	2E-01	2E-01	3E-03	5E-03	<1	3E+00	1E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SO	0	0.5	7440-02-0	I	Metal	Nickel	mg/kg	24	J	Y	110	10	21	123	119	0.013	0.0215	2E-01	2E+00	1E+00	2E-01	2E-01	3E-03	4E-03	<1	2E+00	1E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.5-2.5-20220504	04-May-22	N	SO	1.5	2.5	7440-02-0	I	Metal	Nickel	mg/kg	21		Y	110	10	21	123	119	0.013	0.0215	2E-01	2E+00	1E+00	2E-01	2E-01	2E-03	4E-03	<1	2E+00	1E+00	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-02-0	I	Metal	Nickel	mg/kg	13	J	Y	110	10	21	123	119	0.013	0.0215	1E-01	1E+00	6E-01	1E-01	1E-01	1E-03	2E-03	<1	1E+00	<1	step 2	step 2	step 2	step 2		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7782-49-2	I	Metal	Selenium	mg/kg	3		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	6E+00	6E+00	3E+00	5E-01	5E-01	6E-03	1E-02	6E+00	6E+00	3E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7782-49-2	I	Metal	Selenium	mg/kg	2.5		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	5E+00	5E+00	3E+00	4E-01	4E-01	5E-03	9E-03	5E+00	5E+00	3E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7782-49-2	I	Metal	Selenium	mg/kg	2.4		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	5E+00	5E+00	2E+00	4E-01	4E-01	5E-03	8E-03	5E+00	5E+00	2E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SO	1	1.5	7782-49-2	I	Metal	Selenium	mg/kg	2.4		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	5E+00	5E+00	2E+00	4E-01	4E-01	5E-03	8E-03	5E+00	5E+00	2E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-2.0-3.0-20220504	04-May-22	N	SO	2	3	7782-49-2	I	Metal	Selenium	mg/kg	2.2		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	4E+00	4E+00	2E+00	4E-01	4E-01	5E-03	8E-03	4E+00	4E+00	2E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SO	0	0.5	7782-49-2	I	Metal	Selenium	mg/kg	1.9		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	4E+00	4E+00	2E+00	3E-01	3E-01	4E-03	7E-03	4E+00	4E+00	2E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7782-49-2	I	Metal	Selenium	mg/kg	1.8		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	3E+00	3E+00	2E+00	3E-01	3E-01	4E-03	6E-03	3E+00	3E+00	2E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7782-49-2	I	Metal	Selenium	mg/kg	1.7		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	3E+00	3E+00	2E+00	3E-01	3E-01	4E-03	6E-03	3E+00	3E+00	2E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7782-49-2	I	Metal	Selenium	mg/kg	1.6		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	3E+00	3E+00	2E+00	3E-01	3E-01	3E-03	6E-03	3E+00	3E+00	2E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7782-49-2	I	Metal	Selenium	mg/kg	1.5		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	3E+00	3E+00	2E+00	2E-01	2E-01	3E-03	5E-03	3E+00	3E+00	2E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.5-2.5-20220504	04-May-22	N	SO	1.5	2.5	7782-49-2	I	Metal	Selenium	mg/kg	1.4		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	3E+00	3E+00	1E+00	2E-01	2E-01	3E-03	5E-03	3E+00	3E+00	1E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7782-49-2	I	Metal	Selenium	mg/kg	1.1		Y	0.52	0.52	1	6.1	6.1	0.013	0.0215	2E+00	2E+00	1E+00	2E-01	2E-01	2E-03	4E-03	2E+00	2E+00	1E+00	<1	<1	<1	<1		
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-22-4	I	Metal	Silver	mg/kg	0.16		Y	0.17	2.6	26	--	--	--	--	--	9E-01	6E-02	6E-03	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-22-4	I	Metal	Silver	mg/kg	0.035	J	Y	0.17	2.6	26	--	--	--	--	--	2E-01	1E-02	1E-03	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-22-4	I	Metal	Silver	mg/kg	0.033	J	Y	0.17	2.6	26	--	--	--	--	--	2E-01	1E-02	1E-03	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-22-4	I	Metal	Silver	mg/kg	0.032	J	Y	0.17	2.6	26	--	--	--	--	--	2E-01	1E-02	1E-03	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-22-4	I	Metal	Silver	mg/kg	0.029	J	Y	0.17	2.6	26	--	--	--	--	--	2E-01	1E-02	1E-03	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-3.0-3.5-20220504	04-May-22	N	SO	3	3.5	7440-22-4	I	Metal	Silver	mg/kg	0.029	J	Y	0.17	2.6	26	--	--	--	--	--	2E-01	1E-02	1E-03	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-01	JBRA-01-2.0-3.0-20220504	04-May-22	N	SO	2	3	7440-22-4	I	Metal	Silver	mg/kg	0.028	J	Y	0.17	2.6	26	--	--	--	--	--	2E-01	1E-02	1E-03	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SO	1	1.5	7440-22-4	I	Metal	Silver	mg/kg	0.028	J	Y	0.17	2.6	26	--	--	--	--	--	2E-01	1E-02	1E-03	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.0-1.5-20220504	04-May-22	N	SO	1	1.5	7440-22-4	I	Metal	Silver	mg/kg	0.028	J	Y	0.17	2.6	26	--	--	--	--	--	2E-01	1E-02	1E-03	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SO	0	0.5	7440-22-4	I	Metal	Silver	mg/kg	0.023	J	Y	0.17	2.6	26	--	--	--	--	--	1E-01	9E-03	9E-04	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-1.5-2.5-20220504	04-May-22	N	SO	1.5	2.5	7440-22-4	I	Metal	Silver	mg/kg	0.021	J	Y	0.17	2.6	26	--	--	--	--	--	1E-01	8E-03	8E-04	--	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-03	JBRA-03-0.0-0.5-20220504	04-May-22	N	SO	0	0.5	7440-22-4	I	Metal	Silver	mg/kg	0.016	J	Y	0.17	2.6	26	--	--	--	--	--	9E-02	6E-03	6E-04	--	--	--	--								

Table F-10. Ecological Risk Estimates for Groundwater Exposure Pathways

Site	Location ID	Sample ID	Sample Date	Sample Type	Matrix Code	Fraction	CAS RN	Type	Class	Analyte	Units	Result	Qualifier	Detect	No Effect Screening Levels ^a			Low Effect Screening Levels ^b			Screening HQs			Refined HQs			Summary						
															Chronic Aquatic Life ESL	Terrestrial Plant ESL	Wildlife Ingestion ESL	Acute Aquatic Life ESL	Terrestrial Plant ESL	Wildlife Ingestion ESL	Chronic Aquatic Life HQ	Terrestrial Plant HQ	Wildlife Ingestion HQ	Acute Aquatic Life HQ	Terrestrial Plant HQ	Wildlife Ingestion HQ	Chronic Aquatic Life	No Effect Terrestrial Plants	No Effect Wildlife Ingestion	Acute Aquatic Life	Low Effect Terrestrial Plants	Low Effect Wildlife Ingestion	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-36-0	I	Metal	Antimony	ug/L	3.5		Y	190	--	690	900	--	2300	2E-02	--	5E-03	4E-03	--	2E-03	<1	--	<1	<1	<1	--	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-36-0	I	Metal	Antimony	ug/L	2.9		Y	190	--	690	900	--	2300	2E-02	--	4E-03	3E-03	--	1E-03	<1	--	<1	<1	--	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-38-2	I	Metal	Arsenic	ug/L	3.7		Y	150	1	560	340	10	5600	2E-02	4E+00	7E-03	1E-02	4E-01	7E-04	<1	4E+00	<1	<1	<1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-38-2	I	Metal	Arsenic	ug/L	3.4		Y	150	1	560	340	10	5600	2E-02	3E+00	6E-03	1E-02	3E-01	6E-04	<1	3E+00	<1	<1	<1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-39-3	I	Metal	Barium	ug/L	67		Y	220	--	6100	2000	--	8800	3E-01	--	1E-02	3E-02	--	8E-03	<1	--	<1	<1	--	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-39-3	I	Metal	Barium	ug/L	59		Y	220	--	6100	2000	--	8800	3E-01	--	1E-02	3E-02	--	7E-03	<1	--	<1	<1	--	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-41-7	I	Metal	Beryllium	ug/L	0.31	J	Y	11	500	2900	93	5000	29000	3E-02	6E-04	1E-04	3E-03	6E-05	1E-05	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-41-7	I	Metal	Beryllium	ug/L	0.28	J	Y	11	500	2900	93	5000	29000	3E-02	6E-04	1E-04	3E-03	6E-05	1E-05	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-42-8	I	Metal	Boron	ug/L	41	U	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-42-8	I	Metal	Boron	ug/L	41	U	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-43-9	I	Metal	Cadmium	ug/L	0.2	J	Y	0.094	100	4800	0.49	1000	17000	2E+00	2E-03	4E-05	4E-01	2E-04	1E-05	2E+00	<1	<1	<1	<1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-43-9	I	Metal	Cadmium	ug/L	0.16	J	Y	0.094	100	4800	0.49	1000	17000	2E+00	2E-03	3E-05	3E-01	2E-04	9E-06	2E+00	<1	<1	<1	<1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-47-3	I	Metal	Chromium	ug/L	22	Y	Y	24	50	82	180	500	2000	9E-01	4E-01	3E-01	1E-01	4E-02	1E-02	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-47-3	I	Metal	Chromium	ug/L	19	Y	Y	24	50	82	180	500	2000	8E-01	4E-01	2E-01	1E-01	4E-02	1E-02	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-48-4	I	Metal	Cobalt	ug/L	4.6	Y	Y	19	60	89	120	600	1600	2E-01	8E-02	5E-02	4E-02	8E-03	3E-03	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-48-4	I	Metal	Cobalt	ug/L	3.8	Y	Y	19	60	89	120	600	1600	2E-01	6E-02	4E-02	3E-02	6E-03	2E-03	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-50-8	I	Metal	Copper	ug/L	22	Y	Y	1.4	60	22000	2.3	600	33000	2E+01	4E-01	1E-03	1E-01	4E-02	7E-04	2E+01	<1	<1	<1	1E+01	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-50-8	I	Metal	Copper	ug/L	19	Y	Y	1.4	60	22000	2.3	600	33000	1E+01	3E-01	9E-04	8E+00	3E-02	6E-04	1E+01	<1	<1	8E+00	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7439-89-6	I	Metal	Iron	ug/L	14000	Y	Y	1000	10000	--	--	100000	--	1E+01	1E+00	--	--	1E-01	--	1E+01	1E+00	--	--	<1	--	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7439-89-6	I	Metal	Iron	ug/L	12000	Y	Y	1000	10000	--	--	100000	--	1E+01	1E+00	--	--	1E-01	--	1E+01	1E+00	--	--	<1	--	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7439-92-1	I	Metal	Lead	ug/L	12	J	Y	0.54	20	78	14	200	780	2E+01	6E-01	2E-01	9E-01	6E-02	2E-02	2E+01	<1	<1	<1	<1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7439-92-1	I	Metal	Lead	ug/L	9.6	J	Y	0.54	20	78	14	200	780	2E+01	5E-01	1E-01	7E-01	5E-02	1E-02	2E+01	<1	<1	<1	<1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7439-96-5	I	Metal	Manganese	ug/L	110	J	Y	93	4000	6300	1700	40000	63000	1E+00	3E-02	2E-02	6E-02	3E-03	2E-03	1E+00	<1	<1	<1	<1	step 1	step 1
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7439-96-5	I	Metal	Manganese	ug/L	87	J	Y	93	4000	6300	1700	40000	63000	9E-01	2E-02	1E-02	5E-02	2E-03	1E-03	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7439-97-6	I	Metal	Mercury	ug/L	0.15	U	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7439-97-6	I	Metal	Mercury	ug/L	0.15	U	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7439-98-7	I	Metal	Molybdenum	ug/L	0.58	J	Y	800	500	22000	7200	5000	120000	7E-04	1E-03	3E-05	8E-05	1E-04	5E-06	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7439-98-7	I	Metal	Molybdenum	ug/L	0.57	J	Y	800	500	22000	7200	5000	120000	7E-04	1E-03	3E-05	8E-05	1E-04	5E-06	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-02-0	I	Metal	Nickel	ug/L	15	Y	Y	16	500	890	140	5000	1400	9E-01	3E-02	2E-02	1E-01	3E-03	1E-02	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-02-0	I	Metal	Nickel	ug/L	13	Y	Y	16	500	890	140	5000	1400	8E-01	3E-02	1E-02	9E-02	3E-03	9E-03	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7782-49-2	I	Metal	Selenium	ug/L	2.1	U	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7782-49-2	I	Metal	Selenium	ug/L	2.1	U	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-22-4	I	Metal	Silver	ug/L	0.029	J	Y	0.1	100	31	0.3	1000	310	3E-01	3E-04	9E-04	1E-01	3E-05	9E-05	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-22-4	I	Metal	Silver	ug/L	0.025	J	Y	0.1	100	31	0.3	1000	310	3E-01	3E-04	8E-04	8E-02	3E-05	8E-05	<1	<1	<1	<1	step 1	step 1	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-28-0	I	Metal	Thallium	ug/L	0.029	U	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504	5/4/2022	N	WG	T	7440-28-0	I	Metal	Thallium	ug/L	0.029	U	N	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
OR-J.C. Boyle Dispersed Recreation Area 2	JBRA-02	JBRA-GW01-20220504-FD	5/4/2022	FD	WG	T	7440-62-2	I	Metal	Vanadium	ug/L	56	Y	Y	27	200	4500	79	2000	45000	2E+00	3E-01	1E-02	7E-01	3E-02	1E-03	2E+00	<1	<				

Appendix G
Consolidated Comment Matrix

COMMENT MATRIX for the Stakeholder Review Draft Dated October 2022
Lower Klamath Hydroelectric Project Site Investigation Reports for California and Oregon
FERC No. P-14803
March 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>California Department of Fish and Wildlife - Office of Spill Prevention and Response/California Department of Water Resources (Comments on the California Site Investigation Report)</i>					
CA-General-1	KT	General Comment		[This comment #1 may be withdrawn. CDFW is double checking and will be in touch] CDFW-OSPR is concerned that the lack of screening data for lead shot and target fragments (a potential source of PAHs) is a data gap that PacifiCorp needs to address. The deleterious effects of wildlife ingestion of lead shot or bullet fragments have been well documented over many years and in numerous scientific studies (Rattner et al. 2008). CDFW-OSPR considers lead shot as a poison under California Fish and Game Code section 3005. Additional clarification emailed by Kevin Takei (California) to Demian Ebert (PacifiCorp) on January 11, 2023, at 9:01 AM: "CDFW is fine withdrawing the comment because we understand KRRC will be disposing dam debris on top of the shooting range. As a result the likelihood of wildlife ingesting lead shot/bullet fragments will be low. If KRRC changes its plans and ends up not disposing debris on the shooting range, CDFW would like to reopen this comment."	Acknowledged. No changes necessary.
CA-General-2	KT	General Comment		For sites recommended for removal actions, CDFW is not commenting on the recommendations. CDFW anticipates providing input on specific actions during preparation of the removal action plans.	Acknowledged. No changes necessary.
CA-1	KT		Page 3-11, Section 3.3.4.1 Derivation of Site-Specific EcoPRGs	The method used to calculate ecological preliminary remedial goal in soil is acceptable, as are the bioaccumulation factors used (Appendix G, Tables G-5).	Acknowledged. No changes necessary.
CA-2	KT		Page 5-1, Section 5.1	Was trash and other debris removed or does it remain?	Debris and trash have not been removed, but will be before PacifiCorp stops operating the Lower Klamath Project. No changes necessary.
CA-3	KT		Page 6-9, Section 6.7 Recommended Actions	May need to coordinate implementation of the remedial action plan with any restoration activity by RES.	PacifiCorp expects that the removal action plan would be coordinated with the KRRC's team to identify waste staging areas, stockpile management, soil reuse, backfill and compaction, and offsite disposal requirements all with an eye toward reducing potential conflicts and schedule impacts on dam removal and restoration activities. No changes necessary.
CA-4	KT		Appendix D: Analytical Laboratory Results	CDFW-OSPR requests PacifiCorp ensure that the laboratory, Eurofins/TA is a California state-certified analytical laboratory. CDFW-OSPR requests the PacifiCorp include a current certification document as an appendix to the Draft Final document.	Eurofins/TA has provided their certification in the California Environmental Laboratory Accreditation Program and that document has been added to Appendix D. Note that the certificate expired on 7/7/2022. Eurofins/TA has applied for a renewal, which is in progress, and all samples were analyzed prior to that date.

COMMENT MATRIX for the Stakeholder Review Draft Dated October 2022
Lower Klamath Hydroelectric Project Site Investigation Reports for California and Oregon
FERC No. P-14803
March 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
CA-5	KT		Appendix E, Data Quality Evaluation Report	<p>CDFW-OSPR has concerns regarding the substituted phenol data. The surrogate QC indicates that samples may have been mishandled during extraction yielding results that are biased low. Please to include a current certification document as an appendix to the Draft Final document to estimate the impact.</p> <p><i>Additional clarification emailed by Kevin Takei (California) to Demian Ebert (PacifiCorp) on January 23, 2023, at 3:36 PM: "This was an observation of a trend in one batch of semi-volatiles that the substituted-phenol surrogates were reported with low recoveries; the corresponding quality control samples also were reported with low substituted-phenol recoveries. Aggressive extract concentration is suspected to affect substituted-phenol surrogate recoveries and by association, substituted phenol compounds in samples. The data was appropriately flagged by the validators. No certification is needed."</i></p>	<p>Acknowledged. No changes necessary.</p>
CA-6	KT		Appendix E, Data Quality Evaluation Report	<p>Please clarify how the validators used data flagged as "J" or "UJ" to identify the maximum concentration detected or if the data was ignored.</p> <p><i>Additional clarification emailed by Kevin Takei (California) to Demian Ebert (PacifiCorp) on January 23, 2023, at 3:36 PM: "My question is regarding how the validators calculated the maximum possible concentrated for compounds where the compound is flagged "UJ." If recoveries for a compound was low, was the maximum possible concentration calculated based on the reporting limit, or a recovery-corrected result?"</i></p>	<p>For Section 3.11, the laboratory originally reported the analytical data for various dioxin/furan congeners as "estimated maximum possible concentrations" that were considered detectable by the laboratory and flagged with a "J" (estimated). However, during data validation by Jacobs, it was determined that the ion ratio criteria were exceeded for these congeners. Consequently, the data validator changed the final flag to "UJ" (estimated non-detect). The original estimated result values were not changed and no additional calculations or adjustments were made.</p> <p>No changes necessary.</p>
CA-7	KT		Appendix E, Data Quality Evaluation Report	<p>The Data Quality Evaluation Report is missing the required signatures of the Project Manager/Senior Chemist, who validated the data.</p>	<p>Signature of Mark Fessler/Senior Chemist has been provided in the final report.</p>
CA-8	KT			<p>Appendix G, Table G-6. It is not clear how the HQ was calculated when the incidental soil ingestion rate for the Red-tailed Hawk of 2.4% was used. Based on the 90th percentile from a Monte Carlo simulation, a 5.2% soil ingestion rate (as proportion of diet) is used for the Red-tailed Hawk in the USEPA Eco-SSLs (https://www.epa.gov/risk/ecological-soil-screening-level-eco-ssl-guidance-and-documents).</p>	<p>The percentage of soil ingestion for the red-tailed hawk used in the analysis is the 50th percentile as shown on Table 3 of the EcoSSL guidance. The 90th percentile is applicable for the calculation of the EcoSSLs, which are the most conservative values used for screening purposes.</p> <p>Remedial actions and calculation of preliminary remedial goals (EcoPRGs) are typically based on more realistic exposure and toxicity assumptions, i.e., lowest observed adverse effect levels and median (i.e., 50th percentile) uptake rates.</p> <p>It should be noted that the EcoPRGs remain conservative in that the fraction of soil ingestion is added onto the food ingestion rate rather than considered part of the total food ingestion rate (i.e., 100% food plus additional 2.4% soil = 102.4% total intake).</p> <p>No changes necessary.</p>

COMMENT MATRIX for the Stakeholder Review Draft Dated October 2022
Lower Klamath Hydroelectric Project Site Investigation Reports for California and Oregon
FERC No. P-14803
March 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
CA-9	KT			<p><i>Appendix G, Table G-9 through Table-18.</i> There is no mention of the calculation of hazard indices for chemicals with a similar mechanism of action. Please address the cumulative risk potential for all receptors based on co-exposure to COPECs with similar chemical structures or modes of toxicity. CDFW OSPR recommends the following:</p> <ul style="list-style-type: none"> i. Hazard indices (HIs) be calculated for chemicals with a common mechanism of action or common target organs [examples of chemical groups would be: polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds, semivolatile organic compounds, total petroleum hydrocarbons]. ii. Chemicals do not exit the screening-level ERA even if the HQ for that particular chemical is less than one unless the HI for that group of chemicals is less than one. Following DTSC guidance (DTSC HERO 1996) will ensure that chemicals are not eliminated inadvertently when the incremental summing of effects adds up to HI greater than 1. 	<p>As the comment notes, hazard indices (HIs) are typically computed for chemicals within groups with similar toxic action; however, these are generally limited to PAHs, PCBs, and organochlorine pesticides. Summing of volatiles and petroleum products has not been conducted for this project because it is not recommended by DTSC guidance and is not standard practice. It should be noted that DTSC guidance (1996) provides a general framework and set of approaches to use when evaluating potential risks. It does not constitute a rigid system of points of departure.</p> <p>Sample-specific HIs for low molecular weight PAHs, high molecular weight PAHs, and aroclors have been added to Appendix G for all sites with detected analytes in these groups. Since EcoPRGs were not derived for all PAHs or aroclors, the HIs are computed using the EcoPRG (if available) or the Low Effect ESL. HIs were computed both with and without application of AUFs. This information has been included in the ecological risk assessment section for each site and the weight of evidence discussion where applicable.</p>
CA-10	JD	General Comment		I do not have any comments or questions regarding this report. Thank you for conducting a very thorough assessment.	Acknowledged. No changes necessary.
CA-11	KG	General Comment		I also did not have any comments or questions. Thanks!	Acknowledged. No changes necessary.

* KT = Kevin Takei/California Department of Fish and Wildlife; JD = Jason Duda/California Department of Water Resources; KG = Kimberly Gazzaniga/California Department of Water Resources

COMMENT MATRIX for the Stakeholder Review Draft Dated October 2022
Lower Klamath Hydroelectric Project Site Investigation Reports for California and Oregon
FERC No. P-14803
March 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>Klamath River Renewal Corporation (Comments on the California and Oregon Site Investigation Reports)</i>					
KRRC-1	LL	General Comment on Both Reports		KRRC endorses the comments submitted by California and Oregon, including but not limited to CDFW General Comment No. 2: "For sites recommended for removal actions, CDFW is not commenting on the recommendations. CDFW anticipates providing input on specific actions during preparation of the removal action plans."	Acknowledged. No changes necessary.
KRRC-2	LL	Both Reports	Section 1.2 last paragraph	We note that the characterization of the Memorandum of Resolution in the last paragraph of Section 1.2 of each report is not quite accurate – the MOR doesn't establish a process; it marks the completion of the process. I suggest rewording it as follows: "Site closure refers to a site closure agreed upon by PacifiCorp, KRRC, and the State of [California/Oregon] in a Memorandum of Resolution."	The final paragraph in Section 1.2 has been edited: "Recommended next steps will be provided for each REC based on the results of the risk evaluation. Next steps may consist of a request for REC closure, collection of additional environmental samples, or site remediation (Figure 1-5). If risk evaluation of the analytical results indicates acceptable risk, PacifiCorp will request closure of the REC. <u>As used in this report, site closure refers to a closure action agreed upon by PacifiCorp, KRRC, and California and documented in a Memorandum of Resolution.</u> If analytical results of COPCs indicate the risk is unacceptable, PacifiCorp will either propose advancement of step-out borings to collect additional samples according to the sampling plan established for the REC or develop a remediation plan based on the field and analytical data already collected." The corresponding edit is made in the Oregon Site Investigation Report.

* LL = Lloyd Lowy

COMMENT MATRIX for the Stakeholder Review Draft Dated October 2022
Lower Klamath Hydroelectric Project Site Investigation Reports for California and Oregon
FERC No. P-14803
March 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>Oregon Department of Justice (Comment on the Oregon Site Investigation Report)</i>					
OR-1	CM	General Comment		Oregon does not have any specific comment, but we do want to make a general inquiry about upcoming site work and PAC/Jacobs awareness and protocols around cultural resources. Work on the Oregon site may need to be cognizant of such matters and a plan needs to be in place. Please advise.	PacifiCorp is fully aware of the cultural resources potentially present at the various sites. All the sites have been reviewed by specialists and some have been cleared for work because there are no resources present. Others are in proximity to known sites and will require a monitor to be present during work. None of the sites are within known cultural resource sites. Cultural monitors were present during sampling as necessary and will be present during any clean-up work. All contractors also operate in compliance with PacifiCorp's inadvertent discovery plan. No change necessary.

* CM = Chris Mathews

REFERENCES

- California Department of Toxic Substances Control Human and Ecological Risk Office (DTSC HERO). 1996. *Guidance for Ecological Risk Assessments at Hazardous Waste Sites and Permitted Facilities*. Part A: Overview. July 4. <https://dtsc.ca.gov/ecological-risk-assessment-hero/>.
- Huang, C. 2021. Memorandum to: Anthony Meyers, Project Manager, Department of Water Resources. Re: *Lower Klamath Hydroelectric Project, Draft Site Investigation Work Plan*. July 20, 2021. Sacramento, CA.
- Rattner, B. A., J. C. Franson, and S. R. Sheffield. 2008. *Sources and Implications of Lead Ammunition and Fishing Tackle on Natural Resources*. Technical Review 08 – 01. American Fisheries Society/The Wildlife Society: Technical Review Committee on Lead in the Environment. Bethesda, MD.
- State Water Resources Control Board (SWRCB). 2018. *Environmental Impact Report for the Lower Klamath Project License Surrender Volume I*. December. https://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/lower_klamath_ferc14803_deir.html.



**Lower Klamath Hydroelectric Project
(FERC No. P-14803)**

California Site Investigation Report

Final

March 2023



Lower Klamath Hydroelectric Project (FERC No. P-14803)

Project No: D3514100
Document Title: California Site Investigation Report
Document No.: PPS0721221442PDX
Revision: Final
Date: March 2023
Client Name: PacifiCorp, Demian Ebert, Klamath Program Manager, 503-813-6625
Project Manager: Emilio Candanoza, Jacobs, 541-768-3509

Jacobs Engineering Group Inc.

2020 SW Fourth Avenue
Suite 300
Portland, Oregon
United States
T +1.503.235.5000
www.jacobs.com

© Copyright 2023 Jacobs Engineering Group Inc. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.

Limitation: This document has been prepared on behalf of, and for the exclusive use of Jacobs' client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Contents

Acronyms and Abbreviations.....	vii
1. Introduction	1-1
1.1 Background	1-1
1.2 Objectives.....	1-2
1.3 Investigative Standard and Future Site Uses.....	1-2
1.4 Report Organization.....	1-4
2. Field Activities	2-1
2.1 Waste Management	2-2
2.2 Sample Collection and Management.....	2-2
3. Risk Assessment Approach	3-1
3.1 Human Health Risk Assessment.....	3-1
3.1.1 Data Evaluation	3-2
3.1.2 Exposure Assessment	3-2
3.1.3 Toxicity Assessment	3-4
3.1.4 Risk Characterization	3-5
3.1.5 Uncertainty Discussion.....	3-6
3.2 Leaching to Groundwater Evaluation.....	3-7
3.3 Ecological Risk Assessment	3-8
3.3.1 Ecological Conceptual Site Model.....	3-9
3.3.2 Step 1 – Screening Evaluation.....	3-10
3.3.3 Step 2 – Refined Evaluation	3-11
3.3.4 Step 3 – Site-Specific Evaluation.....	3-11
3.3.5 Step 4 – Weight of Evidence Evaluation.....	3-14
4. Copco No. 1 Dynamite Cave.....	4-1
4.1 Field Activities	4-1
4.2 Analytical Results.....	4-1
4.3 Recommended Actions.....	4-1
5. Copco No. 1 Debris Pile/Scrap Yard.....	5-1
5.1 Background	5-1
5.2 Field Activities	5-2
5.3 Analytical Results.....	5-4
5.4 Site-Specific Human Health Risk Assessment.....	5-5
5.4.1 Data Evaluation	5-5
5.4.2 Exposure Assessment	5-5
5.4.3 Toxicity Evaluation.....	5-5
5.4.4 Human Health Risk Assessment Results.....	5-5
5.4.5 Uncertainty Discussion.....	5-6
5.4.6 Human Health Risk Assessment Conclusions	5-6
5.5 Leaching to Groundwater Evaluation.....	5-6
5.5.1 Bis(2-chloroethyl) ether	5-6

5.5.2	Naphthalene.....	5-6
5.5.3	Leaching to Groundwater Evaluation Conclusions.....	5-7
5.6	Ecological Risk Assessment	5-7
5.7	Recommended Actions.....	5-8
6.	Copco No. 2 Wood-Stave Penstock	6-1
6.1	Background	6-1
6.2	Field Activities	6-2
6.3	Analytical Results.....	6-3
6.4	Site-Specific Human Health Risk Assessment.....	6-5
6.4.1	Data Evaluation	6-5
6.4.2	Exposure Assessment	6-5
6.4.3	Toxicity Evaluation	6-6
6.4.4	Human Health Risk Assessment Results	6-6
6.4.5	Uncertainty Discussion.....	6-6
6.4.6	Human Health Risk Assessment Conclusions	6-6
6.5	Leaching to Groundwater Evaluation.....	6-6
6.5.1	Bis(2-chloroethyl) Ether	6-7
6.5.2	Chrysene	6-7
6.5.3	Naphthalene.....	6-7
6.5.4	Pentachlorophenol.....	6-7
6.5.5	Leaching to Groundwater Conclusions	6-8
6.6	Ecological Risk Assessment	6-8
6.7	Recommended Actions.....	6-9
7.	Copco No. 2 Wood Pile	7-1
7.1	Background	7-1
7.2	Field Activities	7-1
7.3	Analytical Results.....	7-2
7.4	Site-Specific Human Health Risk Assessment.....	7-3
7.4.1	Data Evaluation	7-3
7.4.2	Exposure Assessment	7-3
7.4.3	Toxicity Assessment.....	7-3
7.4.4	Human Health Risk Evaluation Results.....	7-3
7.4.5	Uncertainty Discussion.....	7-4
7.4.6	Human Health Risk Assessment Conclusions	7-4
7.5	Leaching to Groundwater Evaluation.....	7-4
7.5.1	Bis(2-chloroethyl) ether	7-4
7.5.2	Pentachlorophenol.....	7-5
7.5.3	Leaching to Groundwater Conclusions	7-5
7.6	Ecological Risk Assessment	7-5
7.7	Recommended Actions.....	7-6
8.	Copco No. 2 Powerhouse Transformer Fire	8-1
8.1	Background	8-1
8.2	Field Activities	8-1

8.3	Analytical Results.....	8-3
8.4	Site-Specific Human Health Risk Assessment.....	8-3
8.4.1	Data Evaluation.....	8-3
8.4.2	Exposure Assessment.....	8-3
8.4.3	Toxicity Assessment.....	8-4
8.4.4	Human Health Risk Assessment Results.....	8-4
8.4.5	Uncertainty Discussion.....	8-4
8.4.6	Human Health Risk Assessment Conclusions.....	8-4
8.5	Leaching to Groundwater Evaluation.....	8-5
8.6	Ecological Risk Assessment.....	8-5
8.7	Recommended Actions.....	8-5
9.	Copco No. 2 Former Mobile Oil Containment Building and Underground Storage Tanks.....	9-1
9.1	Copco No. 2 Former Mobile Oil Containment Building.....	9-1
9.1.1	Background.....	9-1
9.1.2	Field Activities.....	9-1
9.1.3	Analytical Results.....	9-3
9.2	Copco No. 2 Underground Storage Tanks.....	9-4
9.2.1	Background.....	9-4
9.2.2	Field Activities.....	9-4
9.2.3	Analytical Results.....	9-6
9.3	Site-Specific Risk Assessment.....	9-7
9.3.1	Human Health Risk Assessment.....	9-7
9.3.2	Leaching to Groundwater Evaluation.....	9-8
9.3.3	Ecological Risk Assessment.....	9-8
9.4	Recommended Actions.....	9-8
10.	Copco No. 2 Burn Pit.....	10-1
10.1	Background.....	10-1
10.2	Field Activities.....	10-1
10.3	Analytical Results.....	10-2
10.4	Site-Specific Human Health Risk Assessment.....	10-3
10.4.1	Data Evaluation.....	10-3
10.4.2	Exposure Assessment.....	10-3
10.4.3	Toxicity Evaluation.....	10-4
10.4.4	Human Health Risk Assessment Results.....	10-4
10.4.5	Uncertainty Discussion.....	10-4
10.4.6	Human Health Risk Assessment Conclusions.....	10-5
10.5	Leaching to Groundwater Evaluation.....	10-5
10.5.1	Diesel Range Organics.....	10-5
10.5.2	Benzo(a)anthracene.....	10-5
10.5.3	Chrysene.....	10-6
10.5.4	Naphthalene.....	10-6
10.5.5	Leaching to Groundwater Evaluation Conclusions.....	10-6
10.6	Ecological Risk Assessment.....	10-6
10.7	Recommended Actions.....	10-7

11.	Iron Gate Shooting Range	11-1
11.1	Background	11-1
11.2	Field Activities	11-1
11.4	Site-Specific Human Health Risk Assessment.....	11-5
	11.4.1 Data Evaluation	11-5
	11.4.2 Toxicity Evaluation.....	11-6
	11.4.3 Human Health Risk Assessment Results.....	11-6
	11.4.4 Uncertainty Discussion.....	11-6
11.5	Leaching to Groundwater Evaluation.....	11-6
11.6	Ecological Risk Assessment	11-7
11.7	Recommended Actions.....	11-7
12.	Iron Gate Hatchery Burn Pit	12-1
12.1	Background	12-1
12.2	Field Activities	12-2
12.3	Analytical Results.....	12-3
12.4	Site-Specific Human Health Risk Assessment.....	12-3
	12.4.1 Data Evaluation	12-3
	12.4.2 Exposure Assessment.....	12-3
	12.4.3 Toxicity Evaluation.....	12-4
	12.4.4 Human Health Risk Assessment Results.....	12-4
	12.4.5 Uncertainty Discussion.....	12-4
	12.4.6 Human Health Risk Assessment Conclusions.....	12-4
12.5	Leaching to Groundwater Evaluation.....	12-4
	12.5.1 Benzene.....	12-5
	12.5.2 Naphthalene.....	12-5
	12.5.3 Leaching to Groundwater Evaluation Conclusions.....	12-5
12.6	Ecological Risk Assessment	12-5
12.7	Recommended Actions.....	12-6
13.	Iron Gate Hatchery Settling Ponds.....	13-1
13.1	Field Activities	13-1
13.2	Recommended Actions.....	13-1
14.	Summary of Recommendations	14-1
14.1	Sites Recommended for Closure.....	14-1
14.2	Sites Recommended for Removal Action.....	14-1
15.	References.....	15-1

Appendixes

A Siskiyou County Well Permits
 B Boring Logs
 C Waste Manifests
 D Analytical Laboratory Results
 E Data Quality Evaluation Report
 F Human Health and Leaching to Groundwater Risk Evaluation Tables
 G Ecological Risk Evaluation Tables
 H Dynamite Cave Technical Memorandum
 I Consolidated Comment Matrix

Tables

1-1 Sites, Constituents of Potential Concern, Future Site Uses, and Exposure Pathways 1-3
 3-1 Exposure Assumptions for the Human Health Risk Assessment 3-16
 5-1 Copco No. 1 Debris Pile/Scrap Yard Borehole Summary 5-3
 5-2 Copco No. 1 Debris Pile/Scrap Yard Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels 5-4
 5-3 Human Risk Estimates for COPCs in Soil at Copco No. 1 Debris Pile/Scrap Yard 5-9
 5-4 Soil Leaching to Groundwater Evaluation at Copco No. 1 Debris Pile/Scrap Yard 5-10
 5-5 Weight of Evidence for Ecological Receptors at Copco No. 1 Debris Pile/Scrap Yard 5-11
 6-1 Copco No. 2 Wood-Stave Penstock Borehole Summary 6-2
 6-2 Copco No. 2 Wood-Stave Penstock Boreholes with Compounds in Soil that Exceed the California Site Investigation Work Plan Screening Levels 6-3
 6-3 Copco No. 2 Wood-Stave Penstock Boreholes with Compounds in Water that Exceed the California Site Investigation Work Plan Screening Levels 6-5
 6-4 Human Health Risk Estimates for COPCs in Soil, Copco No. 2 Wood-Stave Penstock 6-11
 6-5 Human Health Risk Estimates for COPCs in Shallow Water, Copco No. 2 Wood-Stave Penstock 6-13
 6-6 Soil Leaching to Groundwater Evaluation for Copco No. 2 Wood-Stave Penstock 6-15
 6-7 Weight of Evidence for Copco No. 2 Wood-Stave Penstock 6-17
 7-1 Copco No. 2 Wood Pile Borehole Summary 7-2
 7-2 Copco No. 2 Wood Pile Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels 7-2
 7-3 Human Health Risk Estimates for COPCs in Soil at Copco No. 2 Wood Pile 7-7
 7-4 Soil Leaching to Groundwater Evaluation at Copco No. 2 Wood Pile 7-8
 7-5 Weight of Evidence for Ecological Receptors at Copco No. 2 Wood Pile 7-9
 8-1 Copco No. 2 Powerhouse Transformer Fire Borehole Summary 8-2
 8-2 Copco No. 2 Powerhouse Transformer Fire Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels 8-3
 8-3 Human Health Risk Estimates for COPCs in Soil at Copco No. 2 Powerhouse Transformer Fire 8-7
 8-4 Soil Leaching to Groundwater Evaluation at Copco No. 2 Powerhouse Transformer Fire 8-8
 9-1 Copco No. 2 Former Mobile Oil Containment Building Borehole Summary 9-2
 9-2 Copco No. 2 Former Mobile Oil Containment Building Boreholes with Compounds in Soil or Groundwater that Exceed the California Site Investigation Work Plan Screening Levels 9-3
 9-3 Copco No. 2 Underground Storage Tanks Borehole Summary 9-5
 9-4 Copco No. 2 Underground Storage Tanks Borehole Summary Boreholes with Compounds in Soil or Groundwater that Exceed the California Site Investigation Work Plan Screening Levels 9-7
 9-5 Human Health Risk Estimates for COPCs in Groundwater, Copco No. 2 Former Mobile Oil Containment Building and Underground Storage Tanks 9-11

9-6	Soil Leaching to Groundwater Evaluation for Copco No. 2 Former Mobile Oil Containment Building and Underground Storage Tanks	9-13
10-1	Copco No. 2 Burn Pit Borehole Summary	10-2
10-2	Copco No. 2 Burn Pit Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels.....	10-2
10-3	Human Health Risk Estimates for COPCs in Soil at the Copco No. 2 Burn Pit	10-9
10-4	Soil Leaching to Groundwater Evaluation at Copco No. 2 Burn Pit.....	10-10
10-5	Weight of Evidence for Ecological Receptors at Copco No. 2 Burn Pit.....	10-11
11-1	Iron Gate Shooting Range Borehole Summary.....	11-2
11-2	Iron Gate Shooting Range Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels	11-3
11-3	Iron Gate Shooting Range Boreholes with Lead that Exceed the California Site Investigation Work Plan Screening Levels.....	11-5
11-4	Human Health Risk Estimates for COPCs in Soil at Iron Gate Shooting Range.....	11-9
12-1	Iron Gate Burn Pit Boreholes.....	12-2
12-2	Iron Gate Burn Pit Boreholes with Compounds in Soil that Exceed the California Site Investigation Work Plan Screening Levels	12-3
12-3	Human Health Risk Estimates for COPCs in Soil at Iron Gate Hatchery Burn Pit.....	12-7
12-4	Soil Leaching to Groundwater Evaluation at Iron Gate Hatchery Burn Pit.....	12-8
12-5	Weight of Evidence for Ecological Receptors at Iron Gate Fish Hatchery Burn Pit.....	12-9
14-1	Summary of Recommended Future Actions.....	14-3

Figures

1-1	Site Investigation Report Recognized Environmental Conditions.....	1-5
1-2	Copco No. 1 Dam Recognized Environmental Conditions	1-6
1-3	Copco No. 2 Dam Recognized Environmental Conditions	1-7
1-4	Iron Gate Dam Recognized Environmental Conditions	1-8
1-5	Flowchart of Possible Next Steps	1-9
3-1	Ecological Risk Assessment Process	3-9
5-1	Copco No. 1 Debris Pile/Scrap Yard.....	5-12
6-1	Copco No. 2 Wood-Stave Penstock	6-1
6-2	Copco No. 2 Wood-Stave Penstock Excavation Areas	6-2
7-1	Copco No. 2 Wood Pile	7-11
7-2	Copco No. 2 Wood Pile Excavation Area.....	7-12
8-1	Copco No. 2 Powerhouse Transformer Fire.....	8-9
8-2	Copco No. 2 Powerhouse Transformer Fire Excavation Area	8-10
9-1	Copco No. 2 Former Mobile Oil Containment Building and Underground Storage Tanks.....	9-15
10-1	Copco No. 2 Burn Pit	10-13
10-2	Copco No. 2 Burn Pit Excavation Areas.....	10-14
11-1	Iron Gate Shooting Range	11-13
11-2	Iron Gate Shooting Range Excavation Areas	11-14
12-1	Iron Gate Hatchery Burn Pit.....	12-11
12-2	Iron Gate Hatchery Burn Pit Excavation Area	12-12

Acronyms and Abbreviations

µg/L	microgram(s) per liter
2,3,7,8-TCDD TEQ	2,3,7,8-Tetrachlorodibenzo-P-dioxin toxic equivalent
AECOM	AECOM Technical Services, Inc.
Agreement	Property Transfer Agreement entered into by PacifiCorp and Klamath River Renewal Corporation
AUF	area use factor
BAF	bioaccumulation factor
bgs	below ground surface
Bi	concentration of chemical in biota type (i) (mg/kg)
BTEX	benzene, toluene, ethylbenzene, and xylenes
BTV	background threshold value
California SI Report	<i>California Site Investigation Report</i>
California SIWP	<i>California Site Investigation Work Plan</i>
COPC	constituent(s) of potential concern
DPT	direct-push technology
DRO	diesel range organics
DTSC	Department of Toxic Substances Control
DTW	depth to water
EcoPRG	ecological preliminary remedial goal
EcoSSL	ecological soil screening level
ELCR	excess lifetime cancer risk
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
ERA	ecological risk assessment
ESA	environmental site assessment
ESL	ecological screening level
FERC	Federal Energy Regulatory Commission
FIR	food ingestion rate
GPS	Global Positioning System
HA	hand auger
HHRA	human health risk assessment
HI	hazard index
HQ	hazard quotient
J	estimated value that is less than the reporting limit but greater than the method detection limit

Jacobs	Jacobs Engineering Group Inc.
KRRC	Klamath River Renewal Corporation
LANL	Los Alamos National Laboratory
LOAEL	lowest observed adverse effect
mg/kg	milligram(s) per kilogram(s)
mg/kg-day	milligram(s) per kilogram(s) per day
NOAEL	no observed adverse effect
ODEQ	Oregon Department of Environmental Quality
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyls
PCP	pentachlorophenol
P _i	proportion of diet that is soil (unitless)
PID	photoionization detector
ppm	parts per million
ppmv	parts per million by volume
PRG	preliminary remedial goal
Project	Lower Klamath Hydroelectric Project
RBC	risk-based concentration
RBCc	risk-based concentrations for cancer effects
RBCnc	risk-based concentrations for noncancer effects
REC	recognized environmental condition
RSL	regional screening level
SFRWQCB	San Francisco Regional Water Quality Control Board
SIM	selective ion monitoring
SL	screening level
SVOC	semivolatile organic compound
THQ	target hazard quotient
TPH	total petroleum hydrocarbon
TRL	target (cancer) risk level
TRV	toxicity reference value
UN	United Nations
UST	underground storage tank
VOC	volatile organic compound

1. Introduction

PacifiCorp retained Jacobs Engineering Group Inc. (Jacobs) to prepare this *California Site Investigation Report* (California SI Report) for the Lower Klamath Hydroelectric Project (Project). The purpose of the California SI Report is to document the environmental sampling activities performed at the location of 11 pre-existing environmental conditions within the Copco No. 1, Copco No. 2, and Iron Gate developments in California. Ten of the pre-existing environmental conditions were identified during Phase I environmental site assessments (Phase I ESAs) conducted by AECOM Technical Services, Inc. (AECOM) on behalf of the Klamath River Renewal Corporation (KRRRC) and were subsequently identified in Exhibit C of a Property Transfer Agreement (Agreement) between PacifiCorp and the KRRRC. PacifiCorp elected to additionally include assessment of the Copco No. 2 Powerhouse Transformer Fire site, bringing to 11 the total number of sites evaluated under this California SI Report.

While the Agreement and specifically Exhibit C discuss the resolution of pre-existing environmental conditions, the *California Site Investigation Work Plan* (California SIWP) (Jacobs 2021a) and this California SI Report refer to the Exhibit C items generically as recognized environmental conditions (RECs). Not all pre-existing environmental conditions in Exhibit C have been formally identified as a REC in a Phase I ESA. The term REC is used interchangeably with pre-existing environmental condition and site throughout this document.

The environmental sampling activities were performed in accordance with the California SIWP to confirm the presence or absence of constituents of potential concern (COPCs) at the 11 sites or alternatively to confirm the extent of COPCs previously identified. The sites evaluated under this California SI Report are as follows (Figures 1-1 to 1-4):

- 1) Copco No. 1 Dynamite Cave
- 2) Copco No. 1 Debris Piles/Scrap Yard (Parcel B REC 4)
- 3) Wood-Stave Penstock
- 4) Copco No. 2 Wood Pile (Parcel B REC 7)
- 5) Copco No. 2 Powerhouse Transformer Fire (not included in Exhibit C of the Agreement)
- 6) Copco No. 2 Former Mobile Oil Containment Building
- 7) Underground Storage Tanks (USTs)
- 8) Copco No. 2 Burn Pit (Parcel B REC 6)
- 9) Iron Gate Shooting Range (Parcel B REC 9)
- 10) Iron Gate Hatchery Burn Pit
- 11) Iron Gate Hatchery Settling Ponds

The California SIWP was approved by the KRRRC (Lowy, pers. comm. 2021) and the State of California. A separate *Oregon Site Investigation Work Plan* (Oregon SIWP) was developed for the J.C. Boyle Development and its single REC, the J.C. Boyle Dispersed Recreational Area – 2 (Jacobs 2021b). The Oregon SIWP was approved by the KRRRC (Lowy, pers. comm. 2021) and the State of Oregon (Matthews, pers. comm. 2021). PacifiCorp has prepared an Oregon SI Report (Jacobs 2023) in accordance with Section 4 of the Oregon SIWP.

1.1 Background

The California SIWP provides detailed backgrounds of the Copco No. 1, Copco No. 2, and Iron Gate developments, a complete list of the Exhibit C RECs, and a discussion of the surrounding lands, local geology, and historical practices (Jacobs 2021a). This information is incorporated into this California SI Report by reference.

Also pertinent to the sites addressed in this California SI Report are: 1) the two Phase I ESAs conducted for the Oregon and California hydroelectric developments (AECOM 2018, 2020a); and 2) two soil investigations performed for the Iron Gate Burn Pit and the Copco No. 2 Wood-Stave Penstock (AECOM 2019, 2020b).

Of importance to note regarding each site and the development of both SIWPs are the following:

- There were no records of spills or releases at most of the sites, no site investigations had been conducted, and therefore actual site conditions at each site were not known.
- Sampling plans for each site were developed consistent with industry standards and were based on assumed conditions (historical site activities and likely contaminants) at each site.
- Site-specific sampling plans were developed to determine if the COPCs summarized in Section 1.3 (Investigative Standard and Future Site Uses) are present at concentrations that exceeded screening levels.
- The COPCs for each site were selected using the most conservative (i.e., lowest) screening levels for residential, ecological, and leaching to groundwater exposure scenarios and on the understood future use for each site, as agreed upon by the KRRC and the State of California.

The dams and associated powerhouses have been, and continue to be, operated to generate and distribute electricity. Hazardous materials that have been used onsite include diesel fuel, leaded and unleaded gasoline, non-polychlorinated biphenyls (non-PCBs), and governor, transformer, and motor oils. Battery banks and oils are stored within secondary containment systems. As noted in the Phase I ESA conducted by AECOM, the powerhouses appeared to be in good operating condition, with proper housekeeping and hazardous materials management practices (AECOM 2018).

1.2 Objectives

The primary objective of this California SI Report is to document the field activities and analytical results to support the following recommended actions, as applicable, for each site:

- No further action and site closure
- Additional assessment through field sampling
- Development of a remedial action plan

Recommended next steps will be provided for each site based on the results of the risk evaluation. Next steps may consist of a request for site closure, collection of additional environmental samples, or site remediation (Figure 1-5). If risk evaluation of the analytical results indicates acceptable risk, PacifiCorp will request closure of the site. As used in this report, site closure refers to a closure action agreed upon by PacifiCorp, KRRC, and California and documented in a Memorandum of Resolution. If analytical results of COPCs indicate the risk is unacceptable, PacifiCorp will either propose advancement of step-out borings to collect additional samples according to the sampling plan established for the site or develop a remediation plan based on the field and analytical data already collected.

1.3 Investigative Standard and Future Site Uses

The COPCs for each site (Table 1-1) were determined based on the Investigative Standard, as defined in Section 1.5 of the California SIWP (Jacobs 2021a), on expectations for the type of site identified, and where applicable, on identified COPCs from prior site assessments. All fieldwork and data evaluations were carried out in accordance with the Investigative Standard. The COPCs, intended future site uses, and exposure pathways for each site (Table 1-1) were identified in the California SIWP and approved by KRRC and the State of California. The exposure pathways were used to determine the screening levels developed

in Section 3.3 of the California SIWP and to evaluate the analytical results in Sections 5 through 13 of this report.

Table 1-1. Sites, Constituents of Potential Concern, Future Site Uses, and Exposure Pathways

Site	Constituents of Potential Concern	Future Site Use(s)	Exposure Pathways
Copco No. 1 Dynamite Cave	Explosives	Permanently sealed	Not applicable
Copco No. 1 Debris Pile/Scrap Yard	Title 22 metals, VOCs, SVOCs, dioxins and furans	Passive recreation/natural habitat	Residential/Ecological/Leaching to Groundwater
Copco No. 2 Wood-Stave Penstock	Title 22 metals and SVOCs	Passive recreation/natural habitat	Residential/Ecological/Leaching to Groundwater
Copco No. 2 Wood Pile	Title 22 metals, VOCs, and SVOCs	Passive recreation/natural habitat	Residential/Ecological/Leaching to Groundwater
Copco No. 2 Powerhouse Transformer Fire	BTEX, TPH-diesel, PAHs, and PCBs	Active recreation	Residential/Leaching to Groundwater
Copco No. 2 Former Mobile Oil Containment Building	VOCs, TPH-gasoline, TPH-diesel, and PAHs	Active recreation	Residential/Leaching to Groundwater
Copco No. 2 Underground Storage Tanks	VOCs, TPH-gasoline, TPH-diesel, and PAHs	Active recreation	Residential/Leaching to Groundwater
Copco No. 2 Burn Pit	Title 22 metals, VOCs, SVOCs, VOCs, TPH-gasoline, TPH-diesel, PAHs, dioxins and furans	Passive recreation/natural habitat	Residential/Ecological/Leaching to Groundwater
Iron Gate Shooting Range	Title 22 metals and PAHs	Passive recreation/natural habitat	Residential/Ecological/Leaching to Groundwater
Iron Gate Hatchery Burn Pit	Title 22 metals, VOCs, SVOCs, VOCs, TPH-gasoline, TPH-diesel, PAHs, dioxins and furans	Passive recreation/natural habitat	Residential/Ecological/Leaching to Groundwater
Iron Gate Hatchery Settling Ponds	None	Passive recreation/natural habitat	Residential/Ecological/Leaching to Groundwater

Notes:

BTEX = benzene, toluene, ethylbenzene, and xylenes

PAHs = polynuclear aromatic hydrocarbons

PCBs = polychlorinated biphenyls

SVOCs = semivolatile organic compounds

TPH = total petroleum hydrocarbon

VOCs = volatile organic compounds

1.4 Report Organization

This California SI Report contains the following sections and appendixes:

- **Section 1 – Introduction:** Describes the California SI Report purpose, provides background information on the evolution of the RECs, objectives of the California SI Report, Investigative Standards utilized, future uses, applicable receptor pathways, and COPCs of each REC.
- **Section 2 – Field Activities:** Provides a general overview of the field activities performed during California SIWP implementation.
- **Section 3 – Risk Assessment Approach:** Describes the general risk assessment approach used to evaluate human health risk, leaching to groundwater, and ecological risk from COPCs.
- **Sections 4 to 13 – Field Activities, Results, Risk Assessment, and Recommendations by Site:** Summarizes the site-specific field activities, analytical results, site risk assessment, and recommendations for next steps at each site.
- **Section 14 – Summary of Recommendations:** Summarizes the recommendations for further action at the 11 sites.
- **Section 15 – References:** Provides a bibliographic listing of documents cited in this California SI Report.
- **Appendix A – Siskiyou County Well Permits:** Contains the water well permits from the Siskiyou County Community Development-Environmental Health Division for the soil borings advanced at each site.
- **Appendix B – Boring Logs:** Contains coordinates for borehole locations based on Global Positioning System (GPS) surveys and borehole logs at the sites.
- **Appendix C – Waste Manifests:** Provides the waste manifests used for transport and disposal of wastes generated during the field mobilizations.
- **Appendix D – Analytical Laboratory Results:** Provides the analytical laboratory results of all samples collected from each of the boreholes and highlights results that exceeded a screening level.
- **Appendix E – Data Quality Evaluation Report:** Assesses the data quality of the analytical results for soil and water samples collected at the sites.
- **Appendix F – Human Health and Leaching to Groundwater Risk Evaluation Tables:** Provides the supporting tables of calculations for the human health risk evaluations and the leaching to groundwater evaluations for each of the sites.
- **Appendix G – Ecological Risk Evaluation Tables:** Provides the supporting tables of calculations for the ecological risk evaluations for each of the sites.
- **Appendix H – Copco No. 1 Dynamite Cave Technical Memorandum:** Provides a technical memorandum that documents the field activities and observations from the Copco No. 1 dynamite cave assessment conducted in March 2022.
- **Appendix I – Consolidated Comment Matrix:** Contains consolidated review comments and responses from California, KRRRC, and Oregon on the stakeholder review draft dated October 2022 as well as supplemental comments received and discussed following the initial round of comments.



- LEGEND
- Dam to be Removed
 - ▲ Recognized Environmental Condition
 - Powerhouse
 - Klamath River

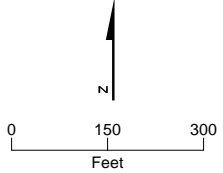
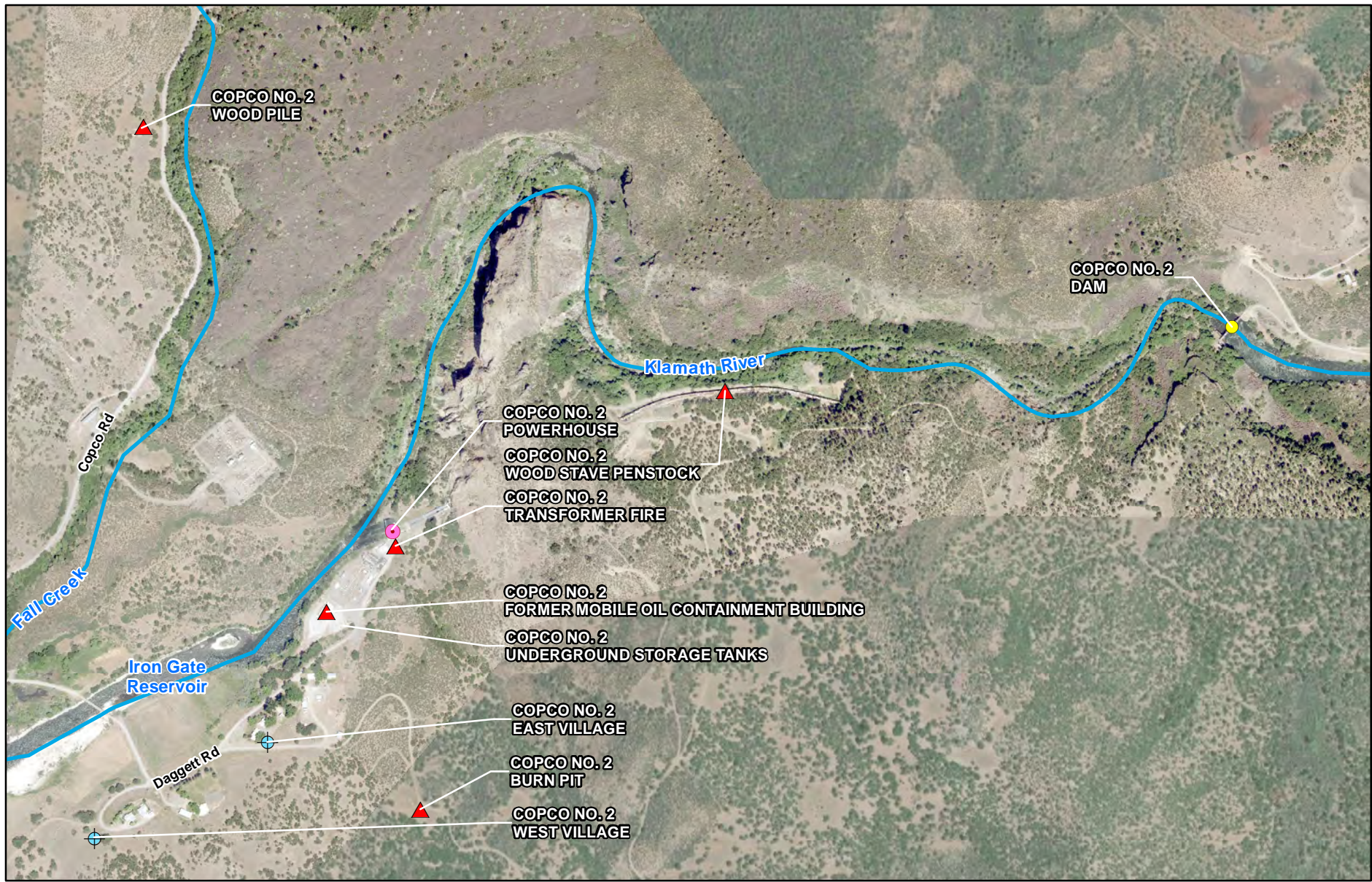


FIGURE 1-2
Copco No. 1 Dam
 Recognized Environmental Conditions
 Lower Klamath Hydroelectric Project



LEGEND

- Dam to be Removed
- ▲ Recognized Environmental Condition
- Powerhouse
- + Village
- River/Creek

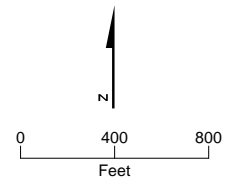
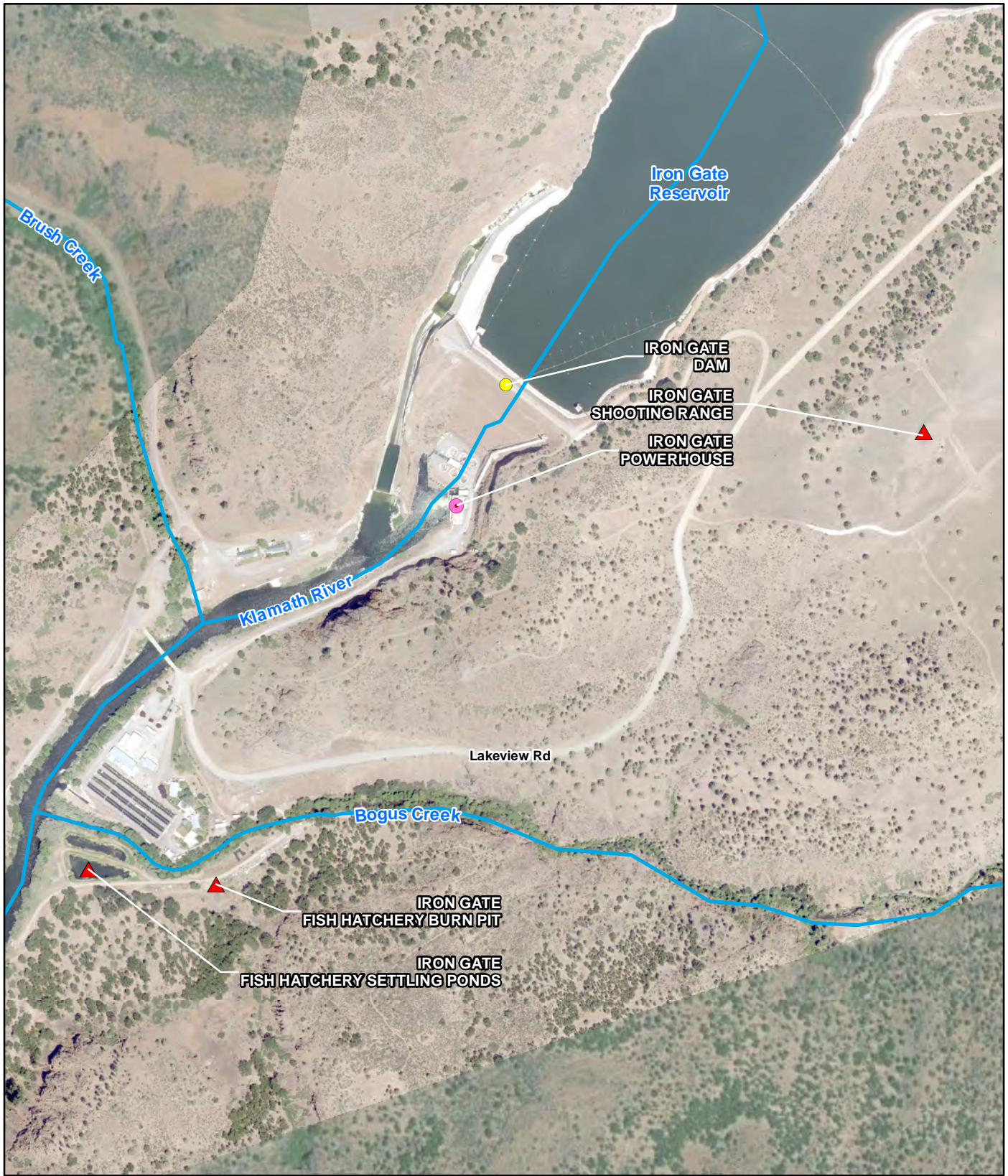


FIGURE 1-3
Copco No. 2 Dam
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



LEGEND

- Dam to be Removed
- ▲ Recognized Environmental Condition
- Powerhouse
- River/Creek

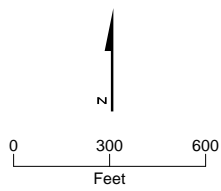


FIGURE 1-4
Iron Gate Dam
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project

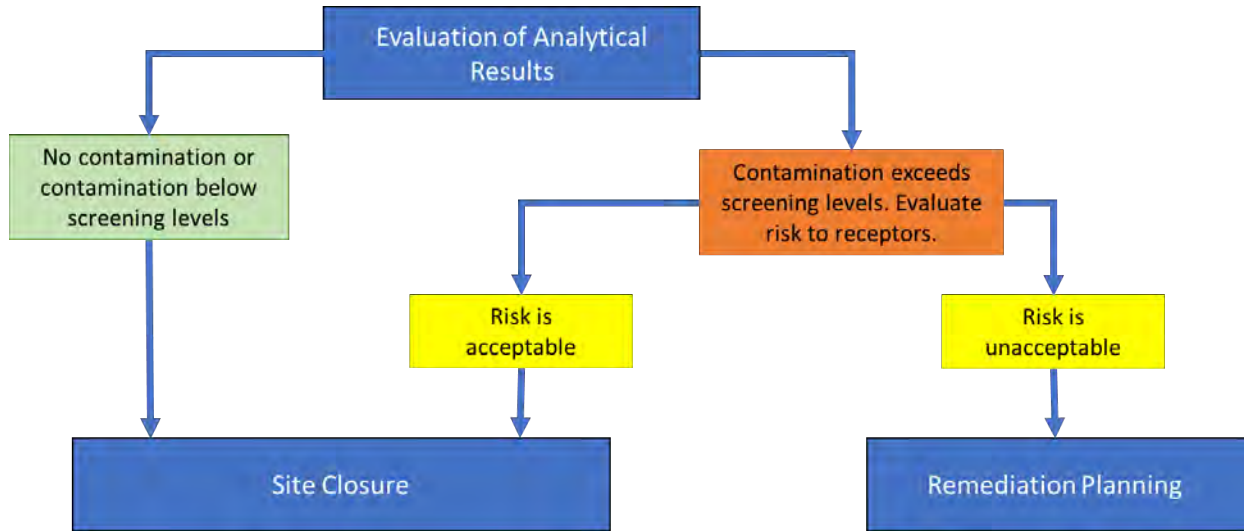


Figure 1-5. Flowchart of Possible Next Steps

2. Field Activities

The California SIWP (Jacobs 2021a) was implemented under two mobilizations performed in February-March 2022 and May 2022. Drilling permits (Appendix A) were obtained from the Siskiyou County Community Development-Environmental Health Division prior to mobilizing to the field. Field activities were documented daily in field logbooks and on tablets. The scopes of work specific to each site were implemented as outlined in the California SIWP. Field activities primarily included the following:

- Soil borings were marked based on their planned coordinates from the California SIWP. During the first mobilization, soil borings were marked the week of February 28, 2022, at the following sites:
 - Copco No. 1 Debris Pile/Scrap Yard
 - Copco No. 2 Wood Pile
 - Copco No. 2 Powerhouse Transformer Fire
 - Copco No. 2 Former Mobile Oil Containment Building
 - Copco No. 2 Underground Storage Tanks
 - Copco No. 2 Burn Pit
- The Copco No. 1 Dynamite Cave was investigated during the first mobilization.
- During the second mobilization, soil borings were marked the week of May 2, 2022, at the following sites:
 - Copco No. 2 Wood-Stave Penstock
 - Copco No. 2 Former Mobile Oil Containment Building (7 additional soil borings)
 - Copco No. 2 Underground Storage Tanks (5 additional soil borings)
 - Copco No. 2 Burn Pit
 - Iron Gate Shooting Range
 - Iron Gate Fish Hatchery Burn Pit
- The marked soil borings were cleared for the presence of subsurface utilities by a subcontracted utility locator service and were moved if subsurface utilities were identified, or as required based on field conditions.
- A hand auger or direct-push technology (DPT) drill rig was used to advance each cleared soil boring.
- Soil samples were collected at specified sample intervals for each REC, for headspace analysis with a photoionization detector (PID), and for borehole logging purposes. If groundwater was encountered, groundwater samples were also collected.
- Collection of shallow and deep soil samples for analysis of site-specific COPCs was conducted as identified in the California SIWP. Soil sampling was performed according to Appendix A of the California SIWP.
- At select sites, grab water samples were collected with disposable bailers from temporary wells constructed with 1-inch-diameter Schedule 40 polyvinyl chloride blank casing and 5 feet of slot screen. Upon collecting the water samples, the temporary well casing was removed so that the soil boring could be abandoned.
- All soil borings were surveyed with a hand-held GPS unit. The final survey coordinates and the boring logs for each soil boring are presented in Appendix B.
- Waste soil and water samples were collected for waste characterization and profiling purposes prior to offsite disposal according to applicable state and federal requirements (Section 2.1).

- Upon completion of sampling activities, each soil boring was abandoned with hydrated bentonite pellets and under purview of a Siskiyou County inspector.

Details of the specific soil sampling activities for each site are summarized in Sections 5 through 12.

2.1 Waste Management

Wastes generated from soil sampling activities included general refuse, soil cuttings from hand auger and DPT drilling, and rinsate water from decontamination of equipment. General refuse was disposed of in trash bins used by PacifiCorp. Soil cuttings and rinsate water were segregated by waste type and site and were contained in labeled, United Nations (UN)-approved 5-gallon buckets or UN-approved 55-gallon drums staged within a secured area near the Copco No. 2 Powerhouse or Iron Gate Dam.

Waste samples were collected from each site for waste profiling purposes. Upon waste characterization and acceptance by the landfill operator, Waste Management, waste soil was consolidated in UN-approved 55-gallon drums for transport and disposal as nonhazardous waste by the waste transporter, EnviroServe, Inc., at Waste Management's Hillsboro Landfill in Hillsboro, Oregon. Upon waste acceptance by the oil recycling firm, Oil Re-Refining, rinsate water was consolidated into a UN-approved 55-gallon drum for transport and disposal as nonhazardous wastewater by EnviroServe, Inc., at Oil Re-Refining in Portland, Oregon. Waste manifests and bills of lading are compiled in Appendix C.

2.2 Sample Collection and Management

The soil samples were collected in glass jars or TerraCore kits provided by the analytical laboratory and in accordance with the Sampling and Analysis Plan (Appendix A of the California SIWP). The soil samples were labeled, placed in resealable plastic bags, and stored in an insulated cooler that was chilled to maintain a shipping temperature of about 4 degrees Celsius. The sample cooler contained a temperature blank used for recording the temperature of samples in the cooler upon arrival at the laboratory. For coolers containing volatile organic compounds (VOCs) or total petroleum hydrocarbon-gasoline (TPH) samples, a trip blank was used to assess the possibility of cross-contamination when transporting the samples to the laboratory. A chain-of-custody form was completed in the field and accompanied all samples during transport to the analytical laboratory, Eurofins Test America in Tacoma, Washington (Appendix D). Test America distributed some samples to other laboratories as required to complete the analysis. Laboratory analyses were performed in accordance with current U.S. Environmental Protection Agency (EPA) procedures and by a laboratory certified by the California State Environmental Laboratory Accreditation Program Branch.

3. Risk Assessment Approach

This section describes the general risk assessment approach used to evaluate human health risk, leaching to groundwater, and ecological risk from COPCs in soil at all sites, and human health risk from COPCs in groundwater at three sites. Risk managers used the results of this analysis to support risk management decisions for each site.

3.1 Human Health Risk Assessment

A streamlined human health risk assessment (HHRA) was conducted for each site to evaluate human health risk to applicable receptors from exposure to contaminants in soil and groundwater. The HHRA provides information that can support risk-management decision making, including the need for further action.

This HHRA was conducted in a manner consistent with the following California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) guidance:

- *Human Health Risk Assessment Note Number 1 – Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Hazardous Waste Sites and Permitted Facilities* (DTSC 2019a)
- *Human Health Risk Assessment Note Number 2 - Soil Remedial Goals for Dioxins and Dioxin-like Compounds for Consideration at California Hazardous Waste Sites* (DTSC 2017)
- *Human Health Risk Assessment Note Number 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities* (DTSC 2022a)
- *Human Health Risk Assessment Note Number 4 – Guidance for Screening Level Human Health Risk Assessments* (DTSC 2022b)

The HHRA framework consists of the following four basic steps (EPA 1989):

- 1) **Data Evaluation:** The first step consists of reviewing and evaluating available data, identifying COPCs in media at each site.
- 2) **Exposure Assessment:** The second step involves evaluating potential exposure pathways for COPCs and the potential human populations that could be exposed to them, either now or in the future. Exposure point concentrations (EPCs) are estimated from measured or modeled concentrations, and pathway-specific exposure parameters and assumptions are evaluated.
- 3) **Toxicity Assessment:** The third step comprises compiling toxicity values that characterize potential adverse health effects from exposure to COPCs and are used to estimate potential risks to human health.
- 4) **Risk Characterization:** The fourth step combines the results of the previous three steps to quantitatively characterize potential risks to human health associated with exposure to COPCs at the RECs evaluated. Potential cancer risk and adverse noncancer health effects are estimated. Uncertainties in risk characterization are discussed.

Each step is described in the following sections.

3.1.1 Data Evaluation

Before conducting the risk assessment, the analytical results from sampling (Appendix D) were validated in a data quality evaluation report (Appendix E). The suitability of the analytical results was then evaluated for use in the risk assessment. The following data reduction steps were taken:

- Estimated values (flagged with "J" qualifiers) were treated as detected concentrations.
- For PAH analysis, where Methods SW8270C and SW8270SIM were both used, the selective ion monitoring (SIM) (low-detection limit) results were retained. SIM methodology allows for high accuracy of identification while the signal-to-noise ratio is much lower than a full-list scan, which allows for higher sensitivity within the SIM method.
- For naphthalene analysis, where Methods SW8270C and SW8260B were both used, the greater detected result was retained. If there were two nondetections, the result having the lower detection limit was retained (EPA 1989).
- Native and duplicate (field duplicates) sample pairs were reduced as follows:
 - If there were two detections, the greater of the two concentrations was used.
 - If there was one detection and one nondetection, the detected value was used.
 - If there were two nondetections, the result having the lower detection limit was used.

The data evaluation step includes the selection of human health COPCs that were included in the HHRA. Human health COPCs were identified based on an initial screening evaluation through which maximum detected concentrations (MDCs) for each analyte were compared to conservative screening levels for soil and groundwater. The risk-based screening levels used to select human health COPCs are based on human health exposure (for carcinogenic and noncarcinogenic constituents) for a residential exposure scenario based on the following hierarchy:

1. DTSC Human Health Risk Assessment Note 3 value for residential soil and tapwater (DTSC 2022a, Tables 1 and 2). Carcinogenic screening levels are based on a target cancer risk of 1×10^{-6} . Noncarcinogenic screening levels are the Note 3 values divided by 10 (for a hazard quotient [HQ] of 0.1).
2. EPA RSL for residential soil and tapwater based on target cancer risk of 1×10^{-6} and target noncancer hazard of 0.1 (EPA 2022a).
3. For petroleum hydrocarbons, San Francisco Regional Water Quality Control Board (SFRWQCB) screening levels for residential land use (SFRWQCB 2019, Table S-1 for soil and Table GW-1 for groundwater) divided by 10 (for a HQ of 0.1).

The COPCs (Appendix F) that were included in the HHRA for each site include analytes that exceed the residential risk-based screening levels and exceed background values, if available.

3.1.2 Exposure Assessment

Potential exposure pathways are based on current and potential future land uses for each REC (Table 1-1). RECs with passive recreation and natural habitat future uses are currently unoccupied and there are no buildings located onsite. Because these RECs are situated in a remote location with limited accessibility and the land will eventually be conveyed to the State of California for conservation purposes, future development is not likely. Potential future receptors are recreational users and construction workers. Although not considered to be a potential future land use, a hypothetical residential scenario was considered for risk management purposes (i.e., unrestricted land use).

Potential risks to human health for future recreational and construction worker exposure scenarios and the hypothetical future residential scenario were evaluated for each REC. The following pathways are assumed to be potentially complete:

- Future recreational users could potentially be exposed to surface soil, defined as 0 foot to 2 feet below ground surface (bgs), and mixed-zone soils (0 foot to 10 feet bgs), which hypothetically assumes subsurface soil is brought to the surface in the future (e.g., excavation during construction projects). Potentially complete routes of exposure to mixed-zone soil include incidental ingestion, dermal contact, and inhalation of suspended particulates (dust) and vapors volatilizing from the soil surface to air.
- Future construction workers could potentially be exposed during construction activities (e.g., excavation) to surface soil and mixed-zone soils through incidental ingestion, dermal contact, and inhalation of suspended soil particulates (dust) and vapors volatilizing from the soil surface to air. At the Copco No. 2 Wood-Stave Penstock, future construction workers could potentially be exposed during construction activities to shallow water through dermal contact.
- Hypothetical future residents could potentially be exposed to surface soil and mixed-zone soils. Potentially complete routes of exposure to soil include incidental ingestion, dermal contact, and inhalation of suspended soil particulates (dust) and vapors volatilizing from the soil surface to air. Hypothetical future residents could potentially be exposed to tapwater use of groundwater. Potentially complete routes of exposure to groundwater would include ingestion, dermal contact, and inhalation during household activities.

An exposure area describes a location or area where humans might encounter one or more contaminated environmental media on a regular basis. Because of the small size of the RECs, each REC was evaluated as its own exposure area.

3.1.2.1 Exposure Point Concentrations

Data were compiled for each media and for each soil depth interval within the exposure area for the respective sites to estimate EPCs, which are the COPC concentrations considered representative of what potential receptors might be exposed to over time.

The EPCs for soil were calculated for each COPC and depth interval (surface soil and mixed-zone soil) evaluated. The data from a depth interval were grouped to calculate an upper-bound average concentration for each COPC, which was used in the risk calculations as the EPC. For data sets that have sufficient data points, a 95 percent upper confidence limit (UCL) on the mean was calculated for each COPC in soil using the latest version of EPA's ProUCL software, version 5.2 (EPA 2022b, 2022c). Treatment of nondetections in the derivation of the EPC were addressed by the ProUCL software, which evaluates several estimation methods, including Kaplan-Meier, regression on order statistics and substitution methods (where the nondetect value is replaced by the limit of detection). Additionally, skewed data sets (including left-censored data sets with nondetect observations) can be adjusted by the ProUCL software using gamma, lognormal distribution, and nonparametric methods to calculate a UCL. ProUCL input and output are provided in Appendix F.

Maximum concentrations are used as the EPCs where the data exhibit high variance, the sample size is fewer than five, there are fewer than four detected values, or the 95 percent UCL is greater than the maximum concentration (EPA 2016a). In cases where there are fewer than four detected values, the mean value may be selected in accordance with EPA (2016a) guidance regarding EPCs. EPCs for COPCs in groundwater are the maximum detected concentrations.

3.1.2.2 Exposure Parameters

For the hypothetical residential exposure scenario, DTSC- and EPA-published default reasonable maximum exposure parameters (DTSC 2019; EPA 2014) were used in the risk estimate calculations (Table 3-1).

For the future passive recreational user exposure scenario, EPA (2014) default exposure assumptions for a resident were used (Appendix F) with the following modifications:

- Exposure frequency: 3 weeks per year (conservative estimate for a site camper)
- Exposure duration: 10 years (conservative estimate of number of years a camper might visit site)

For the future active recreational user exposure scenario, EPA (2014) default exposure assumptions for a resident were used with the following modifications:

- Exposure frequency: 2 hours per day, 5 days per week, and 12 weeks per year (conservative estimate for a fisherman launching a boat at the Copco No. 2 Powerhouse)
- Exposure duration: 10 years (conservative estimate of number of years a fisherman might visit site)

For the future construction worker exposure scenario, EPA (2014) default exposure assumptions (Table 3-1) were used, and conservative site-specific parameters presented for each REC.

3.1.3 Toxicity Assessment

The following DTSC (DTSC 2019b, 2022a) and EPA-recommended (EPA 2003, 2013; ECOS 2007) toxicity value selection hierarchy was used in the risk assessment for soil and groundwater:

- DTSC Human Health Risk Assessment Note 10 (DTSC 2019b)
- EPA Integrated Risk Information System (IRIS) toxicity values (EPA 2021, 2022a)
- EPA Provisional Peer-Reviewed Toxicity Values (PPRTVs) (EPA 2022a)
- Other toxicity values listed in EPA RSL tables (EPA 2022a)

For chemicals not listed in DTSC Note 10, the toxicity values listed in the most current RSL tables (EPA 2022a) were used, as the toxicity hierarchy vetted and used by the EPA to develop the RSL tables corresponds with the hierarchy listed in the second through fourth bullets presented in this section.

For the construction worker exposure scenario, subchronic noncancer toxicity values were used if available (EPA 2022b).

Surrogate chemicals were selected for toxicity values (for COPCs without toxicity values) based on structural similarity, chemical activity, and mechanisms of toxicity. Surrogate chemicals are discussed in the site-specific risk assessments.

3.1.3.1 Dioxins

Risk for dioxins and dioxin-like compounds were evaluated in accordance with DTSC guidance (DTSC 2017) using dioxin toxicity equivalency factors to calculate a 2,3,7,8-Tetrachlorodibenzo-P-dioxin (2,3,7,8-TCDD) toxic equivalent (TEQ) concentration. Toxicity values for 2,3,7,8-TCDD were used for the calculated 2,3,7,8-TCDD TEQ concentrations (DTSC 2017).

3.1.3.2 Total Petroleum Hydrocarbons

Total petroleum hydrocarbons were evaluated in general accordance with DTSC guidance (DTSC 2021). The following surrogate toxicity values were used for diesel range organics (DROs) based on EPA PPRTVs (EPA 2009):

- Oral reference dose = 0.1 milligram per kilogram per day (mg/kg-day) for aliphatic fractions based on aliphatic hydrocarbon streams within the C9–C18 range (hydrocarbons with 9 to 18 carbon atoms) and containing less than 0.5 percent aromatics (EPA 2009; TPHCWG 1997).
- Reference concentration = 1.0 milligram per cubic meter (mg/m³) for aliphatic fractions based on aliphatic hydrocarbon streams within the C9–C18 range and containing less than 0.5 percent aromatics (EPA 2009; TPHCWG 1997).
- Aromatic compounds are evaluated with benzene, toluene, ethylbenzene, and xylene (BTEX) and PAH data.

3.1.3.3 Mutagenic Chemicals

Chemicals with mutagenic mode of action were evaluated using EPA (2014) default age-dependent adjustment factors:

- 10-fold adjustment for 0 to less than 2 years
- 3-fold adjustment for 2 to less than 16 years
- No adjustment for 16 years or greater

3.1.4 Risk Characterization

3.1.4.1 Risk-based Concentrations

Site-specific carcinogenic and noncarcinogenic risk-based concentrations (RBCs) were derived for the COPCs identified using the EPA RSL calculator (EPA 2022e) with site-specific inputs and DTSC toxicity values if available. The RBCs were used to calculate the risk estimates. The RBC (Appendix F) for each COPC is based on a target noncancer HQ of 1 and a target cancer risk estimate of 1×10^{-6} . The RBCs were derived based on the exposure equations and toxicity value selection hierarchies presented, using EPA exposure equations presented in RSL User's Guide (EPA 2022b) consistent with EPA and DTSC guidance (EPA 2014; DTSC 2019).

3.1.4.2 Cancer Risk and Noncancer Hazard Estimates

For soil and groundwater, risks and hazards were calculated for each exposure scenario. Cancer risk and noncancer hazards were calculated using the following equations:

$$\text{Cancer Risk} = \text{EPC} \times \text{TRL} / \text{RBCc}$$

$$\text{HQ} = \text{EPC} \times \text{THQ} / \text{RBCnc}$$

Where:

Cancer Risk = chemical-specific cancer risk estimate (unitless)

TRL = target cancer risk level used in the derivation of the RBCc, 1×10^{-6} (or 1E-06) (unitless)

RBCc	=	risk-based concentrations for cancer effects (milligram per kilogram [mg/kg] for soil, microgram per liter [$\mu\text{g/L}$] for groundwater)
HQ	=	chemical-specific noncancer hazard quotient estimate (unitless)
THQ	=	target HQ used in the derivation of the RBCnc, 1 (unitless)
RBCnc	=	risk-based concentrations for noncancer effects (mg/kg for soil, $\mu\text{g/L}$ for groundwater)
EPC	=	exposure point concentration (mg/kg for soil, $\mu\text{g/L}$ for groundwater)

For each receptor, the risk estimates were summed to generate cumulative risk estimates using the following equations:

Total Excess Lifetime Cancer Risk (ELCR) Estimate = Sum of Cancer Risk Estimates for COPCs

Total Noncancer Hazard Index (HI) Estimate = Sum of Noncancer HQs for COPCs

A primary contributor to carcinogenic risk or noncancer hazard was identified if a COPC has a cancer risk exceeding 1×10^{-6} or a HQ exceeding 1. Primary contributors also include COPCs that most substantially contribute to a HI greater than 1 where the individual HQs are less than 1. Primary contributors to risk are evaluated for required action in the site-specific risk assessments.

3.1.4.3 Evaluation of Lead

Risk from exposure to lead is assessed differently than intake of other chemicals (DTSC 2022b; EPA 2016b). Much of the toxicological data collected on the effects of lead on the human body relate exposure and effect in terms of the amount of lead in blood associated with an observed effect, expressed as micrograms of lead per deciliter of blood.

Potential risks associated with exposure to lead in soil were evaluated by comparing the lead EPCs to the DTSC Note 3 values (DTSC 2022a) for lead in soil. The residential Note 3 value was used for recreational user and hypothetical future residential exposure scenarios, and the industrial Note 3 value was used for the construction worker exposure scenarios.

3.1.5 Uncertainty Discussion

A number of uncertainties are inherent in the estimates of potential cancer risks and noncancer health hazards that are presented in a HHRA. Uncertainties are generally associated with the sampling strategy and site characterization process, or the assumptions and models that make up the risk assessment process. The potential effect of the uncertainties on risk estimates (i.e., overestimation or underestimation) varies from effects that are readily predicted to those that are difficult to assess. Possible uncertainties associated with each of the four steps of the HHRA (data evaluation, exposure assessment, toxicity assessment, and risk characterization) were considered. Site-specific uncertainties for each site are discussed in Sections 5 through 12.

The estimation of exposure requires many assumptions to describe potential exposure situations. There are uncertainties regarding the likelihood of exposure, frequency of contact with contaminated media, the concentration of COPCs at exposure points, and the duration and period of exposure. In general, these assumptions are upper-bound assumptions, intended to be conservative, and yield an overestimate of the true risk or hazard.

Use of the residential Note 3 value for lead to evaluate a recreational scenario is conservative and overestimates the risk to recreational users who have significantly lower exposure frequencies and exposure durations than a potential resident.

As presented in the California SIWP (Jacobs 2021a), some analytes were expected to have method detection limits (MDLs) that exceeded the screening levels because of laboratory analytical method limitations. Generally, the absence of these nondetected analytes with MDLs greater than the screening levels is supported by the site's operational history.

3.2 Leaching to Groundwater Evaluation

The leaching to groundwater evaluation assesses the attenuation that will occur as a constituent leaches from soil above groundwater into groundwater. COPCs for the potential leaching to groundwater pathway are the chemicals in soil with MDCs exceeding the soil leaching screening levels. These screening levels are the SFRWQCB environmental screening levels designed to be protective of groundwater as a drinking water resource (SFRWQCB 2019, Table S-3). The screening levels are conservative because none of the sites are expected to be used as sources of drinking water, and exceedances do not necessarily mean the groundwater will be impacted. Factors and uncertainties concerning the potential for soil contamination to migrate to groundwater include depth to groundwater, site lithology, organic carbon content of soil, rainfall amounts, and infiltration rates.

Evaluation of groundwater as a drinking water resource is provided for risk management purposes. Because potable use of groundwater at the sites is not a future use, soil leaching values protective of groundwater as a nondrinking water resource were considered (SFRWQCB 2019, Table S-3). Soil leaching values for protection of freshwater habitat were evaluated for COPCs at each site. The other SFRWQCB nondrinking water targets, including protection of saltwater habitat and protection of vapor intrusion into indoor air, are not applicable to the sites and were not evaluated.

The SFRWQCB calculates soil leaching screening levels based on the following equation (SFRWQCB 2019):

$$C_{\text{soil}} \text{ (mg/kg)} = C_{\text{water}} \text{ (}\mu\text{g/L)} * \text{DAF} * 0.001 \text{ (mg/}\mu\text{g)}$$

Where:

C_{soil} = Soil Leaching Screening Level Concentration (mg/kg)

C_{water} = Target Groundwater Concentration ($\mu\text{g/L}$)

DAF = Dilution Attenuation Factor (unitless)

The DAF is calculated based on the following modeled equation (SFRWQCB 2019):

$$\text{DAF} = (6207 \times H) + (0.166 \times K_{\text{oc}})$$

Where:

H = Henry's Law Constant (atmospheres cubic meter per mole, $\text{atm}\cdot\text{m}^3/\text{mol}$)

K_{oc} = organic carbon partition coefficient (cubic centimeter per gram, cm^3/g)

The potential for a complete migration to groundwater pathway is also evaluated by considering whether COPCs have migrated from historical surface releases, if contamination is delineated laterally and vertically, and how contaminant depths compare with estimated or measured depths to groundwater.

3.3 Ecological Risk Assessment

A streamlined ecological risk assessment (ERA) was completed for each site to evaluate potential risks to ecological receptors from contaminants in soils under current and potential future land use conditions. The results of the streamlined ERA will be used in conjunction with the HHRA and leaching to groundwater evaluation (discussed in Sections 3.1 and 3.2, respectively) to provide risk managers with information needed to support risk management decisions.

The streamlined ERAs were performed in general accordance with EPA and DTSC guidance as follows:

- *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments* (EPA 2001)
- *Guidelines for Ecological Risk Assessment* (EPA 1998)
- *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final* (EPA 1997)
- *Guidance for Ecological Risk Assessment at Hazardous Waste Sites and Permitted Facilities* (DTSC 1996)

The streamlined ERAs were conducted in a phased approach as follows (Figure 3-1):

- **Step 1 – Screening Evaluation:** The screening evaluation consists of a very conservative (i.e., protective of the most sensitive ecological receptors) screen of sample-specific detected results for the site compared to available background threshold values (BTVs) and the No Effect Ecological Screening Level (No Effect ESL). Chemicals with observed concentrations that do not exceed the No Effect ESLs are considered to not pose a potential risk to ecological receptors and are eliminated from further evaluation. Chemicals with detected concentrations exceeding the No Effect ESLs are carried forward to Step 2 (Refined Evaluation).
- **Step 2 – Refined Evaluation:** The refined evaluation consists of a comparison of sample-specific results against a refined screening level that is based on a lowest observed adverse effect level (LOAEL) for wildlife. The chemicals with observed concentrations that do not exceed the Low Effect ESL are considered to not pose a significant risk to ecological receptors. Chemicals with detections exceeding the Low Effect ESL are carried forward to Step 3 (Site-Specific Evaluation).
- **Step 3 – Site-Specific Evaluation:** The site-specific evaluation consists of a comparison of sample-specific detected results against site-specific ecological preliminary remedial goals (EcoPRGs) developed for avian and mammalian receptors that may potentially be found at the sites (see Section 3.3.4 for details). Chemicals with observed concentrations exceeding the EcoRPGs are carried forward to Step 4 (Weight of Evidence Evaluation).
- **Step 4 – Weight of Evidence Evaluation:** The weight of evidence evaluates multiple lines of qualitative and quantitative evidence to place the potential risks into context of site-specific conditions. These lines of evidence include the results from Steps 1 through 3, comparisons to regional background concentrations, potential for ecological receptors to use the site, available habitat, and expected future use of the site. The results of the weight of evidence evaluation are used to inform risk managers of chemicals considered to pose a potential risk to ecological receptors so that remedial decisions can be made for the site.

The streamlined ERAs were conducted under the following assumptions and constraints. These are typical for ERAs performed for both public and private entities:

- Evaluation of current exposures is derived from existing conditions.
- The abiotic medium of primary ecological concern is soil.
- Measured chemical concentrations are assumed to be at steady-state levels.
- Chemicals never detected or not analyzed for in soil samples are not evaluated.
- Each chemical measured in collected samples is considered to have similar bioavailability as the chemical form used in the toxicity studies that are used to estimate potential for risk.
- Toxicological information used represents information currently available from literature and database searches.

3.3.1 Ecological Conceptual Site Model

The ecological conceptual site model combines information on potential sources of contaminants, ecological exposure pathways, and potential ecological receptors to provide an overall picture of site-related exposures and to focus the evaluation of chemical constituents in this streamlined ERA.

The known site history for each of the sites, physical setting, and biological resources are presented in the California SIWP (Jacobs 2021a) along with the potential future uses of each site and potential exposure pathways. The sites evaluated in this California SI Report are summarized in Appendix G, Table G-1.

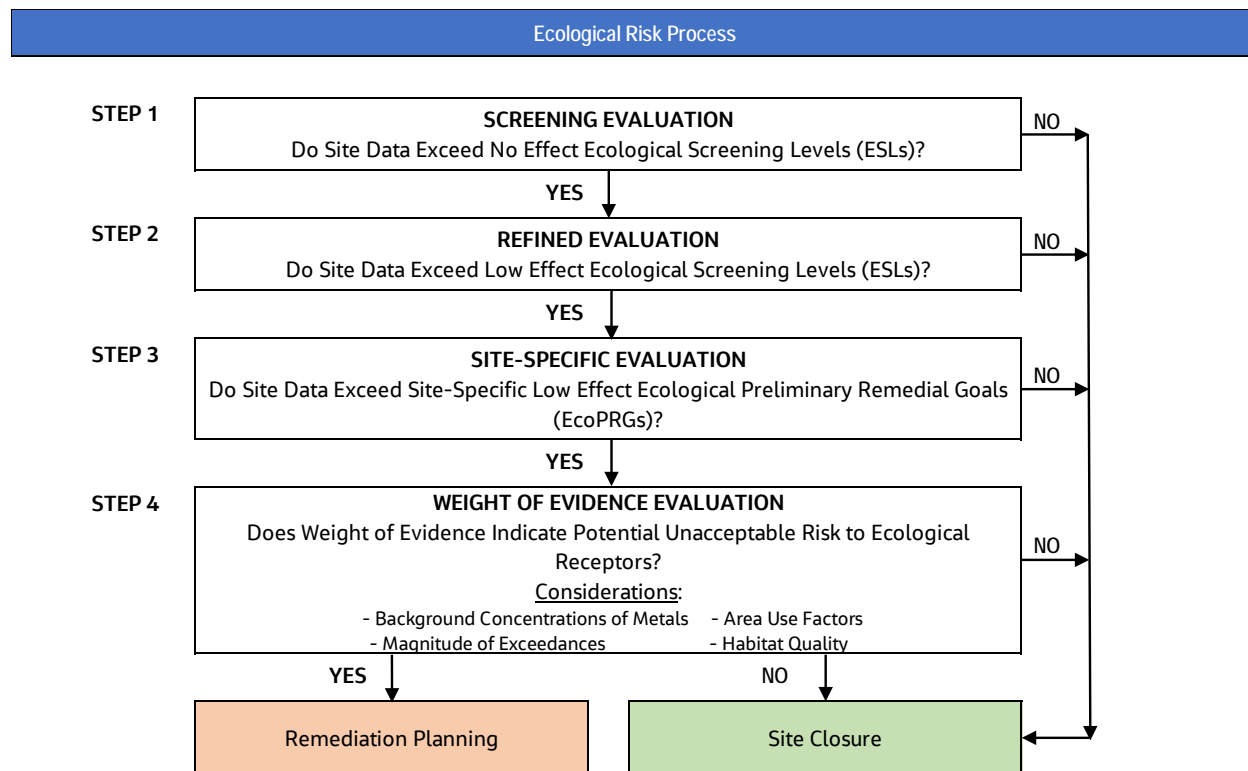


Figure 3-1. Ecological Risk Assessment Process

Potential contaminants include metals, dioxin/furans, PAHs, PCBs, TPHs, semivolatile organic compounds (SVOCs), and VOCs. The primary impacted media are soils. Release and transport mechanisms may include

erosion and surface runoff; infiltration and leaching to groundwater; volatilization, weathering, and/or erosion into soil vapor and ambient air.

Based on review of existing information, the following exposure pathways are considered potentially complete and are evaluated quantitatively under current or potential future land uses:

- Potential exposure to soil from 0 to 1 foot bgs is considered a potentially complete exposure pathway for terrestrial receptors, including terrestrial plants, soil invertebrates, birds, and mammals.
- Potential exposure to soil from 0 foot to 6 feet bgs is considered a potentially complete exposure pathway for burrowing wildlife.
- Potential exposure to onsite groundwater is considered incomplete as depth to groundwater exceeds exposure depths for terrestrial plants (4 feet bgs).

Receptor groups that have the potential for exposure at each site include terrestrial plants, soil invertebrates, birds, and mammals. For purposes of the streamlined ERAs, each site is evaluated as a single exposure area unless otherwise noted. Implicit in the exposure area concept is the assumption that the receptor has equal likelihood of exposure to contamination at any individual location within the identified exposure area.

Site ecological evaluation data are provided in Appendix G. All data collected from 0 foot to 6 feet bgs that met data validation requirements were included in the streamlined ERA including both native and field duplicates. All evaluations in the streamlined ERA are completed on a sample-by-sample basis.

3.3.2 Step 1 – Screening Evaluation

The Screening Evaluation is a conservative estimate of potential risks. The exposure assumptions are the most conservative because risk estimates are completed on a sample-by-sample basis, it is assumed that ecological receptors spend 100 percent of their time (area use factor [AUF] of 1) at that location, and comparisons are against the most conservative (i.e., smallest) toxicity criteria as well as regional background concentrations.

The ESLs used in the screening evaluation are based on No Effect levels, are intended to be protective of all ecological receptors exposed to soil and are widely accepted values available from agencies or peer-reviewed literature sources. No Effect ESLs used in Step 1 were selected from the following sources in hierarchical order:

1. EPA ecological soil screening levels (EcoSSLs) (EPA 2008)
2. Los Alamos National Laboratory (LANL 2020)
3. EPA Region 4 soil screening values (EPA 2018)

Each of the above sources include soil ESLs for plants, soil invertebrates, birds, and mammals. The most conservative (i.e., smallest) ESL from among these terrestrial receptor groups was selected from that source where it appears in the overall hierarchy. The selected No Effect ESLs are summarized in Appendix G, Table G-2 for analytes evaluated as part of this investigation.

Analytes were retained for further evaluation in Step 2 (Refined Evaluation) if at least one detected concentration exceeded the No Effect ESL. In addition, all analytes retained for further evaluation in Step 2 are also included in Step 4 (Weight of Evidence Evaluation). If the detected concentration did not exceed the No Effect ESL, there is high degree of confidence that the risks to ecological receptors are acceptable given the conservative assumptions used.

3.3.3 Step 2 – Refined Evaluation

The Refined Evaluation provides additional information on potential risks for ecological receptors. The refined evaluation remains an overly conservative evaluation because it is still conducted on a sample-by-sample basis assuming 100 percent site use. The only difference from the Step 1 Screening Evaluation is that a Low Effect ESL is used instead of the No Effect ESL.

The Low Effect ESLs are based on LOAELs and are indicative of a level above which potential adverse effects may be observed in some local populations of wildlife (birds and mammals). Low Effect ESLs for birds and mammals because risk management decisions are made on these receptor groups. The soil Low Effect ESLs were obtained from LANL (2020) and are generally the most conservative value between birds and mammals across all feeding guilds including herbivores, insectivores, omnivores, and carnivores. For the cases where the most conservative Low Effect ESL is lower than the No Effect ESL, the most conservative Low Effect ESL that is greater than the bird or mammal No Effect ESL was selected. This condition may occur when multiple sources and receptor groups are used to identify a single screening level. The only instance where this deviation from the standard hierarchy occurred in this analysis was in the selection of the Low Effect ESL for nickel. The most conservative Low Effect ESL for nickel from LANL (2020) was more conservative than the most conservative No Effect ESL for nickel from EPA (2008). In this instance the smallest Low Effect ESL for nickel from LANL that was greater than the EPA No Effect ESL was selected.

Analytes were retained for further evaluation in Step 3 if the detected concentration exceeded the Low Effect ESL. If the detected concentration does not exceed the Low Effect ESL, there is high degree of confidence that the risks to ecological receptors are acceptable because of the conservative assumptions used; however, all analytes evaluated in Step 2 are also included in the weight of evidence evaluation (Step 4) so that both qualitative and quantitative information can be considered in the recommendations for risk management.

3.3.4 Step 3 – Site-Specific Evaluation

The Site-Specific Evaluation includes multiple refinements to further evaluate potential risks and reduce uncertainties. Sites with analytes retained after Step 2 may be evaluated with one or more of these refinements depending on the analytes and results of previous steps:

- Representative species indicative of the ecological setting around the site are identified and species-specific life history parameters are used to calculate site-specific EcoPRGs.
- Low Effect EcoPRGs are developed for birds and mammals to provide a range of potential risk estimates.
- Risk estimates are completed in a stepwise manner so that contributions from soil versus diet are more readily observed and exposure pathways that may be driving risk can be identified.
- Species-specific home ranges may be used to calculate an AUF for the site that is then applied to the risk estimate to provide a more realistic estimate of potential exposure.
- Site data for metals are compared to regional BTVs to estimate the potential risk resulting from site activity versus natural background levels.
- All analytes evaluated in Step 3 are carried forward to Step 4 (Weight of Evidence Evaluation).

Specific representative species were not identified in Step 1 or Step 2; rather all functional groups were evaluated (i.e., terrestrial plants, soil invertebrates, birds, and mammals) together using the most conservative assumptions for all receptors. To evaluate ecological exposure for smaller subsets of wildlife, representative species are selected for the primary functional feeding guilds that may have potentially

complete exposure pathways. Consistent with *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final* (EPA 1997), representative species are preferably those that have ecological relevance, are of societal value, and are susceptible to chemical stressors at the site. These factors were used to select representative species that have been observed or are expected to occur at the site and meet one or more of the following criteria:

- Receptor occurs in the general area and habitat is available onsite to support the receptor.
- Receptor has a small home range.
- Receptor is representative of a feeding guild.

Representative species identified for the RECs include the following:

- Herbivores: Mourning dove (*Zenaida macroura*), deer mouse (*Peromyscus maniculatus*)
- Invertivore: Hermit thrush (*Catharus guttatus*), vagrant shrew (*Sorex vagrans*)
- Carnivores: Red-tailed hawk (*Buteo jamaicensis*), coyote (*Canis latrans*)

3.3.4.1 Derivation of Site-Specific EcoPRGs

EcoPRGs are species-specific RBCs of chemicals in soil that correspond to reported effect levels for a given species and are reported in mg/kg. The EcoPRGs were derived for each of the selected representative species using a food-chain uptake model that accounts for the transfer of chemicals to upper trophic levels (birds and mammals) through the incidental ingestion of soil and ingestion of food (forage or prey) that has accumulated chemicals from the site. The derivation model for EcoPRGs follows the generalized food chain uptake model from Sample et.al (2000) and is shown below. The major inputs to the equation are described below and include toxicity reference values (TRVs), food ingestion rates (FIR), dietary composition (Pi), and proportion of diet that is soil (Ps). Supporting tables and calculations are included in Appendix G.

$$EcoPRG = \frac{TRV}{[P_s \cdot FIR] + [\sum_{i=1}^N B_i \cdot P_i \cdot FIR]}$$

Where:

$$B_i = [Soil] \cdot BAF$$

Where:

EcoPRG	=	ecological preliminary remedial goal in soil (mg/kg)
TRV	=	no effect or low effect toxicity reference value (mg/kg body weight per day)
P _s	=	proportion of diet that is soil (unitless)
FIR	=	food ingestion rate normalized to body weight (kg/kg body weight per day)
B _i	=	concentration of chemical in biota type (i) (mg/kg)
P _i	=	proportion of diet that is biota type (i)
BAF	=	bioaccumulation factor (dry weight)
[Soil]	=	concentration of the analyte in soil

Toxicity Reference Values (TRVs) – TRVs for birds and mammals are represented as a dosage (the amount of an analyte per unit body weight per day) that has been reported to result in an adverse effect. The TRVs for birds and mammals were selected using the following hierarchy of sources and are presented in Appendix G, Table G-3 (birds) and Table G-4 (mammals) for chemicals retained for further evaluation in the site-specific evaluation:

1. Recommended no observed adverse effect level (NOAEL) TRVs and derived LOAEL-based TRVs from the EPA EcoSSL documentation (EPA 2005a, 2005b; EPA 2007b, 2007c; EPA 2008)
2. Toxicological benchmarks for wildlife (Sample et al. 1996)

3. NOAEL and LOAEL TRVs from LANL (2020)
4. Other peer-reviewed literature (cited as appropriate)

TRVs are classified into two categories: No Effect TRVs and Low Effect TRVs. The No Effect TRVs are based on the chronic NOAEL and reflect the highest exposure that has been demonstrated to exert no adverse effect. The Low Effect TRVs are based on the chronic LOAEL and reflect exposure that has been demonstrated to exert an adverse effect.

For analytes with information in USEPA's EcoSSL documentation (sources in item 1 above), the NOAEL TRV that was used to derive the final EcoSSL was selected if it had the highest level of confidence over other available values. In addition, LOAEL toxicity results for growth and reproduction studies were used to derive a geometric mean LOAEL TRV.

For analytes without EPA EcoSSLs (sources in item 1 above), appropriate toxicity studies from peer-reviewed literature were selected based on several criteria. Specifically, toxicity studies were selected for use if exposure was chronic or during reproduction (a critical life stage), the dosing regime was sufficient to identify both a NOAEL and a LOAEL, and the study considered ecologically relevant effects (for example, growth or reproduction). Literature-derived TRVs are adjusted through use of uncertainty factors (where applicable) to derive a final chronic No Effect TRV and chronic Low Effect TRV.

Receptor Exposure Factors – Species-specific life history factors are used to estimate the exposure to chemicals for each of the representative species selected for the site. These include body weight; food ingestion rate (FIR); proportions of the receptors diet (Pi) composed of plants, invertebrates, or mammals; and fraction of diet composed of incidental soil ingestion (Ps). Exposure factors and allometric equations to estimate FIRs were obtained from the literature.

Bioaccumulation Factors (BAFs) – The measurement or estimation of concentrations of chemicals in wildlife food is necessary to evaluate how much of a receptor's exposure is through food versus direct uptake of contaminated media. Although the preferred data are direct measurements of concentrations in biota samples collected from the site, such data were not available for the Project. Therefore, literature-reported values or uptake models are used to estimate bioaccumulation. BAFs and regression models were obtained from the EcoSSL documentation (EPA 2007a), Sample et al. (1998a, 1998b), LANL (2020), Bechtel-Jacobs (1998), and Baes et al. (1984). A default BAF of 1 was used in the absence of reliable values. BAFs and regression models for analytes retained for further evaluation in the site-specific evaluation are presented in Appendix G, Table G-5.

EcoPRGs – No Effect EcoPRGs and Low Effect PRGs were developed for those analytes that had exceedances of the Low Effect ESL in Step 2 and are presented in Appendix G, Table G-6. The most conservative EcoPRG for birds and the most conservative EcoPRG for mammals were used to estimate potential risks in the site-specific evaluation and are shown in the screening-level summary table (Appendix G, Table G-2).

3.3.4.2 Site-Specific Risk Estimation

The site-specific risk estimates were calculated using the No Effect and Low Effect EcoPRGs as follows:

$$HQ = \frac{[Soil]}{EcoPRG} \times AUF$$

Where:

HQ	=	hazard quotient (unitless)
[Soil]	=	sample-specific concentration of analyte in soil (mg/kg)
EcoPRG	=	ecological preliminary remedial goal in soil (mg/kg)
AUF	=	area use factor

EcoPRG – The most conservative bird and mammalian No Effect EcoPRG or Low Effect EcoPRG. All EcoPRGs are presented in Appendix G, Table G-6 and the most conservative values that are used in the risk estimation are summarized in Appendix G, Table G-2.

Area Use Factors – Many wildlife species are highly mobile, covering relatively large areas in search of food, water, and shelter. As such, the exposure that individual receptors experience depends on the amount of time they spend in the exposure area. The species-specific AUF is calculated by dividing the exposure area (acres) by the foraging range (acres) of the receptor. If the foraging range is smaller than the exposure area, the AUF defaults to 1. The AUFs for each site are presented in Appendix G, Table G-7.

The site-specific risk estimates were calculated using the Low Effect EcoPRGs and AUFs for hermit thrush and vagrant shrew as these were the receptors with the most conservative EcoPRGs for the analytes retained for further evaluation in Step 3. The risk estimates were completed both with and without the application of the receptor/site-specific AUFs. The risk estimations for each site are presented in Appendix G, Table G-9 through Table G-17.

In addition, sample-specific HIs were computed for groups of chemicals that were retained for evaluation in Step 3 including low molecular weight PAHs, high molecular weight PAHs, and Aroclors. The sample-specific Low Effect HI was computed by summing the Low Effect HQs for each detected analyte within the chemical group. The sample-specific Low Effect HQs were computed using the most conservative Low Effect EcoPRG between birds and mammals or the Low Effect ESLs from Step 2 if an EcoPRG was not developed for a given analyte. All Low Effect ESLs and EcoPRGs are shown in Appendix G, Table G-2. The sample-specific HIs were computed both with and without application of the most conservative receptor AUFs for each site. The sample-specific HIs are shown for all sites in Appendix G, Table G-18.

3.3.5 Step 4 – Weight of Evidence Evaluation

Not all the site risk estimates with HQs exceeding 1 are ultimately ecologically meaningful. The weight of evidence component (Step 4 of the streamlined ERA) is an evaluation of the lines of evidence supporting or refuting the risk estimates and an interpretation of the significance of the adverse effects on the identified assessment endpoints. To provide confidence in any decision-making regarding risk to ecological resources at a site, potential effects to ecological receptors is assessed using an approach that considers multiple lines of evidence collectively, in accordance with EPA guidance in *Guidelines for Ecological Risk Assessment* (EPA 1998).

The following lines of evidence are considered where applicable for each exposure area and exposure media.

- Site risk estimates at the No Effect ESL and Low Effect ESL
- Site risk estimates using the No Effect EcoPRG and Low Effect EcoPRG (with and without application of the AUF)
- Sample-specific chemical group risk estimates using the Low Effect EcoPRG or Low Effect ESL (with and without application of the AUF)
- Comparison of site concentrations to background concentrations for metals

- AUFs
- Current and potential future land use and habitat quality
- Potential receptors/presence of federal or state threatened and endangered species
- Uncertainties and limitations

Results of Step 4 are used to provide recommendations for risk management or no further evaluation for ecological receptors. Step 4 results for each site are summarized in the site-specific sections in tabular format. Each chemical that was retained after Step 1 is presented in the site-specific summary tables along with a listing of the number of samples exceeding the No Effect ESL, Low Effect ESL, bird EcoPRG, mammal EcoPRG, and background concentrations. The weight of evidence evaluation is summarized into a letter code (specific to each site) for all chemicals with the same rationale to reduce redundancy in the text. The codes focus primarily on the quantitative elements however, the qualitative lines of evidence are also considered and are discussed as needed where they impact the final recommendation. Uncertainties and limitations that are standard in the practice of risk assessment are summarized in Appendix G, Table G-8.

Table 3-1. Exposure Assumptions for the Human Health Risk Assessment

Exposure Parameter	Symbol	Units	Future Construction Worker	Source	Hypothetical Future Resident	Source
Exposure Concentration (soil)	C _s	mg/kg	95% UCL or maximum	a	95% UCL or maximum	a
Exposure Concentration (groundwater)	C _w	µg/L	Maximum	a	Maximum	a
Adult Body Weight	BW _a	kg	80	b	80	b
Child Body Weight	BW _c	kg	--	--	15	b
Exposure Frequency (soil)	EF _s	days/yr	250	b	350	b
Exposure Frequency (groundwater)	EF _w	days/yr	250	b	350	b
Adult Exposure Duration	ED _a	yrs	1	b	20	b
Child Exposure Duration	ED _c	yrs	--	--	6	b
Exposure Time	ET	hrs/day	8	b	24	b
Carcinogenic Averaging Time	AT _c	days	25,550	b	25,550	b
Adult Noncarcinogenic Averaging Time	AT _n	days	365	b	7,300	b
Child Noncarcinogenic Averaging Time	AT _n	days	--	--	2,190	b
Adult Incidental Soil Ingestion Rate	IRS _a	mg/day-dry	100	b	100	b
Child Incidental Soil Ingestion Rate	IRS _c	mg/day-dry	--	--	200	b
Adult Groundwater Ingestion Rate	IRW _a	L/day	--	--	2.5	b
Child Groundwater Ingestion Rate	IRW _c	L/day	--	--	0.78	b
Adult Skin Surface Area (soil)	SA _a	cm ²	3,470	b	6,032	c
Child Skin Surface Area (soil)	SA _c	cm ²	--	--	2,373	c
Adult Skin Surface Area (groundwater)	SA _a	cm ²	3,470	b	19,652	b
Child Skin Surface Area (groundwater)	SA _c	cm ²	--	--	6,365	b
Dermal Absorption Fraction (from soil)	ABS	unitless	Chemical-specific	d	Chemical-specific	d
Dermal Permeability Coefficient (groundwater)	K _p	cm/hr	Chemical-specific	d	Chemical-specific	d
Dermal Event Duration, Child (groundwater)	t _{event}	hr/event	--	--	0.54	b
Dermal Event Duration, Adult (groundwater)	t _{event}	hr/event	--	--	0.71	b
Adult Soil-to-Skin Adherence Factor	AF _a	mg/cm ²	0.12	b	0.07	b
Child Soil-to-Skin Adherence Factor	AF _c	mg/cm ²	--	--	0.2	b
Particulate Emission Factor	PEF	m ³ /kg	Site-specific	f	1.36E+09	e
Volatilization Factor	VF	m ³ /kg	Chemical-specific	e	Chemical-specific	e

Notes:

a = Based on SI sampling.

b = Based on US Environmental Protection Agency (EPA 2014), Human Health Exposure Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors, OSWER Directive 92100.1-120. February 6 2014.

c = EPA 2022b

d = Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final (EPA 2004).

e = Soil Screening Guidance: Users Guide (EPA 1996).

f = Site-specific using RSL calculator (EPA 2022c).

Abbreviations:

-- = not applicable

cm/hr = centimeters per hour

cm² = square centimeters

days/yr = days per year

kg = kilograms

L/day = liters per day

m³/kg = cubic meters per kilogram

m³/kg = cubic meters per kilogram

m³/kg = cubic meters per kilogram

m³/kg = cubic meters per kilogram

m³/kg = cubic meters per kilogram

m³/kg = cubic meters per kilogram

4. Copco No. 1 Dynamite Cave

This section describes the field activities and recommended next steps for closure of the Copco No. 1 Dynamite Cave, which was suspected to have formerly stored dynamite (AECOM 2018). Although PacifiCorp noted that any dynamite had likely been removed from the cave, the absence of explosives or explosive residue within the cave could not be confirmed. Consequently, the cave was included as a REC to be addressed under Exhibit C of the Agreement. Fieldwork to assess the cave was performed according to Section 3.4 (Copco No. 1 Dynamite Cave) of the California SIWP.

4.1 Field Activities

On March 2, 2022, a scaffold was erected and inspected to allow for safe entry to the cave and for removal of the wooden panels blocking the cave entrance. The cave was allowed to vent overnight and was accessed and inspected the following day by a qualified unexploded ordinance (UXO) technician. During the initial inspection, a vertical shaft was discovered at the back of the cave. The shaft was determined to extend more than 20 feet below the plywood flooring. On March 9, 2022, a video survey of the shaft was completed. Dynamite and residual explosives were not observed within the cave or at the bottom of the shaft in the cave (Appendix H).

4.2 Analytical Results

On March 3, 2022, the presence or absence of residual explosives within the cave was determined by a qualified UXO technician through the use of Expray #1 for Group A explosives, Expray #2 for Group B explosives, and Expray #3 for improvised explosives with nitrate. Swipe samples were collected from six representative locations of the cave's floor, from three representative locations of the cave's ceiling, and from three representative locations of each sidewall. All swipe sample locations tested negative for the presence of residual explosives.

4.3 Recommended Actions

Because no explosives or explosive residue were present in the cave, no additional fieldwork is planned, and the Copco No. 1 Dynamite Cave site is recommended for closure (Section 1.2).

5. Copco No. 1 Debris Pile/Scrap Yard

This section summarizes the field activities and analytical laboratory results and provides the risk assessments and recommended next steps for closure of the Copco No. 1 Debris Pile/Scrap Yard.

5.1 Background

The *Draft Phase I Environmental Site Assessment of the Parcel B Lands* (AECOM 2020a) describes a scrap material laydown yard on a graded cinder borrow area located approximately one-quarter mile south of Copco Road and one-quarter mile northwest of the Copco No. 1 Dam. Soil at the site is generally classified as Lava flows-Xerorthents complex (USDA 2021).

For soil assessment purposes, the site was subdivided into four areas (Figure 5-1). Area 1, located on a hillside in the northern portion of the graded area, was found to contain piles of broken ceramic toilet bowls and seats with bullet holes. Area 2, located near the center of the graded area, was found to contain a burn pit with materials piled up to be burned (Photograph 5-1).



Photograph 5-1. Copco No. 1 Debris Pile/Scrap Yard Looking Southeast at Burn Pit (Jacobs 2021a)

Area 3, located in the southern portion of the graded area, was found to contain wood (some burned) and metal debris strewn over a large area (Photograph 5-2). Area 4, located on the downslope of the southern

edge of the graded area, was found to contain a pile of concrete footings, a small broken concrete box, and wood planks.

Also identified were the following:

- A scrap material storage area west of Area 3 and along the southern edge of the graded area. The scrap material storage area contains floating docks, walkways, corrugated metal culverts, and used building materials.
- In the southwest corner of the graded area, an embankment of gravel/soil, potentially used for grading and/or backfill.
- A small pile of ceramic electrical insulators on the western edge of the graded area.

The scrap material storage area, gravel/soil embankment, and pile of ceramic insulators were not found to contain materials with COPCs. The field team inspected these areas and did not observe signs of potential contamination or stressed vegetation. Consequently, soil samples were not collected in these areas.



Photograph 5-2. Copco No. 1 Debris Pile/Scrap Yard Looking East at Area of Strewn Burned Material and Direct-push Technology Rig (Jacobs 2022a)

5.2 Field Activities

On March 3, 2022, the planned soil borings for the Copco No. 1 Debris Pile/Scrap Yard were marked and cleared for utilities (Section 2). The visually impacted areas were delineated with a GPS unit. Select soil borings were moved to be better located within the visually impacted areas (Figure 5-1).

On March 10 and 11, 2022, 17 soil borings were advanced by hand augering and DPT drilling to depths of 2.5 or 6 feet bgs. Groundwater was not observed in any of the soil borings. Soil samples were collected from shallow and deep soil borings and at discrete intervals of varying depths (Table 5-1).

Table 5-1. Copco No. 1 Debris Pile/Scrap Yard Borehole Summary

Area	Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
1. Ceramic Toilet Bowls and Seats	C1DP-01	0-0.5, 1-1.5, 2-2.5	2.5	HA	About 6 feet up cinder slope
	C1DP-02	0-0.5, 1-1.5, 2-2.5	2.5	HA	About 5 feet up cinder slope
	C1DP-03	0-0.5, 1-1.5, 3-3.5, 5.5-6	6	HA/DPT	At base of cinder slope
2. Burn Pit	C1DP-04	0-0.5, 1-1.5, 2-2.5	2.5	HA	North edge of burn pit
	C1DP-05	0-0.5, 1-1.5, 2-2.5	2.5	HA	West edge of burn pit
	C1DP-06	0-0.5, 1-1.5, 3-4.5, 4.5-6	6	HA/DPT	Center of burn pit
3. Strewn Burned Material	C1DP-07	0-0.5, 1-1.5, 2-2.5	2.5	HA	--
	C1DP-08	0-0.5, 1-1.5, 2-2.5	2.5	HA	--
	C1DP-09	0-0.5, 1-1.5, 2-2.5	2.5	HA	Deep boring changed to C1DP-13
	C1DP-10	0-0.5, 1-1.5, 2-2.5	2.5	HA	--
	C1DP-11	0-0.5, 1-1.5, 2-2.5	2.5	HA	Deep boring changed to C1DP-14
	C1DP-12	0-0.5, 1-1.5, 2-2.5	2.5	HA	--
	C1DP-13	0-0.5, 1-1.5, 3-6	6	HA/DPT	Extended to 6 feet bgs
	C1DP-14	0-0.5, 1-1.5, 3-6	6	HA/DPT	Extended to 6 feet bgs
4. Concrete and Wood Planks	C1DP-15	0-0.5, 1-1.5, 3-6	6	HA/DPT	Extended to 6 feet bgs because C1DP-16 was inaccessible by DPT; top of slope
	C1DP-16	0-0.5, 1-1.5, 2-2.5	2.5	HA	Inaccessible by DPT; at base of lumber pile
	C1DP-17	0-0.5, 1-1.5, 2-2.5	2.5	HA	Next to concrete debris

Notes:

-- = no comment

bgs = below ground surface

DPT = direct-push technology

HA = hand auger

In Area 3, soil borings C1DP-09 and C1DP-11 were changed from deep to shallow borings, and soil borings C1DP-13 and C1DP-14 were changed from shallow to deep borings based on visual observations of potential burned material at surface grade in the vicinity of borings C1DP-13 and C1DP-14. In Area 4, soil boring C1DP-15 was changed from a shallow to a deep boring and soil boring C1DP-16 was changed from a deep to a shallow boring because the DPT rig could not access soil boring C1DP-16.

Site soils consisted of loose, fine to coarse sand and gravel-sized scoria and pumice rock. The loose, coarse-grained material resulted in poor hand auger recoveries at depths shallower than 2.5 feet bgs, and use of the DPT rig to advance soil borings to depths greater than 2.5 feet bgs typically resulted in pulverization of the loose volcanic rock into fine-grained material. Consequently, the planned sample intervals for some borings were altered to accommodate collection of a sufficient volume of material for laboratory analysis. At soil boring C1DP-06, the planned sample interval of 3.0-3.5 feet bgs was changed

to 3.0-4.5 feet bgs, and the planned sample interval of 5.5-6.0 feet bgs was changed to 4.5-6.0 feet bgs. At soil borings C1DP-13, C1DP-14, and C1DP-15, the deepest sample intervals (3.0-3.5 and 5.5-6.0 feet bgs) were combined into a single sample interval (3.0-6.0 feet bgs).

5.3 Analytical Results

The analytical results were compared to the site-specific screening levels (Appendix D) established in the California SIWP. Human health screening levels were exceeded for arsenic, cobalt, lead, and dioxins. Leaching to groundwater screening levels were exceeded for bis(2-chloroethyl) ether and naphthalene. Ecological screening levels were exceeded for dioxins and various metals (Table 5-2, Figure 5-1).

Table 5-2. Copco No. 1 Debris Pile/Scrap Yard Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels

Areas	Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
1. Ceramic Toilet Bowls and Seats	C1DP-01	<SLs	<SLs	Boron, Cobalt, Selenium
	C1DP-02	Cobalt	<SLs	Boron, Cobalt, Selenium
	C1DP-03	Cobalt	<SLs	Cobalt, Copper, Selenium
2. Burn Pit	C1DP-04	<SLs	<SLs	Dioxins, Cobalt, Copper, Selenium,
	C1DP-05	<SLs	<SLs	Dioxins, Cobalt, Copper, Selenium
	C1DP-06	Dioxins, Arsenic	Naphthalene	Dioxins, Arsenic, Boron, Cobalt, Copper, Selenium
3. Strewn Burned Material	C1DP-07	<SL	<SLs	<SLs
	C1DP-08	<SL	<SLs	Selenium
	C1DP-09	<SL	<SLs	Dioxins
	C1DP-10	<SL	<SLs	<SLs
	C1DP-11	<SL	<SLs	<SLs
	C1DP-12	<SL	<SLs	Molybdenum, Selenium
	C1DP-13	<SL	<SLs	Cobalt, Selenium
	C1DP-14	Lead	Naphthalene	Dioxins, Cobalt, Lead, Selenium
4. Concrete and Wood Planks	C1DP-15	Cobalt	<SLs	Cobalt, Selenium
	C1DP-16	<SL	Bis(2-chloroethyl) ether	Cobalt, Selenium
	C1DP-17	<SL	<SLs	Cobalt, Copper, Selenium

Notes:

SLs = screening levels

<SLs = does not exceed screening levels

The COPCs carried forward into the risk assessments are based on the risk assessment screening criteria discussed in Sections 3.1 (human health), 3.2 (soil leaching to groundwater), and 3.3 (ecological).

5.4 Site-Specific Human Health Risk Assessment

5.4.1 Data Evaluation

The human health COPCs in soil at the Copco No. 1 Debris Pile/Scrap Yard are dioxins (2,3,7,8-TCDD TEQ), arsenic, cobalt, and lead (Table 5-2, Appendix F), in addition to iron, which is not shown in Table 5-2. Iron is included because iron does not have a background value and because iron concentrations exceed the risk-based screening level based on a HQ of 0.1 (Section 3.1).

5.4.2 Exposure Assessment

Default DTSC and EPA exposure parameters were used (Appendix F) with modifications for the future passive recreational user (Section 3.1.2). Additional site-specific parameters were assumed for the future construction worker exposure scenario based on the input requirement in the RSL calculator. For general construction activities (excavation and grading), "soil-other construction activities" were selected for the RSL calculator, and the following site-specific parameters were entered as inputs:

- Total area: 2.1 acres (conservative estimate)
- Area dozed: 1 acre (conservative estimate)
- Area graded: 1 acre (conservative estimate)
- Area excavated: 4,050 square meters (assumes an approximately 1-acre excavation)
- Dozing and grading blade length: 3.7 meters (based on standard equipment)
- Average depth of excavation: 3 meters

Areas are considered to be conservative because they include the total of the limits of SIWP (Figure 5-1), which are larger than visually impacted areas.

5.4.3 Toxicity Evaluation

Except for the surrogate toxicity values used for dioxins, as presented in Section 3.1.3, no COPCs requiring surrogate toxicity values were identified.

5.4.4 Human Health Risk Assessment Results

The HHRA analysis indicates that for the future passive recreational user and future construction worker scenarios, the cumulative ELCRs and HIs do not exceed $1E-06$ and 1, respectively, for surface soil and mixed-zone soil (Table 5-3).

For the hypothetical future residential scenario, the cumulative ELCRs are $2E-05$ for surface soil and $2E-05$ for mixed-zone soil (Table 5-3), which exceed the EPA point of departure of $1E-06$, but do not exceed the EPA risk management range ($1E-06$ to $1E-04$) (EPA 1989). The only primary contributor to the ELCRs for both depth intervals is arsenic, which is naturally occurring. The HI is 6 for both surface soil and mixed-zone soil, which exceeds the target HI of 1. The primary contributor to the HI is arsenic. Arsenic, cobalt, and iron are naturally occurring and not related to activities at the site. The EPCs of arsenic are 1.84 mg/kg in surface soil and 1.92 mg/kg in mixed-zone soil, both less than the background value of 19 mg/kg. There are no background values available for cobalt and iron, but concentrations are not considered to be related to site activities. Excluding naturally occurring metals, the HIs for the hypothetical future residential scenario are 0.05 for surface soil and 0.2 for mixed-zone soil, both less than the target HI of 1.

No further action is required for soil at Copco No. 1 Debris Pile/Scarp yard to address human health risk concerns for soil.

The EPCs of lead are 10.89 mg/kg in surface soil and 11.84 mg/kg in mixed-zone soil, which are less than the DTSC Note 3 values (DTSC 2022a) for residential and industrial exposure scenarios (80 mg/kg and 500 mg/kg, respectively). Therefore, no further action is required for lead in soil.

5.4.5 Uncertainty Discussion

In general, the number and location of soil samples are considered adequate for risk assessment purposes, and the types of COPCs and EPCs identified are considered representative of potential releases within the Copco No. 1 Debris Pile/Scrap Yard. Because samples were collected at suspected release locations, the exposure area data are likely biased high and the risks potentially overestimated.

5.4.6 Human Health Risk Assessment Conclusions

Estimated risks are below target thresholds for future passive recreational users, future construction workers, and hypothetical future residents from potential exposure to soil, excluding naturally occurring metals, at the Copco No. 1 Debris Pile/Scrap Yard. No further action is required.

5.5 Leaching to Groundwater Evaluation

The soil leaching COPCs at the Copco No. 1 Debris Pile/Scrap Yard are bis(2-chloroethyl) ether and naphthalene (Table 5-2, Appendix F).

Groundwater was not encountered during the site investigation sampling and depth to groundwater is unknown. The Copco No. 1 Reservoir is located approximately 1,500 feet southeast of the Copco No. 1 Debris Pile/Scrap Yard and is approximately 300 feet lower in elevation.

5.5.1 Bis(2-chloroethyl) ether

Bis(2-chloroethyl) ether was detected at a concentration exceeding the soil leaching screening level of 3.4E-05 mg/kg in only 1 of 44 samples. The sample was collected in shallow surface soil (1 to 1.5 feet bgs) at location C1DP-16 at a concentration of 0.0065 J mg/kg, where J indicates an estimated value. In all other samples, bis(2-chloroethyl) ether was not detected at concentrations that exceeded MDLs.

The concentration of bis(2-chloroethyl) ether detected at C1DP-16 is less than the soil leaching value protective of groundwater as a nondrinking water resource (0.33 mg/kg, Table 5-4).

Because bis(2-chloroethyl) ether was only detected in one soil sample at 1 to 1.5 feet bgs at C1DP-16 and was not detected in deeper samples collected at C1DP-16 (2 to 2.5 feet bgs), or at any other locations, the migration to groundwater pathway is considered incomplete.

5.5.2 Naphthalene

Naphthalene was detected at concentrations exceeding the soil leaching screening level of 0.042 mg/kg in only 2 of 44 samples. The two samples exceeding the screening level were collected in shallow surface soil (0 to 0.5 foot bgs) at locations C1DP-06 and C1DP-14. At both locations, naphthalene did not exceed the soil leaching screening levels in deeper soil samples, indicating that infiltration is not occurring. In addition, the EPC of naphthalene at the Copco No. 1 Debris Pile/Scrap Yard (0.00741 mg/kg) is less than both the soil leaching screening level and the soil leaching value protective of groundwater as a nondrinking water resource (6 mg/kg, Table 5-4). Therefore, the migration to groundwater pathway is considered incomplete.

5.5.3 Leaching to Groundwater Evaluation Conclusions

The migration to groundwater pathway is incomplete at the Copco No. 1 Debris Pile/Scrap Yard for bis(2-chloroethyl) ether and naphthalene, which are the only two COPCs with leaching potential encountered at the site.

5.6 Ecological Risk Assessment

The streamlined ERA completed for the Copco No. 1 Debris Pile/Scrap Yard was conducted on a sample-by-sample basis for each of the areas within the site. Sample-specific risk estimates are presented in Appendix G, Table G-9 and Table G-18, and the results of the streamlined ERA for each area are summarized in Table 5-5.

Several metals and dioxins exceeded their respective No Effect ESLs (Step 1) and Low Effect ESLs (Step 2). Additionally, Vanadium (Areas 1 through 4) exceeded the bird EcoPRG but did not exceed background levels. 2,3,7,8-TCDD toxic equivalent for mammals (TEQ Mammal) (Area 2) exceeded the mammal EcoPRG, but all AUF-adjusted HQs were less than 1. Sample-by-sample chemical group HIs were less than 1 for all chemical groups with and without application of AUFs.

The weight of evidence rationale for each area and each analyte is summarized as follows:

- Weight of Evidence Code "A" – Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs. In addition, the maximum detected result did not exceed the BTV. This weight of evidence code applies to the following:
 - Area 1: barium, boron, chromium, cobalt, lead, manganese, nickel, and thallium
 - Area 2: antimony chromium, cobalt, lead, manganese, nickel, and zinc
 - Area 3: barium, chromium, cobalt, manganese, molybdenum, nickel, thallium, and 2,3,7,8-TCDD TEQ Mammal
 - Area 4: barium, chromium, cobalt, manganese, mercury, nickel, thallium, and zinc
- Weight of Evidence Code "B" – Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the BTV and the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs. This weight of evidence rationale applies to arsenic in Area 2.
- Weight of Evidence Code "C" – Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect ESL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals even under the assumption of 100 percent site use. This weight of evidence rationale applies to the following analytes:
 - Area 1: copper and selenium
 - Area 2: boron, copper, and selenium
 - Area 3: copper, lead, selenium, and zinc
 - Area 4: copper and selenium
- Weight of Evidence Code "D" – Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect ESL as well as either the bird or mammal EcoPRG assuming 100 percent site use. However, there are no exceedances of the EcoPRGs when the site-specific AUFs are applied. In addition, the maximum detected concentration does not exceed the BTV. This weight of evidence rationale applies to the following analytes:

- Area 1: vanadium
- Area 2: vanadium and 2,3,7,8-TCDD TEQ Mammal
- Area 3: vanadium
- Area 4: vanadium

No analytes were retained for risk management based on potential risks to ecological receptors.

5.7 Recommended Actions

The Copco No. 1 Debris Pile/Scrap Yard is recommended for closure (Section 1.2) based on the following:

- The HHRA did not recommend any COPCs for risk management.
- The leaching to groundwater evaluation concluded that migration to groundwater pathway is incomplete for the soil leaching COPCs identified at the site.
- The ERA did not recommend any COPCs for risk management.

Table 5-3. Human Risk Estimates for COPCs in Soil at Copco No. 1 Debris Pile/Scrap Yard

Type	COPC	CAS	MDC (mg/kg)	EPC (mg/kg)	EPC Basis	Background Related?	Future Recreational User				Future Construction Worker				Hypothetical Future Resident					
							RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index		
Surface Soils (0 to 2 feet below ground surface)																				
Dioxins	2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	1746-01-6	1.5E-05	2.73E-06	95% UCL	No	9.2E-05	8.5E-04	3.0E-08	3.2E-03	1.7E-04	6.2E-03	1.7E-08	4.4E-04	4.8E-06	5.1E-05	5.7E-07	5.4E-02		
Metals	Arsenic	7440-38-2	2.0E+01	1.837	95% UCL	Yes	2.0E+00	6.8E+00	9.0E-07	2.7E-01	2.4E+01	--	7.8E-08	--	1.1E-01	4.1E-01	1.7E-05	4.5E+00		
Metals	Cobalt	7440-48-4	2.5E+01	17.08	95% UCL	Yes	1.2E+04	3.9E+02	1.5E-09	4.4E-02	2.9E+03	8.9E+02	5.9E-09	1.9E-02	4.2E+02	2.3E+01	4.1E-08	7.4E-01		
Metals	Iron	7439-89-6	4.8E+04	27297	95% UCL	Yes	--	9.1E+05	--	3.0E-02	--	2.4E+05	--	1.1E-01	--	5.5E+04	--	5.0E-01		
Metals	Lead ^a	7439-92-1	1.3E+02	10.89	95% UCL	No	--	--	--	--	--	--	--	--	--	--	--	--		
							Cumulative Risk and Hazard:				9E-07	0.3			1E-07	0.1			2E-05	6
							Cumulative Risk and Hazard Excluding Background Metals:				3E-08	0.003			2E-08	0.0004			6E-07	0.05
Mixed-Zone Soils (0 to 10 feet below ground surface)																				
Dioxins	2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	1746-01-6	1.5E-05	6.97E-06	95% UCL	No	9.2E-05	8.5E-04	7.6E-08	8.2E-03	1.7E-04	6.2E-03	4.2E-08	1.1E-03	4.8E-06	5.1E-05	1.5E-06	1.4E-01		
Metals	Arsenic	7440-38-2	2.0E+01	1.918	95% UCL	Yes	2.0E+00	6.8E+00	9.4E-07	2.8E-01	2.4E+01	--	8.1E-08	--	1.1E-01	4.1E-01	1.7E-05	4.7E+00		
Metals	Cobalt	7440-48-4	2.7E+01	16.56	95% UCL	Yes	1.2E+04	3.9E+02	1.4E-09	4.2E-02	2.9E+03	8.9E+02	5.7E-09	1.9E-02	4.2E+02	2.3E+01	3.9E-08	7.2E-01		
Metals	Iron	7439-89-6	4.8E+04	26002	95% UCL	Yes	--	9.1E+05	--	2.8E-02	--	2.4E+05	--	1.1E-01	--	5.5E+04	--	4.7E-01		
Metals	Lead ^a	7439-92-1	1.3E+02	11.74	95% UCL	No	--	--	--	--	--	--	--	--	--	--	--	--		
							Cumulative Risk and Hazard:				1E-06	0.4			1E-07	0.1			2E-05	6
							Cumulative Risk and Hazard Excluding Background Metals:				8E-08	0.01			4E-08	0.001			1E-06	0.1

Notes:

^aLead is evaluated by comparing EPCs to target concentrations protective of blood lead levels. See Sections 3.1 and 5.4.4.

Bold indicates cancer risk exceeds 1E-6 or hazard quotient exceeds 1.

-- = not applicable

bgs = below ground surface

CAS = chemical abstract service

COPC = constituent of potential concern

EPC = Exposure Point Concentration

MDC = maximum detected concentration

mg/kg = milligram(s) per kilogram

RBC = risk-based concentration

Table 5-4. Soil Leaching to Groundwater Evaluation at Copco No. 1 Debris Pile/Scrap Yard

COPC	CAS	Site EPC (mg/kg)	EPC Basis	Organic Carbon Coefficient (K_{oc}) (cm^3/g)	Henry's Law Constant (H) ($atm \cdot m^3/mole \cdot ^\circ K$)	Dilution/Attenuation Factor (DAF)	Target Groundwater Concentrations		Leaching SLs			
							Drinking Water Resource (ESL Table S-3) ($\mu g/L$)	Nondrinking Water Resource based on Freshwater Habitat (ESL Table S-3) ($\mu g/L$)	Protection of Drinking Water Resource SL ^a (mg/kg)	EPC Exceeds Drinking Water Resource SL?	Protection of Nondrinking Water Resource based on Freshwater Habitat SL ^a (mg/kg)	EPC Exceeds Nondrinking Water Resource SL?
Bis (2-chloroethyl) ether	111-44-4	1.3E-03	Average	3.20E+01	1.71E-05	5.42E+00	6.3E-03	6.1E+01	3.4E-05	Yes	3.3E-01	No
Naphthalene	91-20-3	7.4E-03	95% UCL	1.50E+03	4.40E-04	2.52E+02	1.7E-01	2.4E+01	4.2E-02	No	6.0E+00	No

Notes:

^a Soil Leaching SL calculated per the formula in Section 3.1.2.

Target groundwater concentrations from Table S-3 in SFRWQCB (2019).

Groundwater Category Drinking Water Resource - protective of groundwater that is a source of drinking water AND protective of discharge of groundwater to surface water and subsequent effects on aquatic life.

-- = not applicable

$\mu g/L$ = micrograms per kilogram

$atm \cdot m^3/mole \cdot ^\circ K$ = standard atmosphere meters cubed per mole

CAS = Chemical Abstract Service

cm^3/g = cubic centimeters per gram

COPC = constituent of potential concern

EPC = exposure point concentration for soil data from all depths

ESL = environmental screening level, SFRWQCB 2019

Koc = organic carbon partition coefficient

MDC = maximum detected concentration; used because there are too few detected values to calculate a UCL

mg/kg = milligrams per kilogram

SL = screening level

UCL = upper confidence limit on the mean

Table 5-5. Weight of Evidence for Ecological Receptors at Copco No. 1 Debris Pile/Scrap Yard

			Background Comparison	Step 1 Screening Evaluation	Step 2 Refined Evaluation	Step 3 Site-Specific Evaluation				Step 4 Weight of Evidence	
			Background HQ>1	No Effect HQ>1	Low Effect HQ>1	Bird EcoPRG HQ>1	Mammal EcoPRG HQ>1	Bird AUF Adjusted HQ>1	Mammal AUF Adjusted HQ>1	Retain for Risk Management?	Rationale
REC Name	Class	Detected Analytes									
Area 1											
Copco No. 1 Debris Pile/Scrap Yard	Metal	Barium	--	2	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Boron	--	3	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Chromium	--	11	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Cobalt	--	11	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Copper	1	11	11	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	Metal	Lead	--	--	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Manganese	--	11	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Nickel	--	11	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Selenium	11	11	9	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	Metal	Thallium	--	11	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Vanadium	--	11	11	11	--	--	--	No	D
Area 2											
Copco No. 1 Debris Pile/Scrap Yard	Metal	Antimony	--	1	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Arsenic	1	2	--	--	--	--	--	No	B
Copco No. 1 Debris Pile/Scrap Yard	Metal	Boron	--	1	1	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	Metal	Chromium	--	10	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Cobalt	--	12	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Copper	10	12	12	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	Metal	Lead	--	2	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Manganese	--	12	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Nickel	--	12	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Selenium	9	9	3	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	Metal	Vanadium	--	12	12	6	--	--	--	No	D
Copco No. 1 Debris Pile/Scrap Yard	Metal	Zinc	--	2	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	DXN	2,3,7,8-TCDD TEQ Mammal	--	7	1	--	2	--	--	No	D
Area 3											
Copco No. 1 Debris Pile/Scrap Yard	Metal	Barium	--	2	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Chromium	--	7	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Cobalt	--	7	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Copper	1	26	19	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	Metal	Lead	2	2	2	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	Metal	Manganese	--	16	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Molybdenum	--	1	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Nickel	--	10	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Selenium	10	10	6	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	Metal	Thallium	--	4	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Vanadium	--	26	26	6	--	--	--	No	D
Copco No. 1 Debris Pile/Scrap Yard	Metal	Zinc	--	2	2	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	DXN	2,3,7,8-TCDD TEQ Mammal	--	2	--	--	--	--	--	No	A

Table 5-5. Weight of Evidence for Ecological Receptors at Copco No. 1 Debris Pile/Scrap Yard

REC Name	Class	Detected Analytes	Background Comparison	Step 1 Screening Evaluation	Step 2 Refined Evaluation	Step 3 Site-Specific Evaluation				Step 4 Weight of Evidence	
			Background HQ>1	No Effect HQ>1	Low Effect HQ>1	Bird EcoPRG	Mammal EcoPRG	Bird AUF Adjusted	Mammal AUF Adjusted	Retain for Risk Management?	Rationale
						HQ>1	HQ>1	HQ>1	HQ>1		
Area 4											
Copco No. 1 Debris Pile/Scrap Yard	Metal	Barium	--	4	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Chromium	--	10	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Cobalt	--	10	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Copper	2	10	10	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	Metal	Manganese	--	10	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Mercury	--	2	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Nickel	--	10	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Selenium	10	10	7	--	--	--	--	No	C
Copco No. 1 Debris Pile/Scrap Yard	Metal	Thallium	--	9	--	--	--	--	--	No	A
Copco No. 1 Debris Pile/Scrap Yard	Metal	Vanadium	--	10	10	6	--	--	--	No	D
Copco No. 1 Debris Pile/Scrap Yard	Metal	Zinc	--	1	--	--	--	--	--	No	A

Notes:

Number presented under each step identifies the number of samples collected from 0 to 6 feet bgs that exceeded the indicated screening level or EcoPRG.

-- - no samples had exceedances; analyte not retained for further evaluation.

AUF = area use factor

BTV = background threshold value

DXN = dioxin/furan

EcoPRG = ecological preliminary remedial goal

ESL = Ecological Screening Level

HQ = hazard quotient

PAH = polynuclear aromatic hydrocarbon

REC = recognized environmental condition

RSL = regional screening level

SVOC = semivolatile organic compound

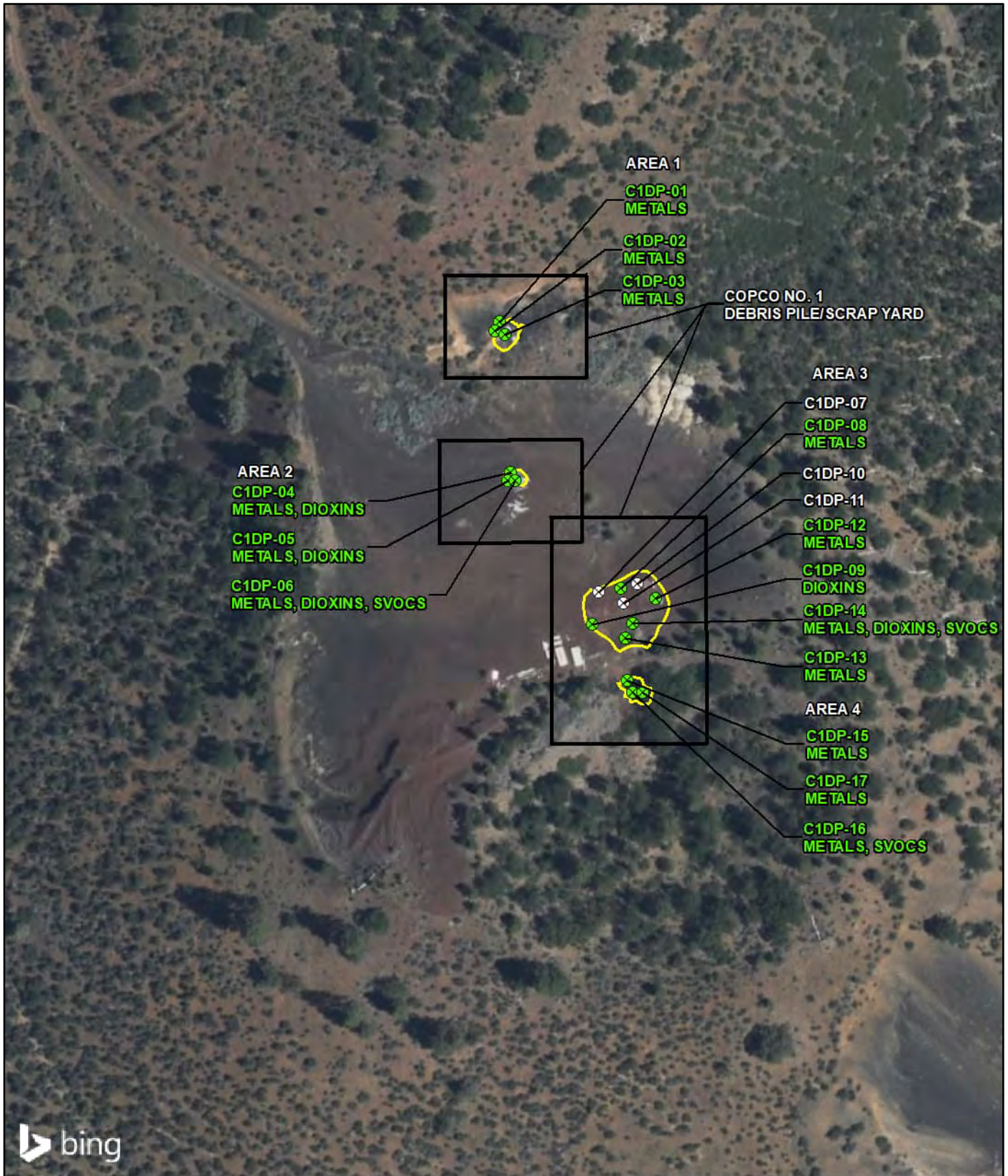
Weight of Evidence Rationale Codes:

A = Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect RSL or EcoPRGs. In addition, the maximum detect did not exceed the BTV.

B = Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the BTV and the No Effect ESL, none of the detected results exceeded the Low Effect RSV or EcoPRGs.

C = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect RSL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals even under the assumption of 100 percent site use.

D = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect RSL as well as either the bird or mammal EcoPRG assuming 100 percent site use. However, there are no exceedances of the EcoPRGs when the site-specific AUFs are applied and the maximum detected result does not



LEGEND
 [Black Box] Limits of SIWP

[Yellow Box] Approximate Limits of Visually Impacted Area

- ⊗ Soil Boring with SL Exceedance
- ⊙ Soil Boring without SL Exceedance

Borehole: C1DP-01
 Analytes: Metals

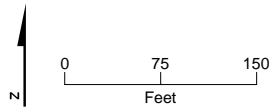


FIGURE 5-1
Copco No. 1 Debris Pile/Scrap Yard
 Lower Klamath Hydroelectric Project

6. Copco No. 2 Wood-Stave Penstock

This section summarizes the field activities and analytical laboratory results and provides the risk assessments and recommended next steps for closure of the Copco No. 2 Wood-Stave Penstock.

6.1 Background

The Copco No. 2 Wood-Stave Penstock (penstock; site) is part of the water conveyance system that transports water from the Copco No. 2 Dam to the Copco No. 2 Powerhouse. The 1,313-foot-long, 16-foot-diameter penstock is composed of narrow beveled wood-staves banded with steel hoops (Photograph 6-1). The site is bounded by elevated access roads on each side of the penstock (Figure 6-1). Soil within the site is generally classified as Lassen-Kuck complex, stony (USDA 2021).



Photograph 6-1. Copco No. 2 Wood-Stave Penstock (Jacobs 2022a)

The penstock was identified as a REC based on Phase II ESA (AECOM 2020b) soil sampling results that indicated the presence of arsenic and lead at concentrations above background for the Cascade Range based on Oregon Department of Environmental Quality (ODEQ) guidance (ODEQ 2013) and the presence

of various SVOCs (anthracene, benzo[a]anthracene, benzo[b]fluoranthene, carbazole, chrysene, Creosote, fluoranthene, indeno[1,2,3-cd]pyrene, pentachlorophenol, phenanthrene) likely from the treated wood of the penstock (AECOM 2020b).

6.2 Field Activities

On May 3, 2022, the planned soil borings for the Copco No. 2 Wood-Stave Penstock were marked and cleared for utilities. Substantial leakage was observed along the length of the penstock, resulting in accumulated water in large areas below and adjacent to the penstock (Photograph 6-1). Consequently, several soil borings were moved 20 to 180 feet from their planned locations to new locations along the penstock and away from ponded water and saturated soil. Some of the soil borings were also moved to provide better access for the DPT rig. The proposed location of borehole C2WS-04 was north of the north access road in a drainage ditch that received water from the penstock leaks through a culvert under the road; however, this location was on a steep embankment and was inaccessible. For this reason, borehole C2WS-04 was moved to the south side of the road near the penstock. A more accessible culvert drainage ditch was located farther east where borehole C2WS-09 was moved into (Figure 6-1).

On May 11, 12, and 13, 2022, 16 soil borings were advanced via hand auger and DPT drilling to depths ranging from 0.5 foot to 6 feet bgs. Several soil borings were not advanced to the planned borehole depth because the hand auger or drill rig met refusal or because saturated soil (from the leaking penstock) was encountered (Table 6-1). Soil samples were collected at 0.5-foot or 1-foot intervals to the total borehole depth or until saturated soil with water from the penstock was encountered. At soil borings C2WS-01 and C2WS-03, soil samples were not collected because gravel and saturated soil conditions were encountered just below the ground surface. Water samples were collected from borings C2WS-04 and C2WS-06, where at least 1 foot of unsaturated surface soil was encountered and surface water from the penstock was not observed to drain into the boreholes (Table 6-1).

Table 6-1. Copco No. 2 Wood-Stave Penstock Borehole Summary

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
C2WS-01	None	4	DPT	No samples collected, all gravel and saturated soil just below ground surface, two attempts made
C2WS-02	0-0.5, 0.5-1.5	1.5	HA	--
C2WS-03	None	3	HA	No samples collected, saturated soil just below ground surface
C2WS-04	0-0.5, 0.5-1.5	6	HA	Moved south across road next to the penstock; saturated soil at 2.5 feet bgs; collected water sample
C2WS-05	0-0.5, 0.5-1.5	2	HA	--
C2WS-06	0-0.5, 0.5-1.5	6	HA/DPT	Saturated soil at 1.5 feet bgs; collected water sample
C2WS-07	0-0.5	1.5	HA	Saturated soil at 0.5 foot bgs
C2WS-08	0-0.5, 0.5-1.5, 1.5-2.5	2.5	HA	--

Table 6-1. Copco No. 2 Wood-Stave Penstock Borehole Summary

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
C2WS-09	0-0.5, 0.5-1.5	1.5	HA	Moved north across road next to culvert; attempted to 6.0 feet bgs but met refusal at 2.5 feet bgs
C2WS-10	0-0.5	1.5	HA	Saturated soil at 0.5 foot bgs
C2WS-11	0-0.5, 0.5-1.5	1.5	HA/DPT	Saturated soil at 1.5 feet bgs
C2WS-12	0-0.5, 0.5-1.5, 2.5-3.5, 5-6	6	DPT	--
C2WS-13	0-0.5, 0.5-1.5, 2-3	3	HA	Refusal met at 3 feet bgs
C2WS-14	0-0.5	0.5	HA	Refusal and saturated soil at 0.5 foot bgs
C2WS-15	0-0.5, 0.5-1.5, 1.5-2.5	2.5	HA	--
C2WS-16	0-0.5, 0.5-1.5	1.5	HA	Moved west approximately 100 feet because of saturated soil; met refusal at 2.0 feet bgs; at 0.5 foot to 1.5 feet bgs, PID = 22 ppmv

Notes:

-- = not applicable

bgs = below ground surface

DPT = direct-push technology

HA = hand auger

PID = photoionization detector

ppmv = parts per million by volume

6.3 Analytical Results

The analytical results were compared to the site-specific screening levels (Appendix D) established in the California SIWP. Human health screening levels were exceeded for pentachlorophenol at seven soil borings and for PAHs (predominantly benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene) at nine soil borings. Leaching to groundwater screening levels were exceeded for pentachlorophenol at ten soil borings, for PAHs (predominantly chrysene and naphthalene) at five soil borings, and for bis(2-chloroethyl) ether at one soil boring. Ecological screening levels were exceeded for pentachlorophenol at seven soil borings, for PAHs at six soil borings, for di-n-butyl phthalate at one soil boring, and for metals, most commonly boron, selenium, and cobalt, at 14 soil borings (Table 6-2, Figure 6-1). Water screening levels were exceeded for metals at soil boring C2WS-04 and for metals and PAHs at soil boring C2WS-06 (Table 6-3, Figure 6-1).

Table 6-2. Copco No. 2 Wood-Stave Penstock Boreholes with Compounds in Soil that Exceed the California Site Investigation Work Plan Screening Levels

Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
C2WS-01	N/A	N/A	N/A
C2WS-02	Benzo(a)pyrene, Dibenzo(a,h)anthracene	PCP	Cobalt, Selenium
C2WS-03	N/A	N/A	N/A

Table 6-2. Copco No. 2 Wood-Stave Penstock Boreholes with Compounds in Soil that Exceed the California Site Investigation Work Plan Screening Levels

Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
C2WS-04	PCP, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene	PCP, Chrysene, Naphthalene, Phenanthrene	PCP, Acenaphthene, Chrysene, Fluoranthene, Phenanthrene, Boron, Cobalt, Selenium
C2WS-05	PCP, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene	PCP, Chrysene, Naphthalene	PCP, Chrysene, Fluoranthene, Phenanthrene, Pyrene, Boron, Cobalt, Selenium
C2WS-06	PCP, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene	PCP, Chrysene	PCP, Benzo(a)anthracene, Chrysene, Fluoranthene, Boron, Selenium
C2WS-07	Benzo(a)pyrene	PCP	Selenium
C2WS-08	<SLs	PCP, Bis(2-chloroethyl) ether	Boron, Selenium
C2WS-09	<SLs	<SLs	Di-N-Butyl phthalate, Boron, Selenium
C2WS-10	<SLs	<SLs	Selenium
C2WS-11	<SLs	<SLs	Selenium
C2WS-12	<SLs	<SLs	Boron, Cobalt, Mercury, Selenium
C2WS-13	PCP, Benzo(a)pyrene	PCP	PCP, Benzo(a)anthracene, Cobalt, Selenium
C2WS-14	PCP, Benzo(a)pyrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene	PCP, Benzo(b)fluoranthene, Chrysene, Naphthalene, Phenanthrene	PCP, Acenaphthene, Chrysene, Benzo(a)anthracene, Fluoranthene, Phenanthrene, Pyrene, Boron, Lead, Selenium
C2WS-15	PCP, Benzo(a)pyrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene	PCP, Chrysene, Benzo(b)fluoranthene	PCP, Chrysene, Benzo(a)anthracene, Fluoranthene, Phenanthrene, Pyrene, Boron, Cobalt, Selenium
C2WS-16	PCP, Benzo(a)pyrene, Dibenzo(a,h)anthracene	PCP	PCP, Boron, Selenium

Notes:

N/A = not applicable; samples were not collected from the soil boring

PCP = pentachlorophenol

SLs = screening levels

<SLs = does not exceed screening levels

Table 6-3. Copco No. 2 Wood-Stave Penstock Boreholes with Compounds in Water that Exceed the California Site Investigation Work Plan Screening Levels

Borehole	Compounds Exceeding Water Screening Levels
C2WS-04	Arsenic, Barium, Beryllium, Chromium, Cobalt, Iron, Lead, Manganese, Mercury, Nickel, Thallium, Vanadium
C2WS-06	Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Cobalt, Iron, Lead, Manganese, Mercury, Thallium, Vanadium

The COPCs carried forward into the risk assessments are based on the risk assessment screening criteria discussed in Sections 3.1 (human health), 3.2 (soil leaching to groundwater), and 3.3 (ecological).

6.4 Site-Specific Human Health Risk Assessment

6.4.1 Data Evaluation

The human health COPCs in soil at the Copco No. 2 Wood-Stave Penstock are PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene), metals (cobalt, iron, and mercury), and pentachlorophenol. The human health COPCs in shallow water at the Copco No. 2 Wood-Stave Penstock site are PAHs (benzo(a)anthracene, benzo(a)pyrene and benzo(b)fluoranthene), and metals (arsenic, barium, beryllium, cadmium, cobalt, copper, iron, lead, manganese, nickel, selenium, thallium, vanadium, and mercury).

6.4.2 Exposure Assessment

The Copco No. 2 Wood-Stave Penstock site is approximately 3.8 acres and was evaluated as one exposure area. Samples were collected in the potential source areas, which conservatively biases the sample results toward the contaminated areas.

Default DTSC and EPA exposure parameters were used (Appendix F) with modifications for the future recreational user (Section 3.1.1.2). Additional site-specific parameters were assumed for the future construction worker exposure scenario based on the input requirement in the RSL calculator. For general construction activities (excavation and grading), "soil-other construction activities" were selected for the RSL calculator, and the following conservative site-specific parameters were entered as inputs:

- Total area: 3.8 acres (conservative estimate)
- Area dozed: 3.8 acres (conservative estimate)
- Area graded: 3.8 acres (conservative estimate)
- Area excavated: 15,000 square meters (assumes most of site is excavated)
- Dozing and grading blade length: 3.7 meters (based on standard equipment)
- Average depth of excavation: 3 meters (likely a conservative over estimate given the abundance of shallow bedrock in the area)

Areas are considered to be conservative because they include the total of the limits of SIWP (Figure 6-1), which are larger than the visually impacted area.

For the future construction worker dermal exposure to shallow water, EPA default exposure assumptions for a construction worker scenario were used (Appendix F) with the modification that the dermal exposure

is 4 hours per event (conservative estimate). The shallow water is not considered potable water, so potential future exposure to shallow water through tapwater (drinking water) use was not evaluated.

6.4.3 Toxicity Evaluation

No COPCs required surrogate toxicity values.

6.4.4 Human Health Risk Assessment Results

The HHRA analysis indicates that for the future passive recreational user and future construction worker scenarios, the cumulative ELCRs and HIs do not exceed $1E-06$ and 1, respectively, for surface soil and mixed-zone soil (Table 6-4).

For the hypothetical future residential scenario, the cumulative ELCRs are $1E-05$ for surface soil and $2E-05$ for mixed zone soil (Table 6-4), which exceed the EPA point of departure of $1E-06$, but do not exceed the EPA risk management range ($1E-06$ to $1E-04$) (EPA 1989). The primary contributors to the ELCRs for both depth intervals are benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and pentachlorophenol. The HIs do not exceed 1 for both surface soil and mixed zone soil.

For the future construction worker dermal exposure to the shallow water, the cumulative ELCR and the HI do not exceed $1E-06$ and 1, respectively (Table 6-5).

6.4.5 Uncertainty Discussion

In general, the number and location of soil samples are considered adequate for risk assessment purposes, and the types of COPCs and EPCs identified are considered representative of potential releases from the penstock. Because samples were collected at suspected release locations, the exposure area data are likely biased high and the risks potentially overestimated.

Shallow water was sampled in only two locations. However, because water samples were collected at suspected release locations, the data are likely biased high and the risks potentially overestimated.

6.4.6 Human Health Risk Assessment Conclusions

Estimated risks are less than target thresholds for future passive recreational users and future construction workers from exposure to site soil.

Cancer risks to hypothetical future residents exceed the EPA point of departure of $1E-06$ in soil but do not exceed the EPA risk-management range. The primary contributors to risk from exposure to soil are benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and pentachlorophenol.

The risks to construction workers through dermal exposure to shallow water (not a potable water source) are less than target thresholds. This water will not be present when the facility is decommissioned and the penstock no longer conveys water.

6.5 Leaching to Groundwater Evaluation

The soil leaching COPCs at the Copco No. 2 Wood-Stave Penstock are benzo(b)fluoranthene, bis(2-chloroethyl) ether, chrysene, naphthalene, pentachlorophenol, and phenanthrene (Appendix F). Subsurface water encountered during sampling is identified as leakage and accumulated water from the penstock. Depth to actual groundwater is not known, but groundwater is presumed to not be present because of competent bedrock found at shallow depths that slopes from the penstock to the Klamath

River. The river is located approximately 90 feet north of the penstock and is approximately 30 feet lower in elevation than the penstock.

Because EPCs of benzo(b)fluoranthene and phenanthrene are less than the soil leaching screening levels and the soil leaching values protective of groundwater as a nondrinking water resource (Table 6-6), the migration to groundwater pathway is considered incomplete for these COPCs.

EPCs of bis(2-chloroethyl) ether, chrysene, naphthalene, and pentachlorophenol exceed the soil leaching screening levels, while only pentachlorophenol exceeds the soil leaching values protective of groundwater as a nondrinking water resource (Table 6-6). The potential for leaching to groundwater to present risk is discussed below for bis(2-chloroethyl) ether, chrysene, naphthalene, and pentachlorophenol.

6.5.1 Bis(2-chloroethyl) Ether

Bis(2-chloroethyl) ether was detected at a concentration exceeding the soil leaching screening level of 3.4E-05 mg/kg in only 1 of 29 samples (C2WS-08 at 0.001 J mg/kg at 0 to 0.5 foot bgs [where J indicates an estimated value]). In all other samples, bis(2-chloroethyl) ether was not detected.

Because bis(2-chloroethyl) ether was only detected in one soil sample at 0 to 0.5 foot bgs from one location (C2WS-08) and was not detected in deeper samples collected at C2WS-08 (0.5 foot to 1.5 feet and 1.5 to 2.5 feet bgs), or at any other locations, the migration to groundwater pathway is considered incomplete.

6.5.2 Chrysene

Chrysene was detected at concentrations exceeding the soil leaching screening level of 1.5 mg/kg in 7 of 29 samples. Soil borings C2WS-04, C2WS-05, C2WS-06, C2WS-13, C2WS-14, and C2WS-15 had chrysene present at concentrations exceeding the screening level and ranging from 2 mg/kg to 9.9 mg/kg. Concentrations of chrysene could potentially migrate to groundwater and exceed the drinking water resource criteria. However, because the EPC of chrysene is less than the soil leaching value protective of groundwater as a nondrinking water resource, no further evaluation is necessary for chrysene.

6.5.3 Naphthalene

At soil borings C2WS-04, C2WS-05, and C2WS-14, 3 of 29 samples, naphthalene was detected at a concentration slightly exceeding (less than an order of magnitude) the soil leaching screening level of 0.042 mg/kg. Naphthalene concentrations that exceeded the screening level ranged from 0.076 to 0.34 mg/kg and were all detected in shallow surface soil from 0 to 0.5 foot bgs. Naphthalene did not exceed the soil leaching screening level in the deeper samples collected from 0.5 foot to 1.5 feet bgs. The vertical extent is delineated, and because only three shallow surface soil samples exceed the soil leaching screening level but not deeper samples, infiltration is not occurring, and the migration to groundwater pathway is considered incomplete for naphthalene.

6.5.4 Pentachlorophenol

Pentachlorophenol was detected at concentrations exceeding the soil leaching screening level of 0.098 mg/kg in 16 of 29 samples at sample locations C2WS-02, C2WS-04, C2WS-05, C2WS-06, C2WS-07, C2WS-08, C2WS-13, C2WS-14, C2WS-15, and C2WS-16, with concentrations ranging from 0.11 mg/kg to 12 mg/kg. Concentrations of pentachlorophenol could potentially migrate to groundwater and exceed the drinking water resource criterion.

Pentachlorophenol was detected at concentrations exceeding the soil leaching screening level protective of groundwater as a nondrinking water resource of 1.5 mg/kg in in 6 of 29 samples at sample locations C2WS-04, C2WS-05, C2WS-06, C2WS-14, and C2WS-15, with concentrations exceeding the screening level ranging from 1.8 mg/kg to 12 mg/kg. Concentrations of pentachlorophenol could potentially migrate to groundwater and exceed the nondrinking water resource criterion.

6.5.5 Leaching to Groundwater Conclusions

Concentrations of chrysene and pentachlorophenol exceed soil leaching SLs at numerous sample locations and could migrate to groundwater and exceed drinking water resource criteria. However, as discussed in Section 6.4, shallow groundwater is not considered a viable source for potable water. The EPC of chrysene does not exceed the soil leaching screening level protective of groundwater as a nondrinking water resource; therefore, chrysene does not pose a threat to potential aquatic receptors in the Klamath River. Concentrations of pentachlorophenol exceed the screening level protective of nondrinking water resources and could potentially migrate to the Klamath River and exceed the freshwater habitat criteria.

6.6 Ecological Risk Assessment

The streamlined ERA completed for the penstock was conducted on a sample-by-sample basis, and sample-specific risk estimates are presented in Appendix G, Table G-10 and Table G-18. Results are summarized in Table 6-7.

Several metals, PAHs, and SVOCs exceeded their respective No Effect ESLs (Step 1) and Low Effect ESLs (Step 2). Vanadium exceeded the bird EcoPRG. The AUFs for the hermit thrush and vagrant shrew were 1 as their home ranges are smaller than the site-size for the penstock; as such, the AUF-adjusted HQs are the same as those prior to AUF-adjustment. Vanadium was the only analyte that exceeded the bird EcoPRG. However, the maximum detected concentration of vanadium does not exceed regional background levels. Sample-by-sample chemical group HIs were less than 1 for all chemical groups with and without application of AUFs.

The weight of evidence rationale for each area and analyte is summarized as follows:

- Weight of Evidence Code "A" – Chemical is not retained for risk management for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs for birds or mammals. In addition, there were no exceedances of the BTV for metals. This weight of evidence rationale applies to the following analytes:
 - Metals: antimony, arsenic, barium, boron, chromium, cobalt, manganese, thallium, and zinc
 - PAHs: acenaphthene, benzo(a)anthracene, chrysene, phenanthrene, and pyrene
 - SVOCs: bis (2-ethylhexyl) phthalate, and di-N-butylphthalate
- Weight of Evidence Code "B" – Chemical is not retained for risk management for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect ESL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals (100 percent site use). This weight of evidence rationale applies to the following analytes:
 - Metals: copper, lead, mercury, and selenium
 - PAHs: fluoranthene
 - SVOCs: pentachlorophenol
- Weight of Evidence Code "C" – Chemical is not retained for risk management for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect ESL as well as the Bird EcoPRG assuming 100 percent site use; however, the maximum detected result does not exceed the BTV. This weight of evidence rationale applies to vanadium.

- Weight of Evidence Code “D” – Chemical group is not retained for risk management for ecological receptors. All sample-by-sample chemical group HIs were less than 1 with and without application of AUFs. This weight of evidence rationale applies to the following:
 - PAHs: low molecular weight PAHs, high molecular weight PAHs

No analytes in site soil were retained for risk management based on potential risks to ecological receptors.

6.7 Recommended Actions

The ERA indicates that site COPCs detected at concentrations greater than ecological screening levels do not need to be retained for risk management. The HHRA did not recommend any COPCs for risk management for future passive recreational users and future construction workers from exposure to soil and water.

The HHRA indicates that cancer risks to hypothetical future residents are exceeded because of the presence of benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and pentachlorophenol in site soil. Furthermore, concentrations of pentachlorophenol in site soil exceed soil leaching screening levels protective of nondrinking water resources, and therefore could potentially migrate to the Klamath River.

A remedial action plan will be developed to address human health risks from PAHs and pentachlorophenol in soil and to address leaching to groundwater concerns for pentachlorophenol in site soil. Additional investigation at this site following removal of the penstock may be warranted to refine the preliminary excavation area (Figure 6-2). The remediation plan will not address removal of accumulated water from beneath the penstock because:

- The accumulated water will not be present after the penstock is dewatered and removed.
- The HHRA did not recommend any COPCs for risk management of the shallow water below the penstock for construction workers.
- The accumulated water beneath the penstock, is not considered potable water source.

Table 6-4. Human Health Risk Estimates for COPCs in Soil at Copco No. 2 Wood-Stave Penstock

Type	COPC	CAS	MDC (mg/kg)	EPC (mg/kg)	EPC Basis	Background Related?	Future Recreational User				Future Construction Worker				Hypothetical Future Resident					
							RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index		
Surface Soils (0 to 2 feet below ground surface)																				
Metals	Cobalt	7440-48-4	2.1E+01	1.43E+01	95% UCL	Yes	1.2E+04	3.9E+02	1.2E-09	3.7E-02	2.3E+03	8.6E+02	6.2E-09	1.7E-02	4.2E+02	2.3E+01	3.4E-08	6.2E-01		
Metals	Iron	7439-89-6	5.3E+04	3.41E+04	95% UCL	Yes	--	9.1E+05	--	3.7E-02	--	2.4E+05	--	1.4E-01	--	5.5E+04	--	6.2E-01		
Metals	Mercury	7439-97-6	2.3E-01	7.28E-02	95% UCL	No	--	1.7E+01	--	4.4E-03	--	9.5E+00	--	7.7E-03	--	1.0E+00	--	7.3E-02		
PAH	Benzo(a)anthracene	56-55-3	2.4E+00	7.0E-01	95% UCL	No	2.0E+01	--	3.5E-08	--	1.7E+02	--	4.2E-09	--	1.1E+00		6.4E-07	--		
PAH	Benzo(a)pyrene	50-32-8	1.1E+00	3.9E-01	95% UCL	No	2.0E+00	3.0E+02	1.9E-07	1.3E-03	1.8E+01	6.4E+01	2.2E-08	6.1E-03	1.1E-01	1.8E+01	3.5E-06	2.2E-02		
PAH	Benzo(b)fluoranthene	205-99-2	6.5E+00	2.0E+00	95% UCL	No	2.0E+01	--	1.0E-07	--	1.8E+02	--	1.2E-08	--	1.1E+00	--	1.9E-06	--		
PAH	Dibenzo(a,h)anthracene	53-70-3	2.0E-01	5.0E-02	95% UCL	No	5.0E-01	--	1.0E-07	--	1.8E+01	--	2.9E-09	--	2.8E-02	--	1.8E-06	--		
SVOC	Pentachlorophenol	87-86-5	1.2E+01	2.7E+00	95% UCL	No	2.0E+01	4.1E+03	1.3E-07	6.5E-04	3.4E+01	5.7E+03	7.8E-08	4.7E-04	1.0E+00	2.5E+02	2.7E-06	1.1E-02		
									Cumulative Risk and Hazard:		6E-07	0.08		1E-07	0.2			1E-05	1	
									Cumulative Risk and Hazard Excluding Background Metals:		6E-07	0.006			1E-07	0.01			1E-05	0.1
Mixed-Zone Soils (0 to 10 feet below ground surface)																				
Metals	Cobalt	7440-48-4	2.1E+01	1.48E+01	95% UCL	Yes	1.2E+04	3.9E+02	1.3E-09	3.8E-02	2.3E+03	8.6E+02	6.4E-09	1.7E-02	4.2E+02	2.3E+01	3.5E-08	6.4E-01		
Metals	Iron	7439-89-6	5.3E+04	3.51E+04	95% UCL	Yes	--	9.1E+05	--	3.8E-02	--	2.4E+05	--	1.5E-01	--	5.5E+04	--	6.4E-01		
Metals	Mercury	7439-97-6	3.2E-01	1.06E-01	95% UCL	No	--	1.7E+01	--	6.4E-03	--	9.5E+00	--	1.1E-02	--	1.0E+00	--	1.1E-01		
PAH	Benzo(a)anthracene	56-55-3	2.4E+00	6.9E-01	95% UCL	No	2.0E+01	--	3.4E-08	--	1.7E+02	--	4.1E-09	--	1.1E+00		6.2E-07	--		
PAH	Benzo(a)pyrene	50-32-8	1.1E+00	3.7E-01	95% UCL	No	2.0E+00	3.0E+02	1.8E-07	1.2E-03	1.8E+01	6.4E+01	2.1E-08	5.8E-03	1.1E-01	1.8E+01	3.3E-06	2.0E-02		
PAH	Benzo(b)fluoranthene	205-99-2	6.5E+00	2.0E+00	95% UCL	No	2.0E+01	--	9.8E-08	--	1.8E+02	--	1.1E-08	--	1.1E+00	--	1.8E-06	--		
PAH	Dibenzo(a,h)anthracene	53-70-3	2.0E-01	5.0E-02	95% UCL	No	5.0E-01	--	1.0E-07	--	1.8E+01	--	2.9E-09	--	2.8E-02	--	1.8E-06	--		
SVOC	Pentachlorophenol	87-86-5	1.2E+01	1.2E+01	MDC	No	2.0E+01	4.1E+03	6.0E-07	2.9E-03	3.4E+01	5.7E+03	3.5E-07	2.1E-03	1.0E+00	2.5E+02	1.2E-05	4.8E-02		
									Cumulative Risk and Hazard:		1E-06	0.09		4E-07	0.2			2E-05	1	
									Cumulative Risk and Hazard Excluding Background Metals:		1E-06	0.01			4E-07	0.02			2E-05	0.2

Notes:

Bold indicates cancer risk exceeds 1E-6 or hazard quotient exceeds 1.

-- = not applicable

bgs = below ground surface

CAS = Chemical Abstract Service

COPC = constituent of potential concern

EPC = exposure point concentration

MDC = maximum detected concentration

mg/kg = milligram(s) per kilogram

RBC = risk-based concentration

Table 6-5. Human Health Risk Estimates for COPCs in Shallow Water at Copco No. 2 Wood-Stave Penstock

Type	COPC	CAS	MDC (µg/L)	EPC (µg/L)	EPC Basis	Background Related?	Future Construction Worker Dermal Exposure			
							RBC Cancer (µg/L)	RBC Non-cancer (µg/L)	Cancer Risk	Non-cancer Hazard Index
Metals	Arsenic	7440-38-2	4.1E+01	4.1E+01	MDC	No	3.9E+02	2.5E+03	1.0E-07	1.6E-02
Metals	Barium	7440-39-3	1.1E+03	1.1E+03	MDC	No	--	1.2E+05	--	9.3E-03
Metals	Beryllium	7440-41-7	5.0E+00	5.0E+00	MDC	No	--	1.2E+02	--	4.2E-02
Metals	Cadmium	7440-43-9	1.0E+00	1.0E+00	MDC	No	--	4.2E+01	--	2.4E-02
Metals	Cobalt	7440-48-4	1.1E+02	1.1E+02	MDC	No	--	6.3E+03	--	1.7E-02
Metals	Copper	7440-50-8	3.7E+02	3.7E+02	MDC	No	--	3.4E+05	--	1.1E-03
Metals	Iron	7439-89-6	2.1E+05	2.1E+05	MDC	No	--	5.9E+06	--	3.6E-02
Metals	Lead ^a	7439-92-1	2.4E+02	2.4E+02	MDC	No	--	--	--	--
Metals	Manganese	7439-96-5	7.2E+03	7.2E+03	MDC	No	--	8.1E+03	--	8.9E-01
Metals	Nickel	7440-02-0	1.3E+02	1.3E+02	MDC	No	--	3.4E+04	--	3.9E-03
Metals	Selenium	7782-49-2	2.0E+01	2.0E+01	MDC	No	--	4.2E+04	--	4.8E-04
Metals	Thallium	7440-28-0	8.0E-01	8.0E-01	MDC	No	--	8.4E+01	--	9.5E-03
Metals	Vanadium	7440-62-2	4.5E+02	4.5E+02	MDC	No	--	1.1E+03	--	4.1E-01
Metals	Mercury	7439-97-6	6.7E-01	6.7E-01	MDC	No	--	--	--	--
PAH	Benzo(a)anthracene	56-55-3	1.4E-01	1.4E-01	MDC	No	--	--	--	--
PAH	Benzo(a)pyrene	50-32-8	5.5E-02	5.5E-02	MDC	No	--	--	--	--
PAH	Benzo(b)fluoranthene	205-99-2	2.8E-01	2.8E-01	MDC	No	--	--	--	--
Cumulative Risk and Hazard:									1E-07	1

Notes:

^a Risks from dermal exposure to lead in shallow water are not considered significant.

Bold indicates cancer risk exceeds 1E-6 or hazard quotient exceeds 1.

-- = not applicable

µg/L = microgram(s) per liter

CAS = Chemical Abstract Service

COPC = constituent of potential concern

EPC = exposure point concentration

MDC = maximum detected concentration

RBC = risk-based concentration

Table 6-6. Soil Leaching to Groundwater Evaluation at Copco No. 2 Wood-Stave Penstock

COPC	CAS	Site EPC (mg/kg)	EPC Basis	Organic Carbon Coefficient (K_{oc}) (cm^3/g)	Henry's Law Constant (H) ($atm\cdot m^3/mole\cdot ^\circ K$)	Dilution/Attenuation Factor (DAF)	Target Groundwater Concentrations		Leaching SLs			
							Drinking Water Resource (ESL Table S-3) ($\mu g/L$)	Nondrinking Water Resource based on Freshwater Habitat (ESL Table S-3) ($\mu g/L$)	Protection of Drinking Water Resource SL ^a (mg/kg)	EPC Exceeds Drinking Water Resource SL? (Yes/No)	Protection of Nondrinking Water Resource based on Freshwater Habitat SL ^a (mg/kg)	EPC Exceeds Nondrinking Water Resource SL? (Yes/No)
Benzo(b)fluoranthene	205-99-2	2.0E+00	95% UCL	6.00E+05	6.60E-07	9.96E+04	4.9E-02	--	4.9E+00	No	--	No
Bis (2-chloroethyl) ether	111-44-4	1.1E-03	Average	3.20E+01	1.71E-05	5.42E+00	6.3E-03	6.1E+01	3.4E-05	Yes	3.3E-01	No
Chrysene	218-01-9	3.3E+00	95% UCL	1.80E+05	5.23E-06	2.99E+04	4.9E-02	3.5E-01	1.5E+00	Yes	1.0E+01	No
Naphthalene	91-20-3	7.5E-02	95% UCL	1.50E+03	4.40E-04	2.52E+02	1.7E-01	2.4E+01	4.2E-02	Yes	6.0E+00	No
Pentachlorophenol	87-86-5	1.2E+01	MDC	5.90E+02	2.45E-08	9.79E+01	1.0E+00	1.5E+01	9.8E-02	Yes	1.5E+00	Yes
Phenanthrene	85-01-8	5.7E+00	95% UCL	1.40E+04	3.91E-05	2.32E+03	4.6E+00	6.3E+00	1.1E+01	No	1.5E+01	No

Notes:

^a Soil Leaching SL calculated per the formula in Section 3.1.2.

Target groundwater concentrations from Table S-3 in SFRWQCB (2019).

Groundwater Category Drinking Water Resource - protective of groundwater that is a source of drinking water AND protective of discharge of groundwater to surface water and subsequent effects on aquatic life.

-- = not applicable

$\mu g/L$ = micrograms per kilogram

$atm\cdot m^3/mole\cdot ^\circ K$ = standard atmosphere meters cubed per mole

CAS = Chemical Abstract Service

cm^3/g = cubic centimeters per gram

COPC = constituent of potential concern

EPC = exposure point concentration for soil data from all depths

ESL = environmental screening level, SFRWQCB 2019

Koc = organic carbon partition coefficient

MDC = maximum detected concentration; used because there are too few detected values to calculate a UCL

mg/kg = milligrams per kilogram

SL = screening level

UCL = upper confidence limit on the mean

Table 6-7. Weight of Evidence for Ecological Receptors at Copco No. 2 Wood-Stave Penstock

REC Name	Class	Detected Analytes	Background Comparison	Step 1 Screening Evaluation	Step 2 Refined Evaluation	Step 3 Site-Specific Evaluation				Step 4 Weight of Evidence	
			Background HQ>1	No Effect HQ>1	Low Effect HQ>1	Bird	Mammal	Bird AUF	Mammal AUF	Retain for Risk Management?	Rationale
						EcoPRG HQ>1	EcoPRG HQ>1	Adjusted HQ>1	Adjusted HQ>1		
Copco No. 2 Wood-Stave Penstock	Metal	Antimony	--	2	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	Metal	Arsenic	--	2	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	Metal	Barium	--	26	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	Metal	Boron	--	16	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	Metal	Chromium	--	4	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	Metal	Cobalt	--	20	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	Metal	Copper	--	17	5	--	--	--	--	No	B
Copco No. 2 Wood-Stave Penstock	Metal	Lead	1	11	4	--	--	--	--	No	B
Copco No. 2 Wood-Stave Penstock	Metal	Manganese	--	29	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	Metal	Mercury	2	21	5	--	--	--	--	No	B
Copco No. 2 Wood-Stave Penstock	Metal	Selenium	32	32	32	--	--	--	--	No	B
Copco No. 2 Wood-Stave Penstock	Metal	Thallium	--	24	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	Metal	Vanadium	--	32	32	29	--	29	--	No	C
Copco No. 2 Wood-Stave Penstock	Metal	Zinc	--	27	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	PAH	Acenaphthene	--	2	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	PAH	Benzo(a)anthracene	--	6	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	PAH	Chrysene	--	7	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	PAH	Fluoranthene	--	7	5	--	--	--	--	No	B
Copco No. 2 Wood-Stave Penstock	PAH	Phenanthrene	--	5	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	PAH	Pyrene	--	5	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	SVOC	Bis (2-ethylhexyl) phthalate	--	1	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	SVOC	Di-N-Butylphthalate	--	1	--	--	--	--	--	No	A
Copco No. 2 Wood-Stave Penstock	SVOC	Pentachlorophenol	--	12	6	--	--	--	--	No	B

Notes:

Number presented under each step identifies the number of samples collected from 0 to 6 feet bgs that exceeded the indicated screening level or EcoPRG.

-- no samples had exceedances; analyte not retained for further evaluation

AUF = area use factor

BTV = background threshold value

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient

PAH = polynuclear aromatic hydrocarbon

REC = recognized environmental condition

RSL = regional screening level

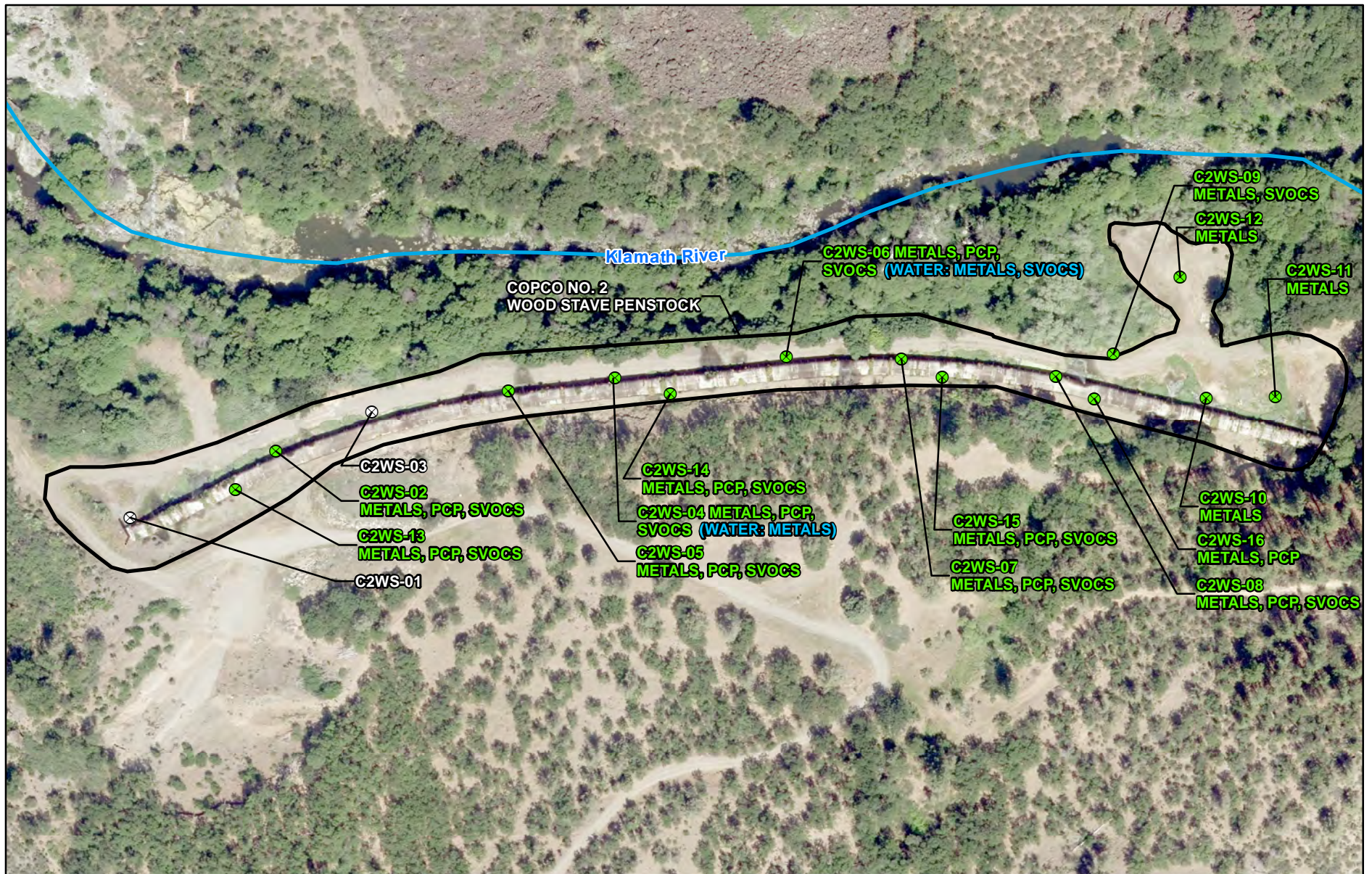
SVOC = semivolatile organic compound

Weight of Evidence Rationale Codes:

A = Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect RSL or EcoPRGs for birds or mammals. In addition, there were no exceedances of the BTV (metals).

B = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect RSL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals (100 percent site use).

C = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect RSL as well as the Bird EcoPRG assuming 100 percent site use. However, the maximum detected result does not exceed the BTV.



LEGEND

- Limits of SIWP
- x Soil Boring with SL Exceedance
- Soil Boring without SL Exceedance
- Klamath River

Borehole: C2WS-01
 Analytes: VOCS
 PCP = Pentachlorophenol

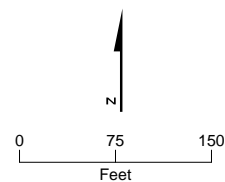
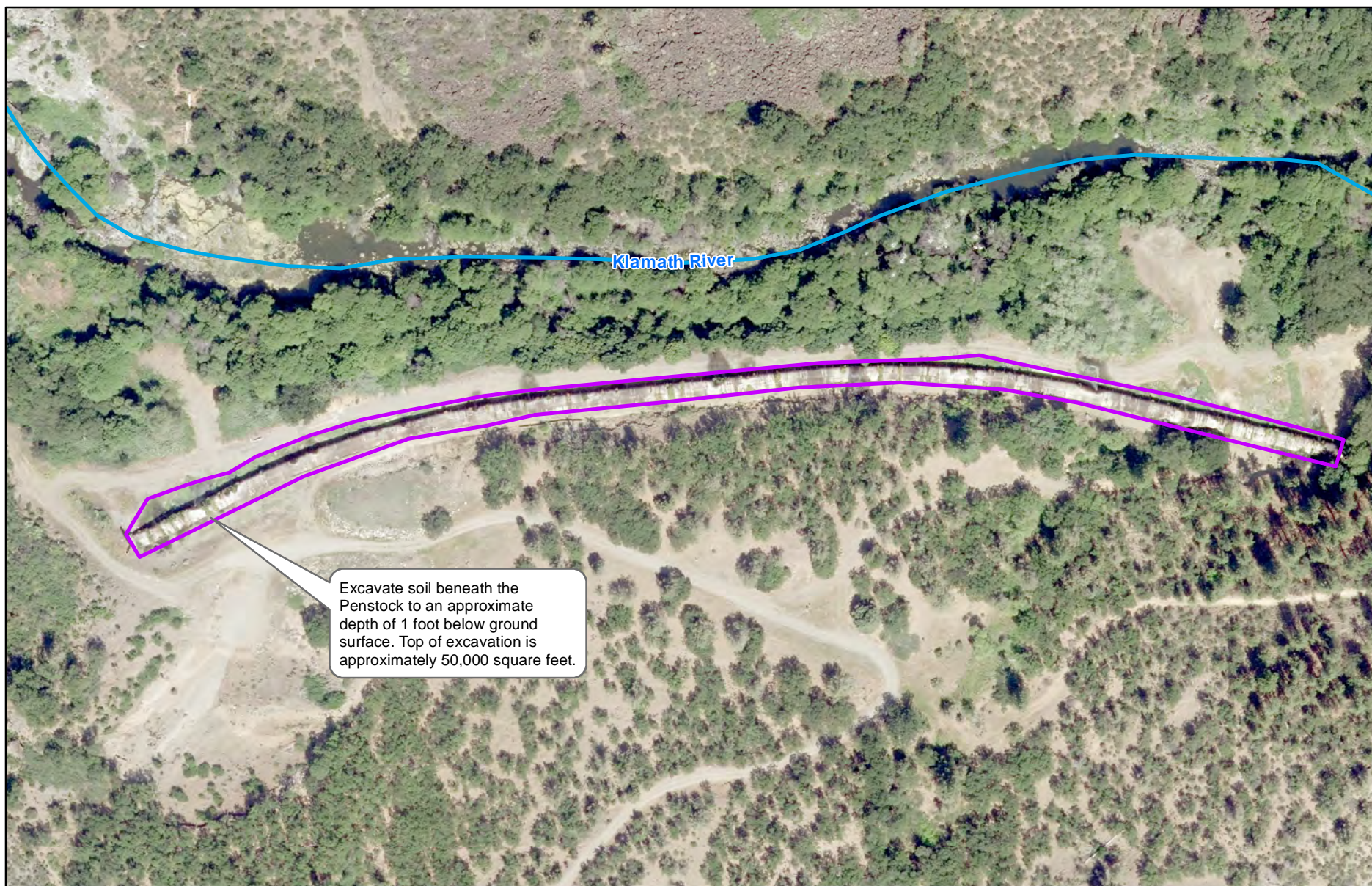


FIGURE 6-1
Copco No. 2 Wood-Stave Penstock
Lower Klamath Hydroelectric Project



LEGEND

- Excavation Area
- Klamath River

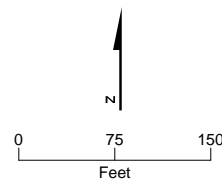


FIGURE 6-2
Copco No. 2 Wood-Stave Penstock Excavation Areas
Lower Klamath Hydroelectric Project

7. Copco No. 2 Wood Pile

This section summarizes the field activities and analytical laboratory results and provides the risk assessments and recommended next steps for closure of the Copco No. 2 Wood Pile.

7.1 Background

The *Draft Phase I Environmental Site Assessment of the Parcel B Lands* (AECOM 2020a) identified three utility pole stockpiles approximately three-quarters of a mile northeast of the intersection of Copco Road and Daggett Road. The utility poles were stockpiled at this location after they had been removed from service. AECOM noted that some of the utility poles were potentially chemically treated (Photograph 7-1). No other features of concern were observed in this area. In June 2021, PacifiCorp collected spatial data locating the corners of the three wood piles and then removed the utility poles for appropriate disposal offsite. The wood piles are numbered 1 through 3 (Figures 7-1 and 7-2).



Photograph 7-1. Copco No. 2 Wood Pile #3 Looking South (PacifiCorp 2021)

7.2 Field Activities

On March 2, 2022, the planned soil borings for the Copco No. 2 Wood Pile were marked and cleared for utilities. A GPS unit was used to relocate the corners of the three utility pole stockpiles using data previously collected by PacifiCorp (Figure 7-1).

On March 8, 2022, seven soil borings were advanced via hand auger and DPT drilling to depths of 5 or 6 feet bgs. Soil samples were collected from 6-inch intervals at varying depths to the bottom of the boreholes (Table 7-1). Site soils were predominantly dark brown moist clays to total borehole depth (5 or 6 feet bgs), except at soil boring C2WP-06 where dark brown, poorly graded gravel was identified to a depth of 6 feet bgs. Groundwater was not observed in any of the borings. All soil borings were advanced and sampled per the California SIWP.

Table 7-1. Copco No. 2 Wood Pile Borehole Summary

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
C2WP-01	0-0.5, 2-2.5, 4.5-5	5	HA/DPT	--
C2WP-02	0-0.5, 1-1.5, 3-3.5, 5.5-6	6	HA/DPT	--
C2WP-03	0-0.5, 2-2.5, 4.5-5	5	HA/DPT	--
C2WP-04	0-0.5, 1-1.5, 3-3.5, 5.5-6	6	HA/DPT	--
C2WP-05	0-0.5, 2-2.5, 4.5-5	5	HA/DPT	--
C2WP-06	0-0.5, 1-1.5, 3-3.5, 5.5-6	6	HA/DPT	--
C2WP-07	0-0.5 2-2.5, 4.5-5	5	HA/DPT	--

Notes:

-- = no comment

bgs = below ground surface

HA = hand auger

DPT = direct-push technology

7.3 Analytical Results

The analytical results were compared to the site-specific screening levels (Appendix D) established in the California SIWP. Human health screening levels were exceeded for cobalt, pentachlorophenol, and iron. Leaching to groundwater screening levels were exceeded for bis(2-chloroethyl) ether and pentachlorophenol. Ecological screening levels were exceeded for various metals, pentachlorophenol, benzoic acid, and bis(2-ethylhexyl) phthalate (Table 7-2, Figure 7-1).

Table 7-2. Copco No. 2 Wood Pile Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels

Area	Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
Wood Pile #1	C2WP-01	Cobalt	<SLs	Cobalt, Selenium
	C2WP-02	Cobalt	Bis(2-chloroethyl) ether	Boron, Cobalt, Selenium
Wood Pile #2	C2WP-03	Cobalt	Pentachlorophenol	Pentachlorophenol Boron, Cobalt, Selenium
	C2WP-04	Pentachlorophenol Cobalt, Iron	Pentachlorophenol	Pentachlorophenol Boron, Cobalt, Selenium
Wood Pile #3	C2WP-05	Cobalt, Iron	Pentachlorophenol	Boron, Cobalt, Selenium

Table 7-2. Copco No. 2 Wood Pile Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels

Area	Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
	C2WP-06	Cobalt, Iron	Pentachlorophenol	Pentachlorophenol Boron, Cobalt, Selenium
	C2WP-07	Cobalt, Iron	<SLs	Boron, Cobalt, Selenium, Benzoic Acid, Bis(2-ethylhexyl) phthalate

Notes:

SLs = screening levels

<SLs = does not exceed screening levels

The COPCs carried forward into the risk assessments are based on the risk assessment screening criteria discussed in Sections 3.1 (human health), 3.2 (soil leaching to groundwater), and 3.3 (ecological).

7.4 Site-Specific Human Health Risk Assessment

7.4.1 Data Evaluation

The human health COPCs in soil at the Copco No. 2 Wood Pile are cobalt, iron, and pentachlorophenol (Appendix F).

7.4.2 Exposure Assessment

Because of the small size of the Copco No. 2 Wood Pile (approximately 100 feet by 150 feet), the site is considered one exposure area. Samples were collected in the three wood pile source areas identified, which conservatively biases the sample results toward the source areas.

Additional site-specific parameters were assumed for the future construction worker exposure scenario based on the input requirement in the RSL calculator. For general construction activities (excavation and grading), "soil-other construction activities" were selected for the RSL calculator, and the following site-specific parameters were entered as inputs:

- Total area: 1 acre (conservative estimate)
- Area dozed: 1 acre (conservative estimate)
- Area graded: 1 acre (conservative estimate)
- Area excavated: 10,000 square feet (assumes approximately 100 feet by 100 feet excavation)
- Dozing and grading blade length: 3.7 meters (m) (based on standard equipment)
- Average depth of excavation: 3 m

7.4.3 Toxicity Assessment

No COPCs identified at this site required surrogate toxicity values.

7.4.4 Human Health Risk Evaluation Results

Soil risk calculations for the Copco No. 2 Wood Pile are provided (Table 7-3) for surface soil (0 foot to 2 feet bgs) and mixed-zone soil (0 foot to 10 feet bgs). Analysis indicates that for the future passive recreational user and future construction worker scenarios, the cumulative ELCRs and HIs do not exceed 1E-06 and 1, respectively, for surface soil and mixed-zone soil (Table 7-3).

For the hypothetical future residential scenario, the cumulative ELCRs are 5E-05 for surface soil and 2E-05 for mixed-zone soil (Table 7-3), which exceed the EPA point of departure of 1E-06, but do not exceed the EPA risk management range (1E-06 to 1E-04) (EPA 1989). The only primary contributor to the ELCRs for both surface soils and the mixed-zone soil is pentachlorophenol. The HIs are 3 for surface soil and 2 for mixed-zone soil, which exceed the target HI of 1. The primary contributors are cobalt and iron, both of which are considered naturally occurring. Because cobalt and iron are not used in treated wood preservatives, the only source of potential contamination at this site, they are not considered to be site-related contaminants. No background values are available for cobalt or iron, but the uniformity of sample results (cobalt concentrations ranged from 22 mg/kg to 36 mg/kg and iron concentrations ranged from 40,000 mg/kg to 59,000 mg/kg), along with the fact that all other metals are less than background values, indicate that cobalt and iron found at this location are naturally occurring and not related to activities at the site. Excluding naturally occurring cobalt and iron, the HIs are 0.05 for surface soil and 0.02 for mixed-zone soil, both less than the target HI of 1.

7.4.5 Uncertainty Discussion

In general, the number and location of soil samples are considered adequate for risk assessment purposes, and the type of COPCs and EPCs identified are considered representative of potential releases within the Copco No. 2 Wood Pile site. Because samples were collected at suspected release locations, the exposure area data are likely biased high and the risks potentially overestimated. The highest concentrations of pentachlorophenol were detected at sample location C2WP-04 where screening levels were exceeded at all depths (0.5, 1.5, 3.5, and 6 feet bgs). Because pentachlorophenol contamination at C2WP-04 has not been delineated laterally or vertically, there is a risk assessment data gap which causes uncertainty in the risk results for pentachlorophenol.

7.4.6 Human Health Risk Assessment Conclusions

Estimated risks are below target thresholds for future passive recreational users and future construction workers from potential exposure to soil. Cancer risks to hypothetical future residents exceed the EPA point of departure of 1E-06 but do not exceed the EPA risk management range. The primary contributor to risk is pentachlorophenol. Because pentachlorophenol contamination at C2WP-04 has not been delineated laterally or vertically, there is a risk assessment data gap which causes uncertainty in the risk results for pentachlorophenol.

7.5 Leaching to Groundwater Evaluation

Bis(2-chloroethyl) ether and pentachlorophenol exceed the soil leaching SLs and are COPCs at the Copco No. 2 Wood Pile (Table 7-4). Groundwater was not encountered during the SI sampling and depth to groundwater is not known. Fall Creek is located approximately 200 feet east of the Copco No. 2 Wood Pile and is approximately 35 to 40 feet lower in elevation. Therefore, depth to groundwater is estimated to be at least 35 feet bgs.

7.5.1 Bis(2-chloroethyl) ether

Bis(2-chloroethyl) ether was detected at a concentration exceeding the soil leaching screening level of 3.4E-05 mg/kg in only one field duplicate sample (C2WP-02-0.5-FD at 0.0016 J mg/kg at 0.5 foot bgs) of 24 samples. In all other samples, including the native sample paired with the field duplicate (C2WP-02-0.5), bis(2-chloroethyl) ether was not detected at concentrations greater than the MDLs. The concentration of bis(2-chloroethyl) ether detected at C2WP-02 is less than the soil leaching value protective of groundwater as a nondrinking water resource (0.33 mg/kg, Table 7-4).

Because bis(2-chloroethyl) ether was only detected at 0.5 foot bgs at C2WP-02 and was not detected in deeper samples collected at C2WP-02 (1.5, 3.5, and 6 feet bgs), or at any other locations, the migration to groundwater pathway is considered incomplete.

7.5.2 Pentachlorophenol

Pentachlorophenol was detected at concentrations exceeding the soil leaching screening level of 0.098 mg/kg in 8 of 24 samples at the following four sample locations:

- C2WP-03: Pentachlorophenol exceeds the soil leaching screening level at 2.5 feet bgs (0.37 mg/kg) and 5 feet bgs (0.2 mg/kg), but does not exceed the soil leaching screening level at 0.5 foot bgs (0.017 mg/kg). Because samples were not collected deeper than 5 feet bgs, vertical extent is not delineated.
- C2WP-04: Pentachlorophenol exceeds the soil leaching screening level at 0.5 foot bgs (27 mg/kg), 1.5 feet bgs (32 mg/kg), 3.5 feet bgs (5.2 mg/kg), and 6 feet bgs (7.2 mg/kg). The vertical and lateral extent is not delineated at this location.
- C2WP-05: Pentachlorophenol exceeds the soil leaching screening level at 0.5 foot bgs (0.34 mg/kg) but is less than the soil leaching screening level at 2.5 feet bgs (0.077 mg/kg) and 5 feet bgs (0.03 mg/kg). The vertical extent is delineated, and because only the shallowest surface soil concentration slightly exceeds (less than an order of magnitude) the soil leaching screening level but does not exceed concentrations found in deeper samples, the migration to groundwater pathway is considered incomplete at C2WP-05.
- C2WP-06: Pentachlorophenol exceeds the soil leaching screening level at 0.5 foot bgs (0.53 mg/kg) but is less than the soil leaching screening level at 1.5 feet bgs (0.028 mg/kg) and was not detected at 3.5 or 6 feet bgs. The vertical extent is delineated, and because only the shallowest surface soil concentration slightly exceeds (less than an order of magnitude) the soil leaching screening level but it was not detected in deeper samples, the migration to groundwater pathway is considered incomplete at C2WP-06.

Concentrations of pentachlorophenol exceed the soil leaching screening level in all samples collected at C2WP-04, and because pentachlorophenol is not vertically delineated, there remains a potential migration pathway to groundwater.

The concentrations of pentachlorophenol detected at C2WP-04 also exceed the soil leaching value protective of groundwater as a nondrinking water resource (1.5 mg/kg, Table 7-4); however, concentrations detected at all other sample locations are less than this value.

7.5.3 Leaching to Groundwater Conclusions

The concentrations of pentachlorophenol at sample locations C2WP-01, C2WP-02, C2WP-05, and C2WP-06 indicate that the migration to groundwater pathway is incomplete at those locations. Concentrations of pentachlorophenol at sample locations C2WP-03 and C2WP-04 exceed soil leaching screening levels and, because the vertical extent of the contamination could not be defined, there remains a potential migration pathway to groundwater.

7.6 Ecological Risk Assessment

The streamlined ERA completed for the Copco No. 2 Wood Pile was conducted on a sample-by-sample basis. Sample-specific risk estimates are presented in Appendix G, Table G-11 and Table G-18, and results are summarized in Table 7-5.

Several metals and pentachlorophenol exceeded their respective No Effect ESLs (Step 1) and Low Effect ESLs (Step 2). Vanadium exceeded the bird EcoPRG and pentachlorophenol exceeded the mammal EcoPRG assuming 100 percent site use; however, all HQs were less than 1 when the AUF was applied. The maximum detected concentration of vanadium did not exceed the regional background level. Sample-by-sample chemical group HIs were less than 1 for all chemical groups with and without application of AUFs.

The weight of evidence rationale for each analyte is summarized as follows:

- Weight of Evidence Code "A" – Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL and the maximum detected result did not exceed the BTV. This weight of evidence rationale applies to the following analytes:
 - Metals: arsenic, barium, boron, cobalt, manganese, mercury, nickel, thallium, and zinc
 - SVOCs: benzoic acid and bis (2-ethylhexyl) phthalate
- Weight of Evidence Code "B" – Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect ESL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals even under the assumption of 100 percent site use. In addition, the maximum detected result did not exceed the BTV. This weight of evidence rationale applies to chromium, copper, and lead.
- Weight of Evidence Code "C" – Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect ESL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals even under the assumption of 100 percent site use. This weight of evidence rationale applies to selenium.
- Weight of Evidence Code "D" – Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect ESL as well as the Bird EcoPRG assuming 100 percent site use; however, the maximum detected result does not exceed the BTV. This weight of evidence rationale applies to vanadium.
- Weight of Evidence Code "E" – Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect ESL as well as the mammalian EcoPRG assuming 100 percent site use; however, no results exceed the Bird EcoPRG (100 percent site use) and none of the AUF-adjusted HQs exceeded 1 for either birds or mammals. This weight of evidence rationale applies to pentachlorophenol.

No analytes in site soil were retained for risk management based on potential risks to ecological receptors.

7.7 Recommended Actions

The ERA indicates that no analytes in site soil were retained for risk management based on potential risks to ecological receptors. The HHRA did not recommend any COPCs for risk management for future passive recreational users and future construction workers for Wood Pile No. 1 and Wood Pile No. 3; therefore, no further assessment is necessary at these specific locations. At Wood Pile No. 2, a data gap is causing uncertainty in the HHRA because pentachlorophenol was not vertically or laterally delineated. Soil borings at this specific wood pile exceeded the screening level for leaching to groundwater for pentachlorophenol.

To expedite site closure, PacifiCorp is recommending excavation and disposal of soil from beneath Wood Pile No. 2. The lengthier process of iterative sampling to first confirm the vertical and lateral extent of pentachlorophenol at Wood Pile No. 2 will not be performed. Instead, the 25-foot by 60-foot footprint of Wood Pile No. 2 will be excavated to a depth of at least 6 feet bgs (Figure 7-2).

Table 7-3. Human Health Risk Estimates for COPCs in Soil at Copco No. 2 Wood Pile

Type	COPC	CAS	MDC (mg/kg)	EPC (mg/kg)	EPC Basis	Background Related?	Future Recreational User				Future Construction Worker				Hypothetical Future Resident			
							RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index
Surface Soils (0 to 2 feet below ground surface)																		
Metals	Cobalt	7440-48-4	3.6E+01	3.41E+01	95% UCL	Yes	1.2E+04	3.9E+02	3.0E-09	8.7E-02	3.5E+03	9.1E+02	9.8E-09	3.7E-02	4.2E+02	2.3E+01	8.1E-08	1.5E+00
Metals	Iron	7439-89-6	5.9E+04	5.64E+04	95% UCL	Yes	--	9.1E+05	--	6.2E-02	--	2.4E+05	--	2.4E-01	--	5.5E+04	--	1.0E+00
SVOC	Pentachlorophenol	87-86-5	3.2E+01	1.33E+01	95% UCL	No	2.0E+01	4.1E+03	6.7E-07	3.2E-03	3.4E+01	5.7E+03	3.9E-07	2.3E-03	1.0E+00	2.5E+02	1.3E-05	5.3E-02
Cumulative Risk and Hazard:									7E-07	0.2			4E-07	0.3			1E-05	3
Cumulative Risk and Hazard Excluding Background Metals:									7E-07	0.003			4E-07	0.002			1E-05	0.05
Mixed-Zone Soils (0 to 10 feet below ground surface)																		
Metals	Cobalt	7440-48-4	3.6E+01	3.15E+01	95% UCL	Yes	1.2E+04	3.9E+02	2.7E-09	8.1E-02	3.5E+03	9.1E+02	9.1E-09	3.5E-02	4.2E+02	2.3E+01	7.5E-08	1.4E+00
Metals	Iron	7439-89-6	5.9E+04	5.45E+04	95% UCL	Yes	--	9.1E+05	--	6.0E-02	--	2.4E+05	--	2.3E-01	--	5.5E+04	--	9.9E-01
SVOC	Pentachlorophenol	87-86-5	3.2E+01	6.01E+00	95% UCL	No	2.0E+01	4.1E+03	3.0E-07	1.5E-03	3.4E+01	5.7E+03	1.7E-07	1.1E-03	1.0E+00	2.5E+02	6.0E-06	2.4E-02
Cumulative Risk and Hazard:									3E-07	0.1			2E-07	0.3			6E-06	2
Cumulative Risk and Hazard Excluding Background Metals:									3E-07	0.001			2E-07	0.001			6E-06	0.02

Notes:

Bold indicates cancer risk exceeds 1E-6 or hazard quotient exceeds 1.

-- = not applicable

bgs = below ground surface

CAS = chemical abstract service

COPC = constituent of potential concern

EPC = Exposure Point Concentration

MDC = maximum detected concentration

mg/kg = milligram(s) per kilogram

RBC = risk-based concentration

Table 7-4. Soil Leaching to Groundwater Evaluation at Copco No. 2 Wood Pile

COPC	CAS	Site EPC (mg/kg)	EPC Basis	Organic Carbon Coefficient (K_{oc}) (cm^3/g)	Henry's Law Constant (H) ($atm\cdot m^3/mole\cdot ^\circ K$)	Dilution/Attenuation Factor (DAF)	Target Groundwater Concentrations		Leaching SLs			
							Drinking Water Resource (ESL Table S-3) ($\mu g/L$)	Nondrinking Water Resource based on Freshwater Habitat (ESL Table S-3) ($\mu g/L$)	Protection of Drinking Water Resource SL ^a (mg/kg)	EPC Exceeds Drinking Water Resource SL?	Protection of Nondrinking Water Resource based on Freshwater Habitat SL ^a (mg/kg)	EPC Exceeds Nondrinking Water Resource SL?
Bis(2-chloroethyl) ether	111-44-4	1.6E-03	MDC	3.20E+01	1.71E-05	5.42E+00	6.3E-03	6.1E+01	3.4E-05	Yes	3.3E-01	No
Pentachlorophenol	87-86-5	6.0E+00	95% UCL	5.90E+02	2.45E-08	9.8E+01	1.0E+00	1.5E+01	9.8E-02	Yes	1.5E+00	Yes

Notes:

^a Soil Leaching SL calculated per the formula in Section 3.1.2.

Target groundwater concentrations from Table S-3 in SFRWQCB (2019).

Groundwater Category Drinking Water Resource - protective of groundwater that is a source of drinking water AND protective of discharge of groundwater to surface water and subsequent effects on aquatic life.

-- = not applicable

$\mu g/L$ = micrograms per kilogram

$atm\cdot m^3/mole\cdot ^\circ K$ = standard atmosphere meters cubed per mole

CAS = Chemical Abstract Service

cm^3/g = cubic centimeters per gram

COPC = constituent of potential concern

EPC = exposure point concentration for soil data from all depths

ESL = environmental screening level, SFRWQCB 2019

Koc = organic carbon partition coefficient

MDC = maximum detected concentration; used because there are too few detected values to calculate a UCL

mg/kg = milligrams per kilogram

SL = screening level

UCL = upper confidence limit on the mean

Table 7-5. Weight of Evidence for Ecological Receptors at Copco No. 2 Wood Pile

REC Name	Class	Detected Analytes	Background Comparison	Step 1 Screening Evaluation	Step 2 Refined Evaluation	Step 3 Site-Specific Evaluation				Step 4 Weight of Evidence	
			Background HQ>1	No Effect HQ>1	Low Effect HQ>1	Bird EcoPRG HQ>1	Mammal EcoPRG HQ>1	Bird AUF Adjusted HQ>1	Mammal AUF Adjusted HQ>1	Retain for Risk Management?	Rationale
			--	2	--	--	--	--	--	--	No
Copco No. 2 Wood Pile	Metal	Arsenic	--	2	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	Metal	Barium	--	26	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	Metal	Boron	--	13	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	Metal	Chromium	--	26	8	--	--	--	--	No	B
Copco No. 2 Wood Pile	Metal	Cobalt	--	26	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	Metal	Copper	--	26	25	--	--	--	--	No	B
Copco No. 2 Wood Pile	Metal	Lead	--	1	1	--	--	--	--	No	B
Copco No. 2 Wood Pile	Metal	Manganese	--	26	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	Metal	Mercury	--	8	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	Metal	Nickel	--	25	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	Metal	Selenium	26	26	26	--	--	--	--	No	C
Copco No. 2 Wood Pile	Metal	Thallium	--	26	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	Metal	Vanadium	--	26	26	26	--	--	--	No	D
Copco No. 2 Wood Pile	Metal	Zinc	--	26	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	SVOC	Benzoic Acid	--	1	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	SVOC	Bis (2-ethylhexyl) phthalate	--	1	--	--	--	--	--	No	A
Copco No. 2 Wood Pile	SVOC	Pentachlorophenol	--	6	4	--	2	--	--	No	E

Notes:

Number presented under each step identifies the number of samples collected from 0 to 6 feet bgs that exceeded the indicated screening level or EcoPRG.

-- - no samples had exceedances; analyte not retained for further evaluation.

AUF = area use factor

BTV = background threshold value

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient

REC = recognized environmental condition

RSL = regional screening level

SVOC = semivolatile organic compound

Weight of Evidence Rationale Codes:

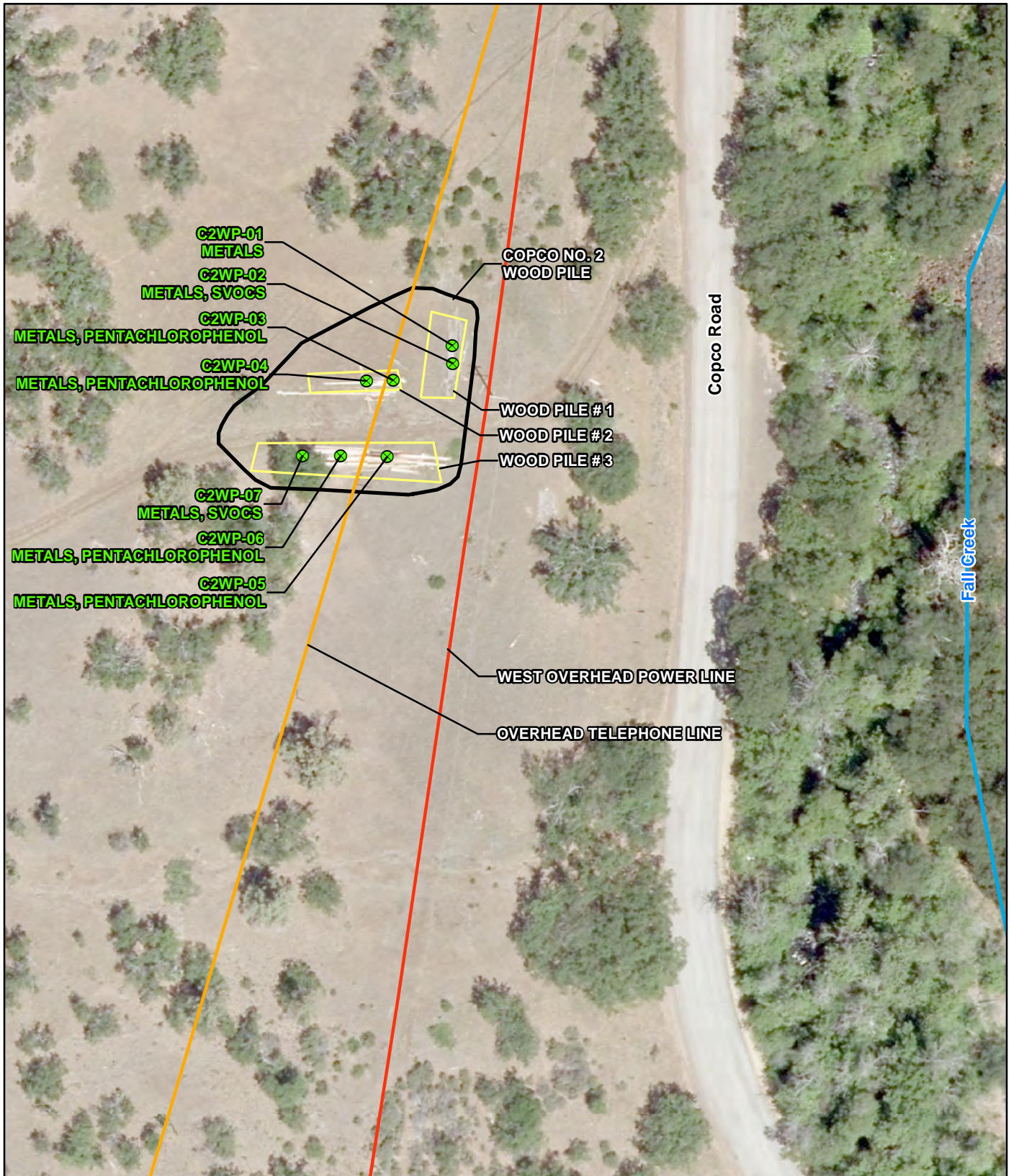
A = Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect RSL and the maximum detected result did not exceed the BTV.

B = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect RSL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals even under the assumption of 100 percent site use. In addition the maximum detected result did not exceed the BTV.

C = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect RSL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals even under the assumption of 100 percent site use.

D = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect RSL as well as the Bird EcoPRG assuming 100 percent site use; however, the maximum detected result does not exceed the BTV.

E = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect RSL as well as the Mammalian EcoPRG assuming 100 percent sites use; however, no results exceed the Bird EcoPRG (100 percent site use) and none of the AUF-adjusted HQs exceeded for either birds or mammals.



LEGEND

- Limits of SIWP
- Approximate Limits of Visually Impacted Area
- Soil Boring with SL Exceedance
- Overhead Power Line
- Overhead Telephone Line

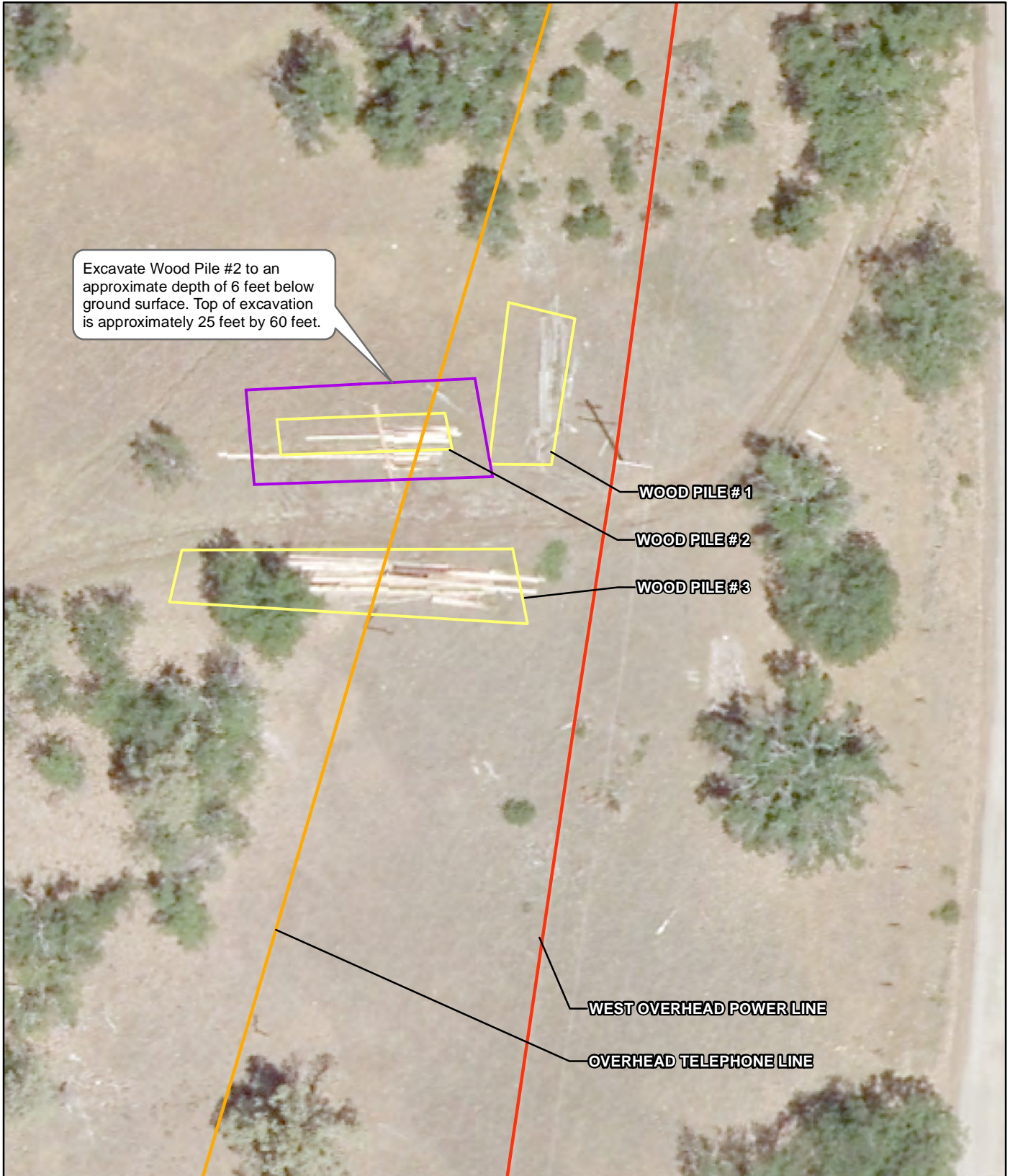
Fall Creek

Borehole: C2WP-01
Analytes: Metals

0 25 50
Feet

Note:
Overhead power and telephone lines are depicted on the ground to show the clearance of the proposed direct push drill rig at the proposed soil boring locations.

FIGURE 7-1
Copco No. 2 Wood Pile
Lower Klamath Hydroelectric Project



LEGEND

- Approximate Limits of Visually Impacted Area
- Excavation Area
- Overhead Power Line
- Overhead Telephone Line

Note:
Overhead power and telephone lines
are depicted on the ground to show
the clearance of excavation equipment.

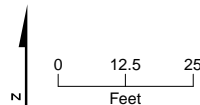


FIGURE 7-2
Copco No. 2 Wood Pile Excavation Area
Lower Klamath Hydroelectric Project

8. Copco No. 2 Powerhouse Transformer Fire

This section summarizes the field activities and analytical laboratory results and provides the risk assessments and recommended next steps for closure of the Copco No. 2 Powerhouse Transformer Fire.

8.1 Background

In May 2006, an aboveground Transformer C located in front of the south side of the Copco No. 2 Powerhouse caught fire, resulting in a release of transformer oil. Transformer C initially contained 3,680 gallons of oil; 2,965 gallons of oil were pumped out of the transformer after the incident. The total volume of oil lost (spilled or combusted) during the fire is estimated to be 715 gallons (Parametrix 2006).

In July 2006, Parametrix advanced six DPT borings (Copco-01 to Copco-06) and two hand auger borings (Copco-07 and Copco-08) for collection of soil samples at depths ranging from 1 to 25 feet bgs. Soil within the Copco No. 2 Powerhouse Transformer Fire site is generally classified as Medford clay loam, cool (USDA 2021). The soil samples were analyzed for diesel range and heavy oil range TPHs. At boring Copco-06, located near the footprint of Transformer C, the soil samples were also analyzed for PCBs. The highest TPH concentrations were detected in the top 3 feet of soil and above a layer of concrete beneath the transformers. Detected DRO concentrations ranged from 7.4 to 650 mg/kg, and oil range organics concentrations ranged from 6.8 to 250 mg/kg. The residential and leaching to groundwater screening level for DRO was exceeded in one soil sample and at a depth of 1 foot bgs at boring Copco-07. At boring Copco-06, PCBs were not detected (above the MDL of 0.0670 mg/kg) in any of the soil samples. PCBs were not analyzed at any other boring location.

The soil sampling results were submitted to the Siskiyou County Department of Public Health by PacifiCorp (PacifiCorp 2006). The Siskiyou County Department of Public Health stated in a follow-up letter to PacifiCorp on September 21, 2006, that no further site investigation was required, and that the Department concurred with PacifiCorp's plan to assess soil beneath the transformers when they were dismantled and to characterize the site soils for proper disposal (PacifiCorp 2006).

Because there are no records confirming removal of TPH-impacted soil when the transformers were dismantled, PacifiCorp decided to collect soil samples as outlined in the California SIWP.

8.2 Field Activities

On March 2, 2022, the planned soil borings for the Copco No. 2 Powerhouse Transformer Fire site were marked and cleared for utilities (Section 2). Borehole locations were moved to avoid the numerous underground utilities in the area (Figure 8-1, Photograph 8-1).

On March 9 and 10, 2022, five soil borings were advanced by hand auger and DPT drilling to depths of 1.5 or 2 feet bgs (Table 8-1). At soil boring C2TF-01, soil samples were collected from a depths of 0 to 1 foot bgs and from 1 to 2 feet bgs. Hand auger refusal was encountered at a depth of 2 feet bgs due to the presence of cobbles and bedrock.

At soil borings C2TF-02, C2TF-03, C2TF-04, and C2TF-05, a DPT rig was used to core the surficial layer of asphalt, and then a hand auger was used to avoid damaging any subsurface utilities. Below the asphalt, several inches of new road base was observed on top of a layer of new pea gravel. Concrete was encountered at a depth of 1.5 to 2.0 feet bgs at C2TF-02 through C2TF-04. The pea gravel layer consistently caused borehole collapse from 1.5 and 2 feet bgs. Consequently, soil samples were not collected from borings C2TF-02, C2TF-04, and C2TF-05, and a sample of the pea gravel was instead

collected to demonstrate that clean backfill had been used upon removal of the transformers. Groundwater was not observed in any of the soil borings.



Photograph 8-1. Location of Four Boreholes (white paint) and Underground Anomalies (pink paint) at the Former Transformers (Jacobs 2022a)

Table 8-1. Copco No. 2 Powerhouse Transformer Fire Borehole Summary

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
C2TF-01	0-1, 1-2	2	HA	Located in soil/gravel area east of Powerhouse and former transformers; hand auger refusal at 2 feet bgs
C2TF-02	None	2	DPT/HA	Cored 6-inch asphalt, road base, pea gravel, refusal (concrete) at 2 feet bgs; no samples collected
C2TF-03	1-1.5	1.5	DPT/HA	Cored 6-inch asphalt, road base, pea gravel, refusal (concrete) at 2 feet bgs. Sample collected to demonstrate use of clean fill.
C2TF-04	None	2	DPT/HA	Cored 6-inch asphalt, road base, pea gravel, refusal (concrete) at 2 feet bgs; no samples collected
C2TF-05	None	2	DPT/HA	Cored 6-inch asphalt, road base, pea gravel, refusal (hole collapsed) at 2 feet bgs; no samples collected

Table 8-1. Copco No. 2 Powerhouse Transformer Fire Borehole Summary

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
Notes: bgs = below ground surface DPT = direct-push technology HA = hand auger				

8.3 Analytical Results

The analytical results were compared to the site-specific screening levels (Appendix D) established in the California SIWP. Human health screening levels were exceeded for DRO, Aroclor 1262 (PCB), and PAHs [benzo(a)pyrene and dibenzo(a,h)anthracene] at soil boring C2TF-01. The leaching to groundwater screening level was also exceeded for DRO at soil boring C2TF-01. Ecological screening levels were not exceeded at any of the soil borings (Table 8-2, Figure 8-1).

Table 8-2. Copco No. 2 Powerhouse Transformer Fire Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels

Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
C2TF-01	Diesel Range Organics, Aroclor 1262, Benzo(a)pyrene, Dibenzo(a,h)anthracene	Diesel Range Organics	<SLs
C2TF-02	Not sampled	Not sampled	Not sampled
C2TF-03	<SLs	<SLs	<SLs
C2TF-04	Not sampled	Not sampled	Not sampled
C2TF-05	Not sampled	Not sampled	Not sampled

Notes:

SLs = screening levels

<SLs = does not exceed screening levels

The COPCs carried forward into the risk assessments are based on the risk assessment screening criteria discussed in Sections 3.1 (human health), 3.2 (soil leaching to groundwater), and 3.3 (ecological).

8.4 Site-Specific Human Health Risk Assessment

8.4.1 Data Evaluation

The human health COPCs in soil at the Copco No. 2 Powerhouse Transformer Fire site are DRO, Aroclor 1262, benzo(a)pyrene, and dibenzo(a,h)anthracene (Appendix F).

8.4.2 Exposure Assessment

Because only three surface soil samples were collected, mixed-zone soil was not evaluated, and maximum detected concentrations were used as the EPCs.

Default DTSC and the EPA exposure parameters were used (Appendix F) with modifications for the future recreational user (Section 3.1.2). Additional site-specific parameters were assumed for the future construction worker exposure scenario based on the input requirement in the RSL calculator. For general construction activities (excavation and grading), "soil-other construction activities" were selected for the RSL calculator, and the following conservative site-specific parameters were entered as inputs:

- Total area: 0.5 acre (minimum input for RSL calculator)
- Area dozed: 0.01 acre (conservative estimate of site size)
- Area graded: 0.01 acre (conservative estimate of site size)
- Area excavated: 50 square meters (assumes entire site is excavated)
- Dozing and grading blade length: 3.7 meters (based on standard equipment)
- Average depth of excavation: 3 meters

8.4.3 Toxicity Assessment

Surrogate toxicity values (Section 3) were used to evaluate Aroclor 1262.

8.4.4 Human Health Risk Assessment Results

The HHRA analysis indicates that for the future active recreational user, the cumulative ELCR and HI do not exceed $1E-06$ and 1, respectively, for surface soil (Table 8-3). For the future construction worker scenario, the cumulative ELCR does not exceed $1E-06$, but the HI is 5, which exceeds the target HI of 1. The primary contributor to the HI is DRO.

For the hypothetical future residential scenario, the cumulative ELCR is $9E-06$, which exceeds the EPA point of departure of $1E-06$ but does not exceed the EPA risk management range ($1E-06$ to $1E-04$) (EPA 1989). The primary contributors to the ELCR are Aroclor 1262, benzo(a)pyrene, and dibenzo(a,h)anthracene. The HI is 5, which exceeds the target HI of 1. The primary contributor to the HI is DRO.

8.4.5 Uncertainty Discussion

In general, the number and location of soil samples are considered adequate for risk assessment purposes, and the types of COPCs and EPCs identified are considered representative of potential releases within the Copco No. 2 Powerhouse Transformer Fire site. Because samples were collected at suspected release locations, the exposure area data are likely biased high and the risks potentially overestimated.

The highest concentrations of Aroclor 1262 were detected at sample location C2TF-01 where residential RBCs were exceeded at all depths (0 to 1 foot and 1 to 2 feet bgs). The highest concentration of DRO was detected at sample location C2TF-01 where the residential RBC was exceeded (1 to 2 feet bgs). Because Aroclor 1260 and DRO at C2TF-01 have not been delineated laterally or vertically, the resulting risk assessment data gap causes uncertainty in the risk results.

8.4.6 Human Health Risk Assessment Conclusions

Estimated risks are below target thresholds for future active recreational users from potential exposure to COPCs in soil.

Noncancer HIs exceed the target HI of 1 for future construction workers and hypothetical future residents. The primary contributor to the HI is DRO. The concentration of DRO exceeds the residential RBC of 960 mg/kg at location C2TF-01 (1 to 2 feet bgs). The vertical extent of the DRO contamination has not been delineated.

Cancer risks to hypothetical future residents exceed the EPA point of departure of 1E-06. The primary contributors to risk are Aroclor 1262, benzo(a)pyrene, and dibenzo(a,h)anthracene. Concentrations of Aroclor 1262 exceed the residential RBC of 0.24 mg/kg at location C2TF-01 (0 to 1 foot and 1 to 2 feet bgs). The vertical extent of Aroclor 1262 has not been delineated. Benzo(a)pyrene and dibenzo(a,h)anthracene exceed the residential RBCs of 0.11 mg/kg and 0.028 mg/kg, respectively, at location C2TF-01 (0 to 1 foot bgs).

8.5 Leaching to Groundwater Evaluation

The soil leaching COPC at the Copco No. 2 Powerhouse Transformer Fire site is DRO (Appendix F). Groundwater was not encountered during the site investigation sampling and depth to groundwater is not known. The Klamath River is located approximately 60 feet northwest of the Copco No. 2 Powerhouse Transformer Fire site and is approximately 20 feet lower in elevation. Therefore, depth to groundwater is estimated to be approximately 15 or more feet bgs.

Diesel range organics were detected at a concentration exceeding the soil leaching screening level of 1,100 mg/kg in one sample (C2TF-01 at 4,400 mg/kg at 1 to 2 feet bgs) out of three samples. The concentration of DRO detected at C2TF-01 is less than the soil leaching value protective of groundwater as a nondrinking water resource of 7,300 mg/kg (Table 8-4). Because refusal was met, samples were not collected deeper than 2 feet bgs and the vertical extent is not delineated.

The concentration of DRO at sample location C2TF-01 exceeds the soil leaching screening level and, because the vertical extent of the DRO contamination has not been delineated, poses a potential threat to groundwater.

8.6 Ecological Risk Assessment

The streamlined ERA for the Transformer Fire area was conducted on a sample-by-sample basis and all risk estimates are presented in Appendix G, Table G-12 and Table G-18. The Copco No. 2 Powerhouse Transformer Fire site is not retained for further ecological risk assessment because there were no exceedances of the No Effect ESLs (Step 1) or chemical group exceedances (Table G-18). Therefore, no analytes in site soil were retained for risk management based on potential risks to ecological receptors.

8.7 Recommended Actions

The ERA did not recommend any COPCs for risk management. However, the HHRA and leaching to groundwater risk assessments identified DRO above target risk levels. PAHs and Aroclor 1262 were also present above target HHRA risk levels.

Soil impacted with DRO, Aroclor 1262, benzo(a)pyrene, and dibenzo(a,h)anthracene in the immediate vicinity of soil boring C2TF-01 will be excavated after the Copco No. 2 Powerhouse utilities have been deenergized (Figure 8-2). A 20-foot by 10-foot footprint will be excavated to a depth of at least 2 feet bgs. The excavation will proceed to bedrock or until confirmation samples from excavation floor and sidewall samples indicate EPCs of DRO, Aroclor 1262, benzo(a)pyrene, and dibenzo(a,h)anthracene are less than the residential RBCs (960 mg/kg, 0.24 mg/kg, 0.11 mg/kg, and 0.028 mg/kg, respectively).

Table 8-3. Human Health Risk Estimates for COPCs in Soil at Copco 2 Powerhouse Transformer Fire

Type	COPC	CAS	MDC (mg/kg)	EPC (mg/kg)	EPC Basis	Background Related?	Future Recreational User				Future Construction Worker				Hypothetical Future Resident				
							RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	
Surface Soils (0 to 2 feet below ground surface)																			
TPH	Diesel Range Organics	DRO	4.4E+03	4.4E+03	MDC	No	--	2.9E+04	--	1.5E-01	--	9.3E+02	--	4.8E+00	--	9.6E+02	--	4.6E+00	
PCB	Aroclor 1262	37324-23-5	1.0E+00	1.0E+00	MDC	No	1.7E+00	--	6.0E-07	--	8.1E+00	--	1.2E-07	--	2.4E-01	--	4.2E-06	--	
PAH	Benzo(a)pyrene	50-32-8	3.1E-01	3.1E-01	MDC	No	7.1E-01	1.1E+02	4.3E-07	3.0E-03	1.8E+01	--	1.8E-08	--	1.1E-01	1.8E+01	2.8E-06	1.7E-02	
PAH	Dibenzo(a,h)anthracene	53-70-3	6.0E-02	6.0E-02	MDC	No	7.1E-01	--	8.4E-08	--	1.8E+01	--	3.4E-09	--	2.8E-02	--	2.1E-06	--	
									Cumulative Risk and Hazard:		1E-06	0.2			1E-07	5		9E-06	5
									Cumulative Risk and Hazard Excluding Background Metals:		1E-06	0.2			1E-07	5		9E-06	5

Notes:

Bold indicates cancer risk exceeds 1E-6 or hazard quotient exceeds 1.

-- = not applicable

bgs = below ground surface

CAS = chemical abstract service

COPC = constituent of potential concern

EPC = Exposure Point Concentration

MDC = maximum detected concentration

mg/kg = milligram(s) per kilogram

RBC = risk-based concentration

Table 8-4. Soil Leaching to Groundwater Evaluation at Copco No. 2 Powerhouse Transformer Fire

COPC	CAS	Site EPC (mg/kg)	EPC Basis	Organic Carbon Coefficient (K _{oc}) (cm ³ /g)	Henry's Law Constant (H) (atm-m ³ /mole-°K)	Dilution/ Attenuation Factor (DAF)	Target Groundwater Concentrations		Leaching SLs			
							Drinking Water Resource (ESL Table S-3) (µg/L)	Nondrinking Water Resource based on Freshwater Habitat (ESL Table S-3) (µg/L)	Protection of Drinking Water Resource SL ^a (mg/kg)	EPC Exceeds Drinking Water Resource SL? Yes	Protection of Nondrinking Water Resource based on Freshwater Habitat SL ^a (mg/kg)	EPC Exceeds Nondrinking Water Resource SL?
Diesel Range Organics	DRO	4.4E+03	MDC	1.50E+03	1.79E+00	1.14E+04	1.0E+02	6.4E+02	1.1E+03	Yes	7.3E+03	No

Notes:

^a Soil Leaching SL calculated per the formula in Section 3.1.2.

Target groundwater concentrations from Table S-3 in SFRWQCB (2019).

Groundwater Category Drinking Water Resource - protective of groundwater that is a source of drinking water AND protective of discharge of groundwater to surface water and subsequent effects on aquatic life.

-- = not applicable

µg/L = micrograms per kilogram

atm-m³/mole-°K = standard atmosphere meters cubed per mole

CAS = Chemical Abstract Service

cm³/g = cubic centimeters per gram

COPC = constituent of potential concern

EPC = exposure point concentration for soil data from all depths

ESL = environmental screening level, SFRWQCB 2019

Koc = organic carbon partition coefficient

MDC = maximum detected concentration; used because there are too few detected values to calculate a UCL

mg/kg = milligrams per kilogram

SL = screening level

UCL = upper confidence limit on the mean



LEGEND

Limits of SIWP

Former Transformer

Soil Boring with SL Exceedance

Soil Boring without SL Exceedance

Prior Soil Sample Location

Powerhouse

Klamath River







0 25 50
Feet

Borehole: C2TF-01
Analytes: DRO, PCBs, PAHs

FIGURE 8-1
Copco No. 2 Powerhouse Transformer Fire
Lower Klamath Hydroelectric Project



LEGEND

-  Former Transformer
-  Excavation Area
-  Powerhouse
-  Klamath River

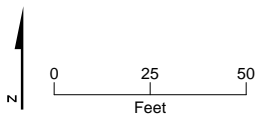


FIGURE 8-2
Copco No. 2 Powerhouse Transformer Fire Excavation Area
Lower Klamath Hydroelectric Project

9. Copco No. 2 Former Mobile Oil Containment Building and Underground Storage Tanks

This section summarizes the field activities and analytical laboratory results and provides the risk assessments and recommended next steps for closure of the Copco No. 2 Former Mobile Oil Containment Building and Underground Storage Tanks sites. The two sites were evaluated as a single site under the risk assessments because of their proximity, interrelatedness, and similar COPCs.

9.1 Copco No. 2 Former Mobile Oil Containment Building

9.1.1 Background

The existing Maintenance Building (Photograph 9-1) is west of the Copco No. 2 Powerhouse and within the footprint of the former Mobile Oil Containment Building. A shop was historically located southwest of the Mobile Oil Containment Building (Figure 9-1). There was no observable evidence of either of these structures during the Phase I ESA, and there were no records documenting an environmental release, facility demolition, or soil removal activities resulting from potential spills or leaks of petroleum hydrocarbons at these former buildings (AECOM 2018). The former buildings were consequently included in Exhibit C because of the potential for undocumented petroleum hydrocarbon releases to the environment.



Photograph 9-1. Existing Maintenance Building (Jacobs 2021a)

9.1.2 Field Activities

On March 1, 2022, the seven planned soil borings (C2CB-01 through C2CB-07) for Copco No. 2 Former Mobile Oil Containment Building were marked and cleared for utilities (Section 2). Soil borings C2CB-01 through C2CB-04 were advanced on each side of the Maintenance Building, and three soil borings were

advanced within the footprint of the former shop (Figure 9-1). Boring C2CB-07 was moved approximately 20 feet northwest and adjacent to a geophysical anomaly. To determine if USTs were present, geophysical surveys were performed over a 1.2-acre area by Spectrum Geophysics, who found no geophysical anomalies indicative of USTs.

On March 7, 2022, soil borings C2CB-01 through C2CB-07 were advanced for logging purposes and for collection of soil samples if soil was determined to have been impacted by TPHs. A hand auger was used until refusal was met, after which a DPT rig was used to advance the boring and collect continuous soil cores to a depth of 10 feet bgs. Recovered soil cores from each boring were logged and screened with a PID. The recovered soil from each boring was determined to not have been impacted by TPHs (no staining, odor, or PID readings greater than 50 parts per million by volume [ppmv]). Consequently, soil samples were not collected (Table 9-1). However, the analytical results for waste profiling of the combined and containerized soil cuttings indicated the presence of DROs above the screening levels. The analytical results for waste profiling of containerized water from equipment decontamination also indicated the presence of DRO and VOCs above screening levels. Because site-specific contamination could not be ruled out, PacifiCorp decided to return to the site, install additional borings at the same general location, and collect soil samples from these locations. Groundwater samples were to be collected, if encountered.

On May 3, 2022, soil borings C2CB-08 through C2CB-14 were marked adjacent to the original soil borings (Figure 9-1) and then the planned soil borings were cleared for utilities. On May 10 and 11, 2022, a DPT rig was used to advance the soil borings to a depth of 10 to 25 feet bgs. Continuous soil cores were collected, and composite soil samples were collected at 5-foot intervals from surface grade to the depth of the boring (Table 9-1). Temporary wells (Section 2) were installed in soil borings C2CB-08, C2CB-10, and C2CB-11; groundwater was not encountered in the other soil borings. A disposable bailer was used to collect grab groundwater samples from soil borings C2CB-08 and C2CB-10. A grab groundwater sample was not collected from soil boring C2CB-11 because the temporary well remained dry (Table 9-1).

Table 9-1. Copco No. 2 Former Mobile Oil Containment Building Borehole Summary

Borehole ID	Sample Interval (feet bgs)	Depth (feet)	Method	Comments
C2CB-01	None	10	HA/DPT	Not impacted by TPH; ^a no samples collected
C2CB-02	None	10	HA/DPT	Not impacted by TPH; no samples collected
C2CB-03	None	10	HA/DPT	Not impacted by TPH; no samples collected
C2CB-04	None	10	HA/DPT	Not impacted by TPH; no samples collected
C2CB-05	None	10	HA/DPT	Not impacted by TPH; no samples collected
C2CB-06	None	10	HA/DPT	Not impacted by TPH; no samples collected
C2CB-07	None	10	HA/DPT	Not impacted by TPH; no samples collected
C2CB-08	0-5, 5-10, 10-15	25	HA/DPT	Advanced adjacent to boring C2CB-01; collected groundwater sample
C2CB-09	0-5, 5-10	10	HA/DPT	Advanced adjacent to boring C2CB-02; not impacted by TPH
C2CB-10	0-5, 5-10, 10-15, 15-20, 20-25	25	HA/DPT	Advanced adjacent to boring C2CB-03; not impacted by TPH; after stabilization, DTW 23.3 feet bgs; collected groundwater sample

Table 9-1. Copco No. 2 Former Mobile Oil Containment Building Borehole Summary

Borehole ID	Sample Interval (feet bgs)	Depth (feet)	Method	Comments
C2CB-11	0-5, 5-10, 10-15, 15-20, 20-23	23	HA/DPT	Advanced adjacent to boring C2CB-04; not impacted by TPH; installed temporary well that remained dry
C2CB-12	0-5, 5-10	10	HA/DPT	Advanced adjacent to boring C2CB-05; not impacted by TPH
C2CB-13	0.5-5, 5-10, 10-15, 15-20, 20-23	23	HA/DPT	Advanced adjacent to boring C2C6B-06; not impacted by TPH
C2CB-14	0-5, 5-10	10	HA/DPT	Advanced adjacent to boring C2CB-07; not impacted by TPH

^a The phrase "not impacted by TPH" in this table row and others means soil was not stained, odorous, or characterized by PID readings greater than 50 ppmv.

bgs = below ground surface

DPT = direct-push technology

DTW = depth to water

HA = hand auger

PID = photoionization detector

ppmv = parts per million by volume

TPH = total petroleum hydrocarbon

9.1.3 Analytical Results

The analytical results from soil borings C2CB-08 to C2CB-14 were compared to the site-specific screening levels (Appendix D) established in the California SIWP. Soil from borings C2CB-08 through C2CB-14 and groundwater from temporary well C2CB-10 were not found to contain COPCs at concentrations that exceeded screening levels (Table 9-2). Groundwater from temporary well C2CB-08 contained DRO at a concentration of 290 µg/l, which exceeds the screening level of 200 µg/l (Table 9-2, Figure 9-1).

Table 9-2. Copco No. 2 Former Mobile Oil Containment Building Boreholes with Compounds in Soil or Groundwater that Exceed the California Site Investigation Work Plan Screening Levels

Borehole	Soil Human Health SLs	Soil Leaching to Groundwater SLs	Soil Ecological SLs	Groundwater Drinking Water SLs
C2CB-08	<SLs	<SLs	<SLs	Diesel Range Organics
C2CB-09	<SLs	<SLs	<SLs	Not encountered
C2CB-10	<SLs	<SLs	<SLs	<SLs
C2CB-11	<SLs	<SLs	<SLs	Remained dry
C2CB-12	<SLs	<SLs	<SLs	Not encountered
C2CB-13	<SLs	<SLs	<SLs	Not encountered
C2CB-14	<SLs	<SLs	<SLs	Not encountered

Notes:

SLs = screening levels; <SLs = does not exceed screening levels

9.2 Copco No. 2 Underground Storage Tanks

9.2.1 Background

At the Copco No. 2 Development, AECOM identified one 9,000-gallon UST located at 19305 Daggett Road, Hornbrook, California, based on a June 27, 1996, letter from Marsh & McLennan to PacifiCorp. No further information was available on the specific location of the UST or whether it has been removed. Hazmat Figure Sheet 8 from the Phase I ESA (AECOM 2018) depicts the former fuel pumps in an area east northeast of the Copco No. 2 Maintenance Building and just below Daggett Road (Figure 9-1); roughly the area between the power pole and the road grader in Photograph 9-2.



Photograph 9-2. Looking Southeast at Approximate Location of Copco No. 2 Underground Storage Tanks (Jacobs 2021a)

9.2.2 Field Activities

On March 1, 2022, the planned soil borings for Copco No. 2 Underground Storage Tanks were marked and cleared for utilities as discussed in Section 2 (Figure 9-1). Geophysical surveys were performed over a 1.2 acre area to determine if a UST was present. The geophysical surveys did not identify anomalies indicative of USTs, but did result in the relocation of soil boring C2UT-06 approximately 5 feet to north of the planned location to avoid an underground utility.

On March 7, 8, and 9, 2022, a hand auger or DPT rig was used to advance soil borings C2UT-01 through C2UT-9 for logging purposes and for collection of soil samples if soil was determined to have been impacted by TPHs. Because the DPT rig met refusal, several soil borings could not be advanced to the planned borehole depth of 20 feet bgs. Recovered soil cores from each boring were logged and screened with a PID. Except for soil from boring C2UT-02, recovered soil from each boring was determined to not

have been impacted by TPHs (no staining, odor, or PID readings greater than 50 ppmv). Consequently, soil samples were not collected from borings C2UT-01 and C2UT-03 through C2UT-09 (Table 9-3).

At soil boring C2UT-02, a moist, black clay with a slight organic odor was observed at a depth of 11.5 to 12 feet bgs. The PID reading from both of these depth intervals was 0 ppmv. Because the soil at these depths had a slight organic odor, soil samples were collected from each of these depths and from a depth of 17 to 18 feet bgs, just below the deepest interval with black soil. Four step-out borings (C2UT-02N, C2UT-02S, C2UT-02E, C2UT-02W) were also advanced to depths of 20 feet bgs (Figure 9-1).

Impacted soil was not observed in soil borings C2UT-02N, C2UT-02S, C2UT-02E, which were respectively advanced 10 feet north, south, and east of boring C2UT-02. Boring C2UT-02W, located 10 feet west of soil boring C2UT-02, contained soil with staining and odor at a depth 15 to 17 feet bgs, so a soil sample was collected from this interval (Table 9-3). The soil boring was advanced to collect a soil sample from beneath the impacted soil. Groundwater was encountered at a depth of 20 feet bgs. A temporary well was installed near the end of the day (Section 2), was allowed to stabilize overnight, and static water was measured in the well at a depth of 13.4 feet bgs the following day. A grab groundwater sample was collected with a disposable bailer and was submitted for analysis of the same analytes as the soil samples (Table 9-3).

On May 3, 2022, five step-out soil borings (C2UT-10 through C2UT-14) were marked and cleared for utilities (Section 2). Soil borings C2UT-10 through C2UT-13 were located 15 feet from soil boring C2UT-02W, and soil boring C2UT-14 was located near soil boring C2UT-05 in an effort to establish presumed upgradient groundwater conditions from soil borings C2UT-02 and C2UT-02W (Figure 9-1). On May 9 and 10, 2022, the step-out soil borings were advanced with a DPT rig. Continuous soil cores were collected to refusal or the planned drilling depth of 25 feet bgs, and soil samples were collected at 5-foot intervals (Table 9-3). Temporary wells were installed within borings C2UT-10, C2UT-12, C2UT-13, and C2UT-14 (Section 2); groundwater was allowed to stabilize, and then groundwater samples were collected from each temporary well (Table 9-3).

Table 9-3. Copco No. 2 Underground Storage Tanks Borehole Summary

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
C2UT-01	None	12.5	HA/DPT	Refusal encountered at 12.5 feet bgs in each of three attempts; not impacted by TPH, no samples collected
C2UT-02	11.5-12, 15-16, 17-18	20	HA/DPT	Black clay with organic odor at 11.5-12 feet bgs and 15-16 feet bgs
C2UT-02E	None	20	HA/DPT	Not impacted by TPH; ^a no soil samples collected
C2UT-02N	None	20	HA/DPT	Not impacted by TPH; no soil samples collected
C2UT-02S	None	20	HA/DPT	Not impacted by TPH; no soil samples collected
C2UT-02W	15.5-17.5	25	HA/DPT	Black clay at 15.5-17.5 feet bgs; initial DTW at 20.0 feet bgs; after stabilization, DTW at 13.4 feet bgs; collected groundwater sample
C2UT-03	None	16.5	HA/DPT	Refusal at 16.5 feet bgs; not impacted by TPH, no soil samples collected
C2UT-04	None	20	HA/DPT	Not impacted by TPH; no soil samples collected

Table 9-3. Copco No. 2 Underground Storage Tanks Borehole Summary

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
C2UT-05	None	20	HA/DPT	Not impacted by TPH; no samples collected; DTW at 19 feet bgs
C2UT-06	None	20	HA/DPT	Not impacted by TPH; no soil samples collected
C2UT-07	None	20	HA/DPT	Not impacted by TPH; no soil samples collected
C2UT-08	None	20	HA/DPT	Not impacted by TPH; no soil samples collected
C2UT-09	None	11	HA/DPT	Not impacted by TPH; no soil samples collected
C2UT-10	0-5, 5-10, 10-15, 15-17	17	HA/DPT	After stabilization, DTW at 15.6 feet bgs; collected groundwater sample
C2UT-11	0-5, 5-10	10	HA/DPT	Refusal at 10 feet bgs or shallower on each of four attempts
C2UT-12	0-5, 5-10, 10-15, 15--20, 20-21	25	HA/DPT	Initial DTW at 21.5 feet bgs; after stabilization, DTW at 13.2 feet bgs; collected groundwater sample
C2UT-13	0-5, 5-10, 10-15, 15--20, 20-25	25	HA/DPT	DTW at 23.5 feet bgs; collected partial groundwater sample, very low flow
C2UT-14	0-5, 5-10, 10-15, 15--20, 20-23	23	HA/DPT	Moist soil observed 11 to 13 feet bgs with dry soil beneath; DTW at 9.6 feet bgs; collected groundwater sample

Notes:

^a The phrase "not impacted by TPH" in this table row and others means soil was not stained, odorous, or characterized by PID readings greater than 50 ppmv.

bgs = below ground surface

DPT = direct-push technology

DTW = depth to water

HA = hand auger

PID = photoionization detector

ppmv = parts per million by volume

TPH = total petroleum hydrocarbon

9.2.3 Analytical Results

The analytical results were compared to the site-specific screening levels (Appendix D) established in the California SIWP. Soil from borings C2UT-10 through C2UT-14 and black soil from borings C2UT-02 and C2UT-02W did not exceed site-specific screening levels, except for soil at a depth of 15 to 20 feet bgs in boring C2UT-12, which exceeded the leaching to groundwater screening level for 1,2,3-trichloropropane (Table 9-4).

Groundwater from borings C2UT-02W, C2UT-13, and C2UT-14 exceeded the screening level for DRO. The groundwater screening level for several PAHs was exceeded in a groundwater sample collected from boring C2UT-12, and the groundwater screening level for chloroform was exceeded in the groundwater sample collected from boring C2UT-14 (Table 9-4).

Table 9-4. Copco No. 2 Underground Storage Tanks Borehole Summary Boreholes with Compounds in Soil or Groundwater that Exceeded the California Site Investigation Work Plan Screening Levels

Borehole	Soil: Human Health SLs	Soil: Leaching to Groundwater SLs	Soil: Ecological SLs	Water: Groundwater SLs
C2UT-02	<SLs	<SLs	<SLs	Not encountered
C2UT-02W	<SLs	<SLs	<SLs	Diesel Range Organics
C2UT-10	<SLs	<SLs	<SLs	<SLs
C2UT-11	<SLs	<SLs	<SLs	Not encountered
C2UT-12	<SLs	1,2,3-trichloropropane	<SLs	Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Dibenz(a,h)anthracene
C2UT-13	<SLs	<SLs	<SLs	Diesel Range Organics
C2UT-14	<SLs	<SLs	<SLs	Diesel Range Organics, Chloroform

Notes:

SLs = screening levels

<SLs = does not exceed screening levels

9.3 Site-Specific Risk Assessment

The risk assessment treated these two sites as a single exposure area because of their proximity, inter-relatedness, and similar COPCs. The COPCs carried forward into the risk assessments are based on the risk assessment screening criteria discussed in Sections 3.1 (human health), 3.2 (soil leaching to groundwater), and 3.3 (ecological).

9.3.1 Human Health Risk Assessment

9.3.1.1 Data Evaluation

No human health COPCs were identified in soil at either site. The human health COPCs in groundwater at both sites are DRO, chloroform, and PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene] (Appendix F).

9.3.1.2 Exposure Assessment

Default DTSC and EPA exposure parameters were used (Appendix F).

9.3.1.3 Toxicity Assessment

No COPCs required surrogate toxicity values.

9.3.1.4 Human Health Risk Assessment Results

For the hypothetical future residential scenario, based on drinking water use of groundwater, the cumulative ELCR is 2E-04 which exceeds the EPA risk management range (Table 9-5). The primary

contributors to the ELCR are benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene. The HI is 1 which does not exceed the target HI of 1.

9.3.1.5 Uncertainty Discussion

In general, the types of COPCs identified are considered representative of potential releases within the combined sites. Because the maximum COPC concentrations detected in groundwater were used as the EPCs, the risks are potentially overestimated.

9.3.1.6 Human Health Risk Assessment Conclusions

Estimated cancer risks for hypothetical future residents exposed to groundwater exceed the target ELCR of 1E-06. The primary contributors to the ELCR are benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene. No human health COPCs were identified in soil at the Copco No. 2 Former Mobile Containment Building or at the Copco No. 2 Underground Storage Tanks.

9.3.2 Leaching to Groundwater Evaluation

The soil leaching COPC at the two sites is 1,2,3-trichloropropane (Appendix F). Groundwater was encountered between 13.4 and 23.5 feet bgs when sampling at the sites. The Klamath River is located approximately 90 feet northwest of the Copco No. 2 Former Mobile Oil Containment Building and is approximately 28 feet lower in elevation.

1,2,3-trichloropropane was only detected in 1 of 24 samples (6.5E-04 at C2UT-12 from 15 to 20 feet bgs). Because the EPC of 1,2,3-trichloropropane (1.0E-04 mg/kg) is less than the soil leaching screening level (1.1E-04 mg/kg) and the soil leaching value protective of groundwater (58 mg/kg) as a nondrinking water resource (Table 9-6), the migration to groundwater pathway is considered incomplete.

9.3.3 Ecological Risk Assessment

The streamlined ERA for the Copco No. 2 Former Mobile Oil Containment Building and the Copco No. 2 Underground Storage Tanks was conducted on a sample-by-sample basis and all risk estimates are presented in Appendix G, Table G-13 (Mobile Oil Containment Building), Table G-14 (Underground Storage Tanks), and Table G-18 (chemical group HIs). Neither site was retained for further evaluation because there were no exceedances of the No Effect ESLs (Step 1) or chemical group exceedances (Table G-18). Therefore, no analytes in site soil were retained for risk management analysis based on potential risks to ecological receptors.

9.4 Recommended Actions

No further action is recommended for site soil at the two sites because:

- 1) There are no documented spills or releases at these sites.
- 2) There was no evidence of a UST at these sites based on the absence of anomalies indicative of USTs within the boundaries of the geophysical survey (Figure 9-1).
- 3) Soil cores from initial and subsequent borings were not observed to be impacted by TPHs or other compounds.
- 4) Soil samples from all borings, with the exception of one soil sample from boring C2UT-12, did not contain COPCs at concentrations greater than soil screening levels for the sites. Soil from boring C2UT-12 did not contain detectable concentrations of 1,2,3-trichloropropane in the primary soil sample, but 1,2,3-trichloropropane was detected above the soil screening level in the duplicate soil

sample. However, 1,2,3-trichloropropane was not retained for risk management in the human health, leaching to groundwater, and ecological risk assessments.

The only COPCs retained for human health consideration in groundwater were the following PAHs detected in one groundwater sample collected from boring C2UT-12: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene. No further action is recommended for groundwater at the two sites because:

- 1) PAH concentrations in the duplicate groundwater sample collected from boring C2UT-12 are less than the groundwater screening levels.
- 2) These four PAHs were not detected above soil screening levels in samples collected from boring C2UT-12 or any other borings advanced at each site.
- 3) Groundwater samples collected from five nearby temporary wells (C2CB-08, C2CB-10, C2UT-02W, C2UT-10, and C2UT-14) did not contain detectable concentrations of these PAHs.

For these reasons, the Copco No. 2 Former Mobile Oil Containment Building and Copco No. 2 Underground Storage Tanks sites are recommended for closure (Section 1.2).

Table 9-5. Human Health Risk Estimates for COPCs in Groundwater at Copco No. 2 Former Mobile Oil Containment Building and Underground Storage Tanks

Type	COPC	CAS	MDC (µg/L)	EPC (µg/L)	EPC Basis	Background Related?	Hypothetical Future Resident			
							RBC Cancer (µg/L)	RBC Non-cancer (µg/L)	Cancer Risk	Non-cancer Hazard Index
TPH	Diesel Range Organics	DRO	4.5E+02	4.5E+02	MDC	No	--	1.0E+03	--	4.4E-01
VOC	Chloroform	67-66-3	2.6E-01	2.6E-01	MDC	No	2.2E-01	9.7E+01	1.2E-06	2.7E-03
PAH	Benzo(a)anthracene	56-55-3	1.5E+00	1.5E+00	MDC	No	1.7E-02	--	8.8E-05	--
PAH	Benzo(a)pyrene	50-32-8	1.1E+00	1.1E+00	MDC	No	2.5E-02	6.0E+00	4.4E-05	1.8E-01
PAH	Benzo(b)fluoranthene	205-99-2	6.9E-01	6.9E-01	MDC	No	2.5E-01	--	2.8E-06	--
PAH	Dibenzo(a,h)anthracene	53-70-3	2.0E-01	2.0E-01	MDC	No	6.1E-03	--	3.3E-05	--
Cumulative Risk and Hazard:									2E-04	1

Notes:

Bold indicates cancer risk exceeds 1E-6 or hazard quotient exceeds 1.

-- = not applicable

µg/L = microgram(s) per liter

CAS = Chemical Abstract Service

COPC = constituent of potential concern

EPC = exposure point concentration

MDC = maximum detected concentration

RBC = risk-based concentration

Table 9-6. Soil Leaching to Groundwater Evaluation at Copco No. 2 Former Mobile Oil Containment Building and Underground Storage Tanks

COPC	CAS	Site EPC (mg/kg)	EPC Basis	Organic Carbon Coefficient (K_{oc}) (cm^3/g)	Henry's Law Constant (H) ($atm\cdot m^3/mole\cdot ^\circ K$)	Dilution/Attenuation Factor (DAF)	Target Groundwater Concentrations		Leaching SLs			
							Drinking Water Resource (ESL Table S-3) ($\mu g/L$)	Nondrinking Water Resource based on Freshwater Habitat (ESL Table S-3) ($\mu g/L$)	Protection of Drinking Water Resource SL ^a (mg/kg)	EPC Exceeds Drinking Water Resource SL? SL?	Protection of Nondrinking Water Resource based on Freshwater Habitat SL ^a (mg/kg)	EPC Exceeds Nondrinking Water Resource SL?
1,2,3-Trichloropropane	96-18-4	1.0E-04	Average	1.16E+02	3.43E-04	2.14E+01	5.0E-03	2.7E+03	1.1E-04	No	5.8E+01	No

Notes:

^a Soil Leaching SL calculated per the formula in Section 3.1.2.

Target groundwater concentrations from Table S-3 in SFRWQCB (2019).

Groundwater Category Drinking Water Resource - protective of groundwater that is a source of drinking water AND protective of discharge of groundwater to surface water and subsequent effects on aquatic life.

-- = not applicable

$\mu g/L$ = micrograms per kilogram

$atm\cdot m^3/mole\cdot ^\circ K$ = standard atmosphere meters cubed per mole

CAS = Chemical Abstract Service

cm^3/g = cubic centimeters per gram

COPC = constituent of potential concern

EPC = exposure point concentration for soil data from all depths

ESL = environmental screening level, SFRWQCB 2019

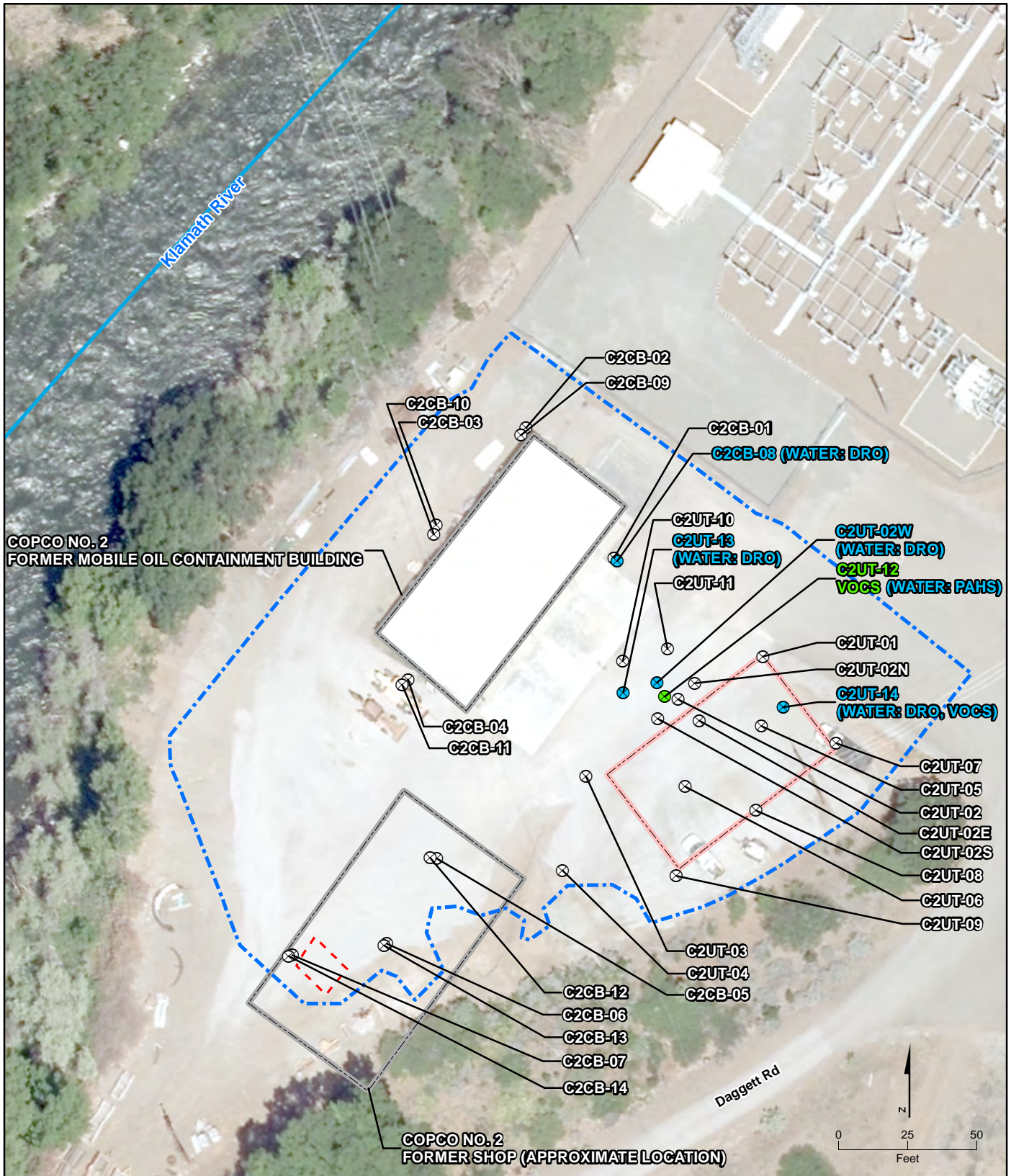
Koc = organic carbon partition coefficient

MDC = maximum detected concentration; used because there are too few detected values to calculate a UCL

mg/kg = milligrams per kilogram

SL = screening level

UCL = upper confidence limit on the mean



LEGEND

- Limits of Geophysical Survey
- Former Building
- Approximate Location of Fuel Pumps and USTs
- EM-61 Anomaly

- Soil Boring with SL Exceedance
- ⊗ Soil Boring without SL Exceedance
- Boring with Water SL Exceedance
- Klamath River

Borehole: C2UT-01
Analyses: VOCS

FIGURE 9-1
Copco No. 2 Former Mobile Oil
Containment Building and
Underground Storage Tanks
Lower Klamath Hydroelectric Project

10. Copco No. 2 Burn Pit

This section summarizes the field activities and analytical laboratory results and provides the risk assessments and recommended next steps for closure of the Copco No. 2 Burn Pit.

10.1 Background

The *Draft Phase I Environmental Site Assessment of the Parcel B Lands* (AECOM 2020a) identified an approximate 10-foot by 10-foot burn pit about 1,600 feet south of the Copco No. 2 Powerhouse and up the hill from Copco 2 Village. Wood pallets, tree branches and limbs, and other debris were observed to be piled on the burn pit (Photograph 10-1). A pile of soil was located on the northwest edge of the burn pit and may be where burned ash and soil was periodically scraped. An old drum and metal pipe were found near the pit. Additional site features include a backhoe, wood beams, a pile of broken concrete, and two areas of bare soil and what appeared to be stressed vegetation (Figure 10-1). Current PacifiCorp policy allows for burning of vegetation and untreated lumber when an open burn permit is utilized; however, it is not known what may have been historically disposed of through use of the burn pit. Soil at the site is generally classified as Lassen-Kuck complex, stony (USDA 2021).



Photograph 10-1. Copco No. 2 Burn Pit, Backhoe, and Drum Looking Northeast (PacifiCorp 2021)

10.2 Field Activities

On March 2, 2022, the planned soil borings for the Copco No. 2 Burn Pit were marked and cleared for utilities. Planned soil borings C2BP-01, C2BP-04, C2BP-07, and C2BP-12 were adjusted so that they would be advanced closer to their respective site features of concern (Table 10-1). The backhoe and material to be burned were no longer present.

On March 9 and 10, 2022, soil borings C2BP-01 through C2BP-12 were advanced via hand auger. Soil samples were collected at 0.5-foot intervals and at depths ranging from 0.5 foot to 6 feet bgs (Table 10-1).

Table 10-1. Copco No. 2 Burn Pit Borehole Summary

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
C2BP-01	0-0.5, 1-1.5, 2-2.5	2.5	HA	At stressed vegetation
C2BP-02	0-0.5, 1-1.5, 2-2.5	2.5	HA	Adjacent to wood pile
C2BP-03	0-0.5, 1-1.5, 2-2.5	2.5	HA	In wood pile
C2BP-04	0-0.5, 1-1.5, 2-2.5	2.5	HA	At depression from backhoe
C2BP-05	0-0.5, 1-1.5, 2-2.5	2.5	HA	In area of dark stained soil under backhoe area
C2BP-06	0-0.5, 1-1.5, 2-2.5	2.5	HA	Adjacent to concrete rubble
C2BP-07	0-0.5, 1-1.5, 2-2.5	2.5	HA	Adjacent to drum remnants
C2BP-08	0-0.5, 1-1.5, 2-2.5, 3-3.5	3.5	HA	In pile of soil next to burn pit
C2BP-09	0-0.5, 1-1.5, 2-2.5, 3-3.5	3.5	HA	East edge of burn pit
C2BP-10	0-0.5, 1-1.5, 2-2.5, 3-3.5, 5.5-6	6.0	HA	Center of burn pit
C2BP-11	0-0.5, 1-1.5, 2-2.5, 3-3.5	3.5	HA	South edge of burn pit
C2BP-12	0-0.5, 1-1.5, 2-2.5	2.5	HA	At stressed vegetation

Notes:

bgs = below ground surface

HA = hand auger

10.3 Analytical Results

The analytical results were compared to the site-specific screening levels (Appendix D) established in the California SIWP. Human health screening levels were exceeded for dioxin, arsenic, cobalt, lead, DRO, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. The leaching to groundwater screening level was also exceeded for DRO, diethylphthalate, naphthalene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene. Ecological screening levels were exceeded for dioxin, benzyl alcohol, bis(2-ethylhexyl) phthalate, benzo(a)anthracene, benzo(b)fluoranthene, chrysene, pyrene, and various metals (Table 10-2, Figure 10-1).

Table 10-2. Copco No. 2 Burn Pit Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels

Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
C2BP-01	<SLs	<SLs	Cobalt, Selenium
C2BP-02	Cobalt	<SLs	Cobalt, Selenium

Table 10-2. Copco No. 2 Burn Pit Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels

Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
C2BP-03	Cobalt	<SLs	Cobalt, Selenium
C2BP-04	Cobalt	<SLs	Boron, Cadmium, Cobalt, Selenium
C2BP-05	Cobalt, DRO	DRO	Boron, Cobalt, Selenium Bis(2-ethylhexyl) phthalate
C2BP-06	Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene	Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Chrysene, Naphthalene, Indeno(1,2,3-cd)pyrene	Cobalt, Selenium, Benzo(a)anthracene, Benzo(b)fluoranthene, Chrysene, Pyrene
C2BP-07	<SLs	Diethylphthalate	Cobalt, Selenium
C2BP-08	Dioxin, Arsenic, Lead	Naphthalene	Dioxin, Antimony, Arsenic, Boron, Cadmium, Cobalt, Copper, Lead, Selenium, Zinc
C2BP-09	Cobalt	Naphthalene	Dioxin, Boron, Cobalt, Selenium
C2BP-10	<SLs	Naphthalene	Dioxin, Boron, Cobalt, Selenium, Benzyl Alcohol
C2BP-11	Dioxin	<SLs	Dioxin, Boron, Cobalt, Selenium
C2BP-12	Cobalt, Iron	<SLs	Boron, Cobalt, Selenium

Notes:

SLs = screening levels

<SLs = does not exceed screening levels

The COPCs carried forward into the risk assessments are based on the risk assessment screening criteria discussed in Sections 3.1 (human health), 3.2 (soil leaching to groundwater), and 3.3 (ecological).

10.4 Site-Specific Human Health Risk Assessment

10.4.1 Data Evaluation

The human health COPCs in soil at the Copco No. 2 Burn Pit are 2,3,7,8-TCDD TEQ, PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene), and metals (arsenic, cadmium, cobalt, iron, and lead) (Appendix F).

10.4.2 Exposure Assessment

Default DTSC and EPA exposure parameters were used (Appendix F) with modifications for the future recreational user (Section 3.1.2). Construction workers are not potential future receptors at the Copco No. 2 Burn Pit site because the site is outside the proposed development area and there is no infrastructure requiring maintenance or repair; therefore, the scenario was not evaluated.

10.4.3 Toxicity Evaluation

Except for the surrogate toxicity values used for dioxins, as presented in Section 3.1.3, no COPCs requiring surrogate toxicity values were identified.

10.4.4 Human Health Risk Assessment Results

The HHRA analysis indicates that for the future passive recreational use, the cumulative ELCRs are 1E-05 for surface soil and 8E-06 for mixed-zone soil (Table 10-3), which exceed the EPA point of departure of 1E-06, but do not exceed the EPA risk management range (1E-06 to 1E-04) (EPA 1989). Arsenic is a primary contributor to the ELCRs in both surface soil and mixed-zone soil. Benzo(a)pyrene and dibenzo(a,h)anthracene are also primary contributors to the ELCR in surface soil. The HIs are 3 for surface soil and 2 for mixed-zone soil, which exceed the target HI of 1. The only primary contributor to the HI in both surface and mixed-zone soil is arsenic. Arsenic is considered naturally occurring because the EPCs in surface soil (17.1 mg/kg) and mixed-zone soil (13.2 mg/kg) are below the background concentration of 19 mg/kg. Excluding naturally occurring metals, the cumulative ELCR does not exceed 1E-06 in mixed-zone soil and the HIs do not exceed 1 in both surface soil and mixed-zone soil. In surface soil the ELCR, excluding naturally occurring metals, is 5E-06.

For the hypothetical future residential scenario, the cumulative ELCRs are 2E-04 for surface soil and 1E-04 for mixed-zone soil (Table 10-3). Arsenic, 2,3,7,8-TCDD TEQ, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene are primary contributors to the ELCRs in both surface soil and mixed-zone soil. Benzo(a)anthracene and benzo(a)pyrene are also primary contributors to the ELCR in surface soil. The HIs are 49 for surface soil and 37 for mixed-zone soil, which exceed the target HI of 1. The primary contributors to the HI in both surface and mixed-zone soil are arsenic and DRO. Excluding naturally occurring metals, the cumulative ELCRs are 9E-05 for surface soil and 1E-05 for mixed-zone soil, and the HIs are 6 for surface soil and 4 for mixed-zone soil, which exceed the target HI of 1.

The EPCs of lead are 12.79 mg/kg in surface soil and 15.59 mg/kg in mixed-zone soil, which are below the DTSC Note 3 values (DTSC 2022a) for residential and industrial exposure scenarios (80 mg/kg and 500 mg/kg, respectively). Therefore, risk from exposure to lead does not exceed target risk criteria.

10.4.5 Uncertainty Discussion

In general, the number and location of soil samples are considered adequate for risk assessment purposes, and the type of COPCs and EPCs identified are considered representative of potential releases within the Copco No. 2 Burn Pit. Because samples were collected at suspected release locations, the exposure area data are likely biased high and the risks potentially overestimated.

The highest concentration of DRO (6,700 mg/kg) was detected at sample location C2BP-05 where the residential RBC (960 mg/kg) was exceeded at 0 to 0.5 foot bgs but not in deeper samples. Because DRO at C2BP-05 is within the stained soil below where the backhoe was parked, the concentration likely biases the EPC high, and risk from DRO is likely overestimated.

The highest concentration of 2,3,7,8-TCDD TEQ was detected at sample location C2BP-08 (pile of soil adjacent to burn pit) where the residential RBC was exceeded at all depths. Because dioxins at C2BP-08 have not been delineated vertically, the resulting risk assessment data gap causes uncertainty in the risk results.

The highest concentrations of PAHs were detected at sample location C2BP-06 where the residential RBCs were exceeded at 0 to 0.5 foot bgs but not in deeper samples. PAHs have not been delineated laterally, resulting in a risk assessment data gap that causes uncertainty in the risk results.

10.4.6 Human Health Risk Assessment Conclusions

Estimated cancer risks for future passive recreational users and hypothetical future residents potentially exposed to COPCs in soil exceed the EPA point of departure of 1E-06 but does not exceed the EPA risk management range. The site-related primary contributors to ELCRs are 2,3,7,8-TCDD TEQ and PAHs.

Noncancer HIs exceed the target HI of 1 for future passive recreational users and hypothetical future residents. The site-related primary contributors to the HIs are 2,3,7,8-TCDD TEQ at the burn pit and DRO in the soil where the backhoe had been parked.

The vertical extent of dioxin contamination at C2BP-08 (burn pit) has not been delineated. The lateral extent of PAH contamination at C2BP-06 (concrete rubble) has not been delineated resulting in uncertainty in the HHRA results.

10.5 Leaching to Groundwater Evaluation

The soil leaching COPCs at the Copco No. 2 Burn Pit are DRO, PAHs [i.e., benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene], and diethylphthalate (Appendix F).

Groundwater was not encountered during sampling and depth to groundwater is not known. The Klamath River is located approximately 1,200 feet northwest of the Copco No. 2 Burn Pit and is approximately 230 feet lower in elevation.

Because EPCs of benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and diethylphthalate are less than the soil leaching SLs and the soil leaching values protective of groundwater as a nondrinking water resource (Table 10-4), the migration to groundwater pathway is considered incomplete for these COPCs. EPCs of DRO at the backhoe location, benzo(a)anthracene and chrysene at the concrete rubble, and naphthalene at the burn pit exceed the soil leaching SLs for drinking water (Table 10-4).

10.5.1 Diesel Range Organics

DRO was detected at a concentration exceeding the soil leaching screening level of 1,100 mg/kg in only 1 of 9 samples. At location C2BP-05, DRO exceeds the soil leaching screening level at 0 to 0.5 foot bgs (6,700 mg/kg) but DRO concentrations are less than the soil leaching screening level at 1 to 1.5 feet bgs (59 mg/kg) and 2 to 2.5 feet bgs (88 mg/kg). The vertical extent is delineated, and because only the shallowest surface soil concentration exceeds (by less than an order of magnitude) the soil leaching screening level but not deeper samples, infiltration is not occurring and the migration to groundwater pathway is considered incomplete for DRO.

10.5.2 Benzo(a)anthracene

Benzo(a)anthracene was detected at a concentration exceeding the soil leaching screening level of 0.51 mg/kg in only 1 of 40 samples. At location C2BP-06, benzo(a)anthracene exceeds the soil leaching screening level at 0 to 0.5 foot bgs (20 mg/kg) but was not detected at 1 to 1.5 feet bgs and 2 to 2.5 feet bgs. The vertical extent is delineated. Because only the shallowest surface soil concentration exceeds the soil leaching screening level but the deeper samples do not, infiltration is not occurring and the migration to groundwater pathway is considered incomplete for benzo(a)anthracene.

10.5.3 Chrysene

Chrysene was detected at a concentration exceeding the soil leaching screening level of 1.6 mg/kg in only 1 of 40 samples. At location C2BP-06, chrysene exceeds the soil leaching screening level at 0 to 0.5 foot bgs (23 mg/kg) but was not detected at 1 to 1.5 feet bgs and does not exceed the soil leaching screening level at 2 to 2.5 feet bgs (0.033 mg/kg). The vertical extent is delineated. Because only the shallowest surface soil concentration exceeds the soil leaching screening level but the deeper samples do not, infiltration is not occurring and the migration to groundwater pathway is considered incomplete for chrysene.

10.5.4 Naphthalene

Naphthalene was detected at concentrations exceeding the soil leaching screening level of 0.042 mg/kg in 5 of 40 samples at the following locations:

- C2BP-06: Naphthalene exceeds the soil leaching screening level at 0 to 0.5 foot bgs (0.85 mg/kg) but was not detected at 1 to 1.5 feet bgs and 2 to 2.5 feet bgs. The vertical extent is delineated. Because only the shallowest surface soil concentration exceeds the soil leaching screening level but the deeper samples do not, infiltration is not occurring and the migration to groundwater pathway is considered incomplete at C2BP-06.
- C2BP-08: Naphthalene exceeds the soil leaching screening level at 0 to 0.5 foot bgs (0.16 mg/kg), 1 to 1.5 feet bgs (0.42 mg/kg) and 3 to 3.5 feet bgs (0.12 mg/kg). Because samples were not collected deeper than 3 feet bgs, vertical extent is not delineated.
- C2BP-10: Naphthalene exceeds the soil leaching screening level at 0 to 0.5 foot bgs (0.082 mg/kg) but does not exceed the soil leaching screening level at 1 to 1.5 feet bgs (0.011 mg/kg) and was not detected at 3 to 3.5 feet bgs. The vertical extent is delineated. Because only the shallowest surface soil concentration exceeds the soil leaching screening level but the deeper samples do not, infiltration is not occurring and the migration to groundwater pathway is considered incomplete at C2BP-10.

10.5.5 Leaching to Groundwater Evaluation Conclusions

Except for naphthalene at location C2BP-08 (burn pit), the migration to groundwater pathway is incomplete for all identified leaching to groundwater COPCs at the Copco No. 2 Burn Pit. The concentrations of naphthalene at sample location C2BP-08 exceed the soil leaching screening level and, because the vertical extent of the naphthalene contamination has not been delineated, there remains a potential threat to groundwater.

10.6 Ecological Risk Assessment

The streamlined ERA completed for the Copco No. 2 Burn Pit was conducted on a sample-by-sample basis. Sample-specific risk estimates are presented in Appendix G, Table G-15 and Table G-18, and results are summarized in Table 10-5.

Several metals, dioxins, PAHs, and SVOCs exceeded their respective No Effect ESLs (Step 1) and Low Effect ESLs (Step 2). Vanadium, 2,3,7,8-TCDD TEQ for birds, and 2,3,7,8-TCDD TEQ Mammal all exceeded EcoPRGs assuming 100 percent site use. 2,3,7,8-TCDD TEQ Mammal also exceeded the EcoPRG when the AUF was applied and was retained for risk management analysis. Vanadium HQs were below 1 when the AUF was applied, and the maximum detected concentration of vanadium did not exceed the regional background level. All sample-by-sample chemical group HIs were equal to or less than 1 without application of AUFs and less than 1 with application of AUFs.

The weight of evidence rationale for each analyte is summarized as follows:

- Weight of Evidence Code "A" – Chemical is retained for risk management analysis for ecological receptors. Some individual sample results exceeded the No Effect ESL, Low Effect ESL, and EcoPRGs for birds and mammals under the assumption of 100 percent site use as well as when the site-specific AUF was applied (mammals). This weight of evidence rationale applies to 2,3,7,8-TCDD TEQ for birds and mammals.
- Weight of Evidence Code "B" – Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs for birds or mammals. This weight of evidence rationale applies to the following analytes:
 - Metals: antimony, barium, chromium, cobalt, manganese, mercury, and thallium
 - PAHs: acenaphthene, benzo(b)fluoranthene, chrysene, and pyrene
 - SVOCs: 1,3-dichlorobenzene and benzyl alcohol
- Weight of Evidence Code "C" – Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect ESL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals even under the assumption of 100 percent site use. This weight of evidence rationale applies to the following analytes:
 - Metals: arsenic, boron, cadmium, copper, lead, selenium, and zinc
 - PAHs: benzo(a)anthracene
 - SVOCs: bis (2-ethylhexyl) phthalate
- Weight of Evidence Code "D" – Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect ESL as well as the Bird EcoPRG assuming 100 percent site use. However, there are no exceedances of the EcoPRGs when the site-specific AUFs are applied, and the maximum detected result does not exceed the BTV. This weight of evidence rationale applies to vanadium.
- Weight of Evidence Code "E" – Chemical group is not retained for risk management for ecological receptors. All sample-by-sample chemical group HIs were equal to or less than 1 without application of AUFs and less than 1 with application of AUFs. This weight of evidence rationale applies to the following:
 - PAHs: low molecular weight PAHs, high molecular weight PAHs

2,3,7,8-TCDD TEQ in soil was retained for risk management based on potential risks to ecological receptors.

10.7 Recommended Actions

Concentrations of DRO in surface soil at the location where the backhoe had been parked (C2BP-05) exceed the HHRA hazard quotient of 1 for hypothetical future residents. Concentrations of PAHs in surface soil of the concrete rubble area (C2BP-06) exceed the ELCR of 1E-06 for the passive recreational users and hypothetical future residents, and the lateral extent has not been delineated. At the burn pit (C2BP-08 through C2BP-11), concentrations of a dioxin (2,3,7,8-TCDD) exceed risk-based criteria for human health and ecological receptors and concentrations of naphthalene exceed soil leaching criteria and have not been vertically delineated.

The top 1 foot of soil at the backhoe area and the concrete rubble area are recommended to be excavated and disposed of offsite (Figure 10-2). Confirmation sampling will be performed on the remaining soil in the sidewalls and at the bottom of the excavation at the backhoe parking location to verify DRO

concentrations are less than 960 mg/kg and at the concrete rubble area to verify PAHs are less than the residential RBCs (benzo(a)anthracene [1.1 mg/kg], benzo(a)pyrene [0.11 mg/kg], and benzo(b)fluoranthene [1.1 mg/kg]).

The burn pit and adjacent soil pile will be excavated to a depth of 4 feet bgs and soil disposed of offsite (Figure 10-2). Confirmation sampling will be performed on the remaining soil in sidewalls and on the bottom of the excavation to verify dioxin and naphthalene concentrations are less than human health and ecological screening levels. All excavated areas will be backfilled with clean material, graded, compacted to match surrounding grade, and revegetated.

Table 10-3. Human Health Risk Estimates for COPCs in Soil at the Copco No. 2 Burn Pit

Type	COPC	CAS	MDC (mg/kg)	EPC (mg/kg)	EPC Basis	Background Related?	Future Recreational User				Hypothetical Future Resident			
							RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index
Surface Soils (0 to 2 feet below ground surface)														
Dioxins	2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal	1746-01-6	1.1E-04	9.75E-05	95% UCL	No	9.2E-05	8.5E-04	1.1E-06	1.1E-01	4.8E-06	5.1E-05	2.0E-05	1.9E+00
Metals	Arsenic	7440-38-2	1.1E+02	1.7E+01	95% UCL	Yes	2.0E+00	6.8E+00	8.4E-06	2.5E+00	1.1E-01	4.1E-01	1.6E-04	4.2E+01
Metals	Cadmium	7440-43-9	2.1E+00	5.6E-01	95% UCL	Yes	2.5E+04	1.2E+02	2.3E-11	4.7E-03	9.1E+02	7.1E+00	6.2E-10	7.9E-02
Metals	Cobalt	7440-48-4	2.6E+01	2.1E+01	95% UCL	Yes	1.2E+04	3.9E+02	1.8E-09	5.3E-02	4.2E+02	2.3E+01	4.9E-08	9.0E-01
Metals	Iron	7439-89-6	6.3E+04	4.1E+04	95% UCL	Yes	--	9.1E+05	--	4.5E-02	--	5.5E+04	--	7.4E-01
Metals	Lead ^a	7439-92-1	4.8E+01	1.3E+01	95% UCL	No	--	--	--	--	--	--	--	--
TPH	Diesel Range Organics	DRO	6.7E+03	3.6E+03	95% UCL	No	--	1.6E+04	--	2.3E-01	--	9.6E+02	--	3.8E+00
PAH	Benzo(a)anthracene	56-55-3	2.0E+01	2.3E+00	95% UCL	No	2.0E+01	--	1.1E-07	--	1.1E+00	--	2.1E-06	--
PAH	Benzo(a)pyrene	50-32-8	3.5E+01	4.1E+00	95% UCL	No	2.0E+00	3.0E+02	2.0E-06	1.4E-02	1.1E-01	1.8E+01	3.7E-05	2.3E-01
PAH	Benzo(b)fluoranthene	205-99-2	3.2E+01	3.7E+00	95% UCL	No	2.0E+01	--	1.8E-07	--	1.1E+00	--	3.4E-06	--
PAH	Dibenzo(a,h)anthracene	53-70-3	2.1E+00	7.6E-01	95% UCL	No	5.0E-01	--	1.5E-06	--	2.8E-02	--	2.7E-05	--
PAH	Indeno(1,2,3-cd)pyrene	193-39-5	2.5E+01	2.9E+00	95% UCL	No	2.0E+01	--	1.4E-07	--	1.1E+00	--	2.6E-06	--
Cumulative Risk and Hazard:									1E-05	3		2E-04	49	
Cumulative Risk and Hazard Excluding Background Metals:									5E-06	0.4		9E-05	6	
Mixed-Zone Soils (0 to 10 feet below ground surface)														
Dioxins	2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal	1746-01-6	1.1E-04	4.75E-05	95% UCL	No	9.2E-05	8.5E-04	5.2E-07	5.6E-02	4.8E-06	5.1E-05	9.9E-06	9.3E-01
Metals	Arsenic	7440-38-2	1.1E+02	1.3E+01	95% UCL	Yes	2.0E+00	6.8E+00	6.5E-06	1.9E+00	1.1E-01	4.1E-01	1.2E-04	3.2E+01
Metals	Cadmium	7440-43-9	2.1E+00	4.2E-01	95% UCL	Yes	2.5E+04	1.2E+02	1.7E-11	3.5E-03	9.1E+02	7.1E+00	4.6E-10	5.9E-02
Metals	Cobalt	7440-48-4	2.6E+01	2.1E+01	95% UCL	Yes	1.2E+04	3.9E+02	1.8E-09	5.3E-02	4.2E+02	2.3E+01	4.9E-08	8.9E-01
Metals	Iron	7439-89-6	6.3E+04	4.1E+04	95% UCL	Yes	--	9.1E+05	--	4.5E-02	--	5.5E+04	--	7.4E-01
Metals	Lead ^a	7439-92-1	9.9E+01	1.6E+01	95% UCL	No	--	--	--	--	--	--	--	--
TPH	Diesel Range Organics	DRO	6.7E+03	2.3E+03	95% UCL	No	--	1.6E+04	--	1.4E-01	--	9.6E+02	--	2.4E+00
PAH	Benzo(a)anthracene	56-55-3	2.0E+01	1.4E+00	95% UCL	No	2.0E+01	--	6.8E-08	--	1.1E+00	--	1.2E-06	--
PAH	Benzo(a)pyrene	50-32-8	3.5E+01	3.8E-02	95% UCL	No	2.0E+00	3.0E+02	1.9E-08	1.3E-04	1.1E-01	1.8E+01	3.5E-07	2.1E-03
PAH	Benzo(b)fluoranthene	205-99-2	3.2E+01	2.2E+00	95% UCL	No	2.0E+01	--	1.1E-07	--	1.1E+00	--	2.0E-06	--
PAH	Dibenzo(a,h)anthracene	53-70-3	2.1E+00	1.5E-01	95% UCL	No	5.0E-01	--	3.0E-07	--	2.8E-02	--	5.4E-06	--
PAH	Indeno(1,2,3-cd)pyrene	193-39-5	2.5E+01	1.7E+00	95% UCL	No	2.0E+01	--	8.4E-08	--	1.1E+00	--	1.6E-06	--
Cumulative Risk and Hazard:									8E-06	2		1E-04	37	
Cumulative Risk and Hazard Excluding Background Metals:									1E-06	0.2		1E-05	4	

Notes:

^aLead is evaluated by comparing EPCs to target concentrations protective of blood lead levels. See Sections 3.1.1.4 and 10.4.4 in the Site Investigation Report.

Bold indicates cancer risk exceeds 1E-6 or hazard quotient exceeds 1.

-- = not applicable

bgs = below ground surface

CAS = Chemical Abstract Service

COPC = constituent of potential concern

EPC = Exposure Point Concentration

MDC = maximum detected concentration

mg/kg = milligrams per kilogram

RBC = risk-based concentration

Table 10-4. Soil Leaching to Groundwater Evaluation at Copco No. 2 Burn Pit

COPC	CAS	Site EPC (mg/kg)	EPC Basis	Organic Carbon Coefficient (K _{oc}) (cm ³ /g)	Henry's Law Constant (H) (atm·m ³ /mole·°K)	Dilution/Attenuation Factor (DAF)	Target Groundwater Concentrations		Leaching SLs			
							Drinking Water Resource (ESL Table S-3) (µg/L)	Nondrinking Water Resource based on Freshwater Habitat (ESL Table S-3) (µg/L)	Protection of Drinking Water Resource SL ^a (mg/kg)	EPC Exceeds Drinking Water Resource SL?	Protection of Nondrinking Water Resource based on Freshwater Habitat SL ^a (mg/kg)	EPC Exceeds Nondrinking Water Resource SL?
Diesel Range Organics	DRO	2.3E+03	95% UCL	1.50E+03	1.79E+00	1.14E+04	1.0E+02	6.4E+02	1.1E+03	Yes	7.3E+03	No
Benzo(a)anthracene	56-55-3	1.4E+00	95% UCL	1.80E+05	1.20E-05	2.99E+04	1.7E-02	2.7E-02	5.1E-01	Yes	8.1E-01	Yes
Benzo(a)pyrene	50-32-8	3.8E-02	95% UCL	5.90E+05	4.64E-07	9.79E+04	1.4E-02	1.4E-02	1.4E+00	No	1.4E+00	No
Benzo(b)fluoranthene	205-99-2	2.2E+00	95% UCL	6.00E+05	6.60E-07	9.96E+04	4.9E-02	--	4.9E+00	No	--	No
Chrysene	218-01-9	1.6E+00	95% UCL	1.80E+05	5.23E-06	2.99E+04	4.9E-02	3.5E-01	1.5E+00	Yes	1.0E+01	No
Diethylphthalate	84-66-2	5.9E-03	95% UCL	1.00E+02	6.11E-07	1.66E+01	1.5E+00	1.5E+00	2.5E-02	No	2.5E-02	No
Indeno(1,2,3-cd)pyrene	193-39-5	1.7E+00	95% UCL	2.00E+06	3.48E-07	3.32E+05	4.9E-02	--	1.6E+01	No	--	No
Naphthalene	91-20-3	1.4E-01	95% UCL	1.50E+03	4.40E-04	2.52E+02	1.7E-01	2.4E+01	4.2E-02	Yes	6.0E+00	No

Notes:

^a Soil Leaching SL calculated per the formula in Section 3.1.2.

Target groundwater concentrations from Table S-3 in SFRWQCB (2019).

Groundwater Category Drinking Water Resource - protective of groundwater that is a source of drinking water AND protective of discharge of groundwater to surface water and subsequent effects on aquatic life.

-- = not applicable

µg/L = micrograms per kilogram

atm·m³/mole·°K = standard atmosphere meters cubed per mole

CAS = Chemical Abstract Service

cm³/g = cubic centimeters per gram

COPC = constituent of potential concern

EPC = exposure point concentration for soil data from all depths

ESL = environmental screening level, SFRWQCB 2019

K_{oc} = organic carbon partition coefficient

MDC = maximum detected concentration; used because there are too few detected values to calculate a UCL

mg/kg = milligrams per kilogram

SL = screening level

UCL = upper confidence limit on the mean

Table 10-5. Weight of Evidence for Ecological Receptors at Copco No. 2 Burn Pit

REC Name	Type	Class	Detected Analytes	Background Comparison	Step 1 Screening Evaluation	Step 2 Refined Evaluation	Step 3 Site-Specific Evaluation				Step 4 Weight of Evidence	
				Background HQ>1	No Effect HQ>1	Low Effect HQ>1	Bird EcoPRG HQ>1	Mammal EcoPRG HQ>1	Bird AUF Adjusted HQ>1	Mammal AUF Adjusted HQ>1	Retain for Risk Management?	Rationale
Copco No. 2 Burn Pit	I	Metal	Antimony	3	4	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	I	Metal	Arsenic	5	6	2	--	--	--	--	No	C
Copco No. 2 Burn Pit	I	Metal	Barium	--	44	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	I	Metal	Boron	--	18	6	--	--	--	--	No	C
Copco No. 2 Burn Pit	I	Metal	Cadmium	5	6	2	--	--	--	--	No	C
Copco No. 2 Burn Pit	I	Metal	Chromium	--	42	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	I	Metal	Cobalt	--	42	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	I	Metal	Copper	4	16	5	--	--	--	--	No	C
Copco No. 2 Burn Pit	I	Metal	Lead	3	6	5	--	--	--	--	No	C
Copco No. 2 Burn Pit	I	Metal	Manganese	--	44	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	I	Metal	Mercury	--	9	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	I	Metal	Selenium	44	44	44	--	--	--	--	No	C
Copco No. 2 Burn Pit	I	Metal	Thallium	--	44	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	I	Metal	Vanadium	--	44	44	43	--	--	--	No	D
Copco No. 2 Burn Pit	I	Metal	Zinc	5	41	5	--	--	--	--	No	C
Copco No. 2 Burn Pit	O	DXN	2,3,7,8-TCDD TEQ Bird	--	4	--	3	--	--	--	Yes	A
Copco No. 2 Burn Pit	O	DXN	2,3,7,8-TCDD TEQ Mammal	--	14	8	--	5	--	4	Yes	A
Copco No. 2 Burn Pit	O	PAH	Acenaphthene	--	1	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	O	PAH	Benzo(a)anthracene	--	1	1	--	--	--	--	No	C
Copco No. 2 Burn Pit	O	PAH	Benzo(b)fluoranthene	--	1	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	O	PAH	Chrysene	--	1	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	O	PAH	Pyrene	--	1	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	O	SVOC	1,3-Dichlorobenzene	--	1	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	O	SVOC	Benzyl alcohol	--	1	--	--	--	--	--	No	B
Copco No. 2 Burn Pit	O	SVOC	Bis (2-ethylhexyl) phthalate	--	1	1	--	--	--	--	No	C

Notes:

Number presented under each step identifies the number of samples collected from 0 to 6 feet bgs that exceeded the indicated screening level or EcoPRG.

Yes = Retained for Risk Management

-- - no samples had exceedances; analyte not retained for further evaluation.

AUF = area use factor

BTV = background threshold value

DXN = dioxin/furan

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient

PAH = polynuclear aromatic hydrocarbon

REC = recognized environmental condition

RSL = regional screening level

SVOC = semivolatle organic compound

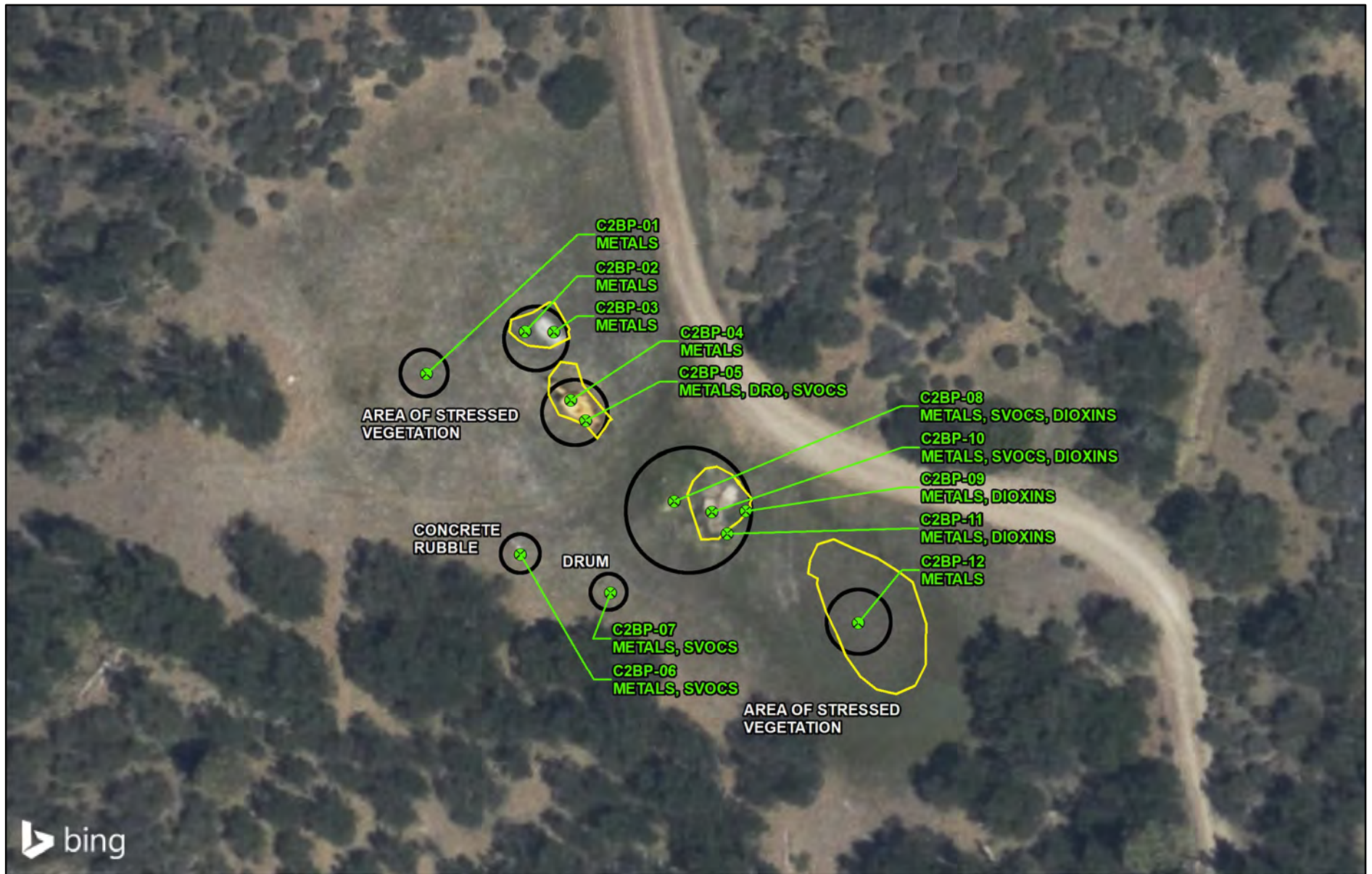
Weight of Evidence Rationale Codes:

A = Chemical is retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, Low Effect ESL, and EcoPRGs for birds and mammals under the assumption of 100 percent site use as well as when the site-specific AUF was applied (mammals).




B = Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect RSL or EcoPRGs for birds or mammals.

C = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect RSL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals even under the assumption of 100 percent site use.

D = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect RSL as well as the Bird EcoPRG assuming 100 percent site use; however, there are no exceedances of the EcoPRGs when the site-specific AUFs are applied and the maximum detected result does not exceed the BTV.



LEGEND

-  Limits of SIWP
-  Approximate Limits of Visually Impacted Area
-  Soil Boring with SL Exceedance

Borehole: C2BP-01
Analytes: Metals

Notes:
Borehole locations adjusted based on field observations

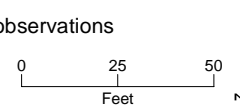
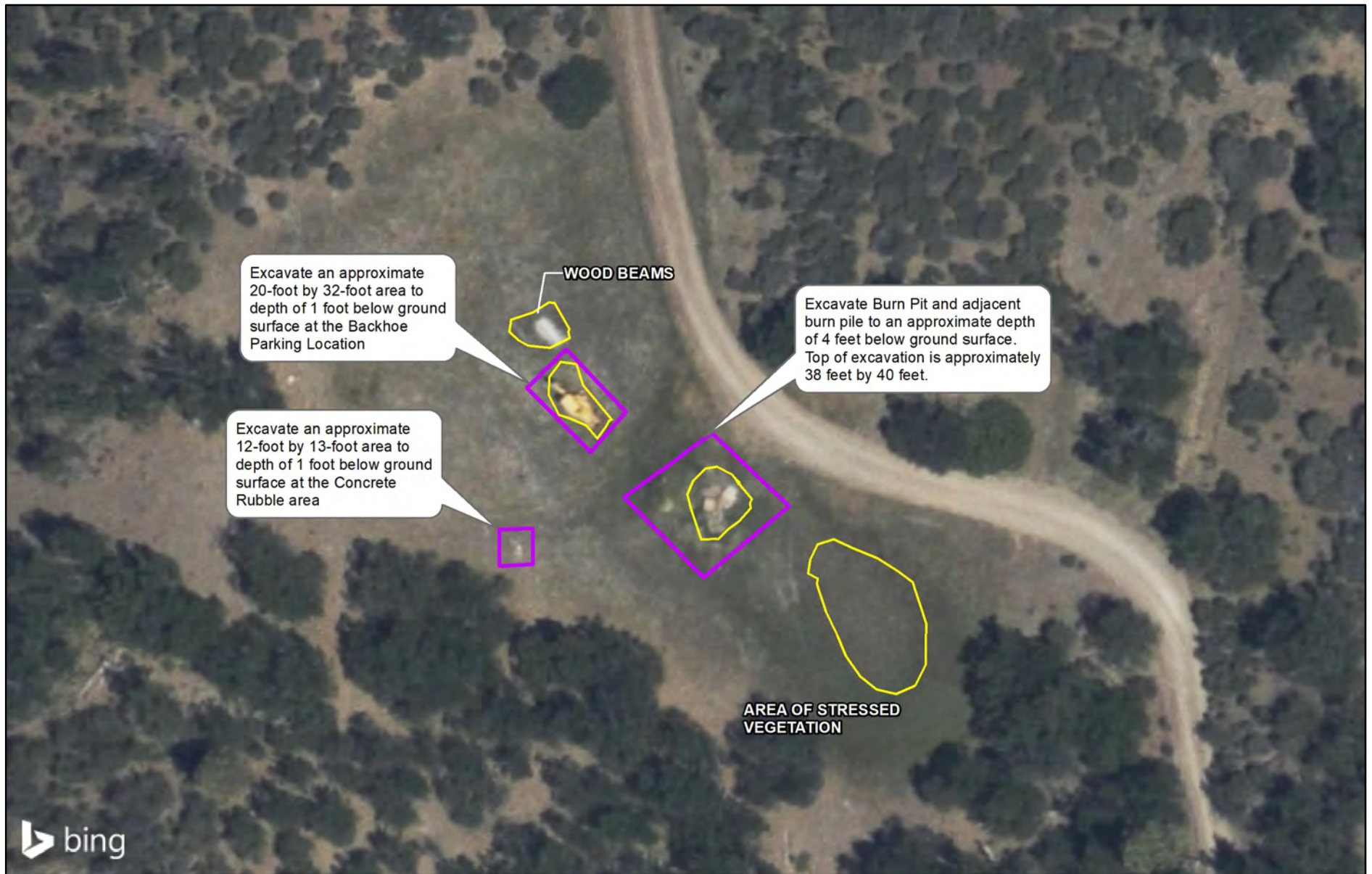




FIGURE 10-1
Copco No. 2 Burn Pit
Lower Klamath Hydroelectric Project



LEGEND

 Approximate Limits of Visually Impacted Area

 Excavation Area

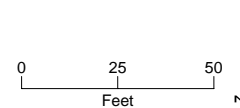


FIGURE 10-2
Copco No. 2 Burn Pit Excavation Areas
Lower Klamath Hydroelectric Project

11. Iron Gate Shooting Range

This section summarizes the field activities and analytical laboratory results and provides the risk assessments and recommended next steps for closure of the Iron Gate Shooting Range.

11.1 Background

A shooting range is located approximately 2,000 feet east of the Iron Gate Dam (Figure 11-1). During a reconnaissance survey conducted by PacifiCorp and Jacobs on June 21, 2021, shell casings and clay targets were observed on the ground while walking the gun range. The gun range surface soils are turned over regularly using a bulldozer and worked soil piles are visible (Photograph 11-1). There was some evidence of cans and other items being used for target practice down range of the shooting stations. Soil within the Iron Gate Shooting Range is generally classified as Lassen-Kuck complex, stony (USDA 2021).



Photograph 11-1. Iron Gate Shooting Range Looking Southeast Toward Short-range Target Berm (Jacobs 2022a)

11.2 Field Activities

On May 2, 2022, the planned soil borings for the Iron Gate Shooting Range were marked and cleared for utilities. Soil borings IGSR-01 and IGSR-02 were moved approximately 20 feet away from areas with large rocks. Soil boring IGSR-05 was moved approximately 20 feet north and into a drainage swale to assess the

potential for migration of contaminants from stormwater runoff. Soil borings IGRS-11, IGRS-12, IGRS-16, IGRS-18, and IGRS-28 were moved approximately 30 to 60 feet and into areas with broken pieces of clay targets. Soil borings IGRS-23 and IGRS-24 were moved approximately 20 feet to avoid large pieces of concrete debris within the mound of concrete.

On March 3, 5, 6, and 13, 2022, soil borings IGSR-01 through IGSR-28 were advanced via hand auger and DPT rig. Soil samples were collected at 0.5-foot intervals and at depths ranging from 0.5 foot to 6 feet bgs (Table 11-1). Borings IGSR-01, IGSR-04, and IGSR-27 met refusal during installation despite two or more attempts to reach the depth proposed in the California SIWP. Samples were collected above the refusal depth in accordance with the California SIWP. Recovery at the lower depths of boreholes installed with the DPT rig experienced poor recovery. Consequently, the sample interval was extended in the deep boreholes to collect adequate soil volume for laboratory analysis.

Table 11-1. Iron Gate Shooting Range Borehole Summary

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
IGSR-01	0-0.5, 0.5-1	1.0	HA	Refusal at 1.0 feet bgs; at base of hill behind long-range target
IGSR-02	0-0.5, 1-1.5, 3-3.5, 5-6	6.0	HA/DPT	At base of hill behind long-range target
IGSR-03	0-0.5, 1-1.5, 2.5-3.5, 5-6	6.0	HA/DPT	At base of long-range target
IGSR-04	0-0.5, 1-1.5, 1.5-2.25	2.25	HA	Refusal at 2.25 feet bgs; at base of hill behind long-range target
IGSR-05	0-0.5, 1-1.5	1.5	HA	Moved into drainage swale
IGSR-06	0-0.5, 1-1.5	1.5	HA	--
IGSR-07	0-0.5, 1-1.5	1.5	HA	--
IGSR-08	0-0.5, 1-1.5	1.5	HA	--
IGSR-09	0-0.5, 1-1.5	1.5	HA	--
IGSR-10	0-0.5, 0.5-1.5, 2.5-3.5, 5-6	6.0	HA/DPT	--
IGSR-11	0-0.5, 1-1.5	1.5	HA	Moved to area with clay targets
IGSR-12	0-0.5, 1-1.5	1.5	HA	Moved to area with clay targets
IGSR-13	0-0.5, 1-1.5	1.5	HA	--
IGSR-14	0-0.5, 1-1.5	1.5	HA	--
IGSR-15	0-0.5, 1-1.5	1.5	HA	--
IGSR-16	0-0.5, 1-1.5	1.5	HA	Moved to area with clay targets
IGSR-17	0-0.5, 1-1.5	1.5	HA	--
IGSR-18	0-0.5, 1-1.5	1.5	HA	Moved to area with clay targets
IGSR-19	0-0.5, 1-1.5, 2-2.5	2.5	HA	In berm where short-range targets are placed

Table 11-1. Iron Gate Shooting Range Borehole Summary

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
IGSR-20	0-0.5, 0.5-1.5, 2.5-3.5, 5-6	6.0	HA/DPT	In berm where short-range targets are placed
IGSR-21	0-0.5, 1-1.5	1.5	HA	In front of berm where short-range targets are placed
IGSR-22	0-0.5, 1-1.5	1.5	HA	In front of berm where short-range targets are placed
IGSR-23	0-0.5, 1-1.5	1.5	HA	--
IGSR-24	0-0.5, 1-1.5	1.5	HA	--
IGSR-25	0-0.5, 0.5-1.5, 2.5-3.5, 5-6	6.0	HA/DPT	--
IGSR-26	0-0.5, 1-1.5	1.5	HA	--
IGSR-27	0-0.5, 0.5-1.5, 2.5-3.5	5.5	HA/DPT	Refusal at 5.5 feet bgs
IGSR-28	0-0.5, 1-1.5	1.5	HA	Moved to area with clay targets

Notes:

-- = no comment

bgs = below ground surface

HA = hand auger

DPT = direct-push technology

11.3 Analytical Results

The analytical results were compared to the site-specific screening levels (Appendix D) established in the California SIWP. Human health screening levels were exceeded for lead, antimony, cobalt, iron, magnesium, and benzo(a)pyrene. No compounds exceeded the leaching to groundwater screening levels. Ecological screening levels were exceeded for metals, most commonly lead, boron, cobalt, and selenium (Table 11-2, Figure 11-1).

Table 11-2. Iron Gate Shooting Range Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels

Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
IGSR-01	<SLs	<SLs	Boron, Cobalt, Copper, Selenium
IGSR-02	<SLs	<SLs	Lead, Boron, Cobalt, Copper, Selenium
IGSR-03	Lead, Magnesium	<SLs	Lead, Antimony, Boron, Cobalt, Copper, Magnesium, Selenium, Zinc
IGSR-04	Cobalt, Iron	<SLs	Antimony, Cobalt, Copper, Selenium
IGSR-05	<SLs	<SLs	Boron, Cobalt, Selenium
IGSR-06	<SLs	<SLs	Boron, Cobalt, Selenium

Table 11-2. Iron Gate Shooting Range Boreholes with Compounds that Exceed the California Site Investigation Work Plan Screening Levels

Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
IGSR-07	<SLs	<SLs	Cobalt, Selenium
IGSR-08	<SLs	<SLs	Selenium
IGSR-09	<SLs	<SLs	Cobalt, Selenium
IGSR-10	<SLs	<SLs	Cobalt, Selenium
IGSR-11	<SLs	<SLs	Cobalt, Selenium
IGSR-12	<SLs	<SLs	Selenium
IGSR-13	<SLs	<SLs	Selenium
IGSR-14	<SLs	<SLs	Selenium
IGSR-15	<SLs	<SLs	Boron, Cobalt, Copper, Selenium
IGSR-16	<SLs	<SLs	Boron, Cobalt, Selenium
IGSR-17	<SLs	<SLs	Boron, Cobalt, Selenium
IGSR-18	<SLs	<SLs	Boron, Selenium
IGSR-19	Lead, Antimony, Benzo(a)pyrene	<SLs	Lead, Antimony, Boron, Cobalt, Selenium
IGSR-20	<SLs	<SLs	Boron, Cobalt, Selenium
IGSR-21	Lead	<SLs	Lead, Antimony, Boron, Cobalt, Selenium
IGSR-22	<SLs	<SLs	Boron, Cobalt, Selenium
IGSR-23	<SLs	<SLs	Boron, Selenium
IGSR-24	<SLs	<SLs	Boron, Cobalt, Selenium
IGSR-25	<SLs	<SLs	Cobalt, Selenium
IGSR-26	<SLs	<SLs	Cobalt, Selenium
IGSR-27	<SLs	<SLs	Boron, Cobalt, Selenium
IGSR-28	<SLs	<SLs	Boron, Cobalt, Selenium

Notes:

SLs = screening levels

<SLs = does not exceed screening levels

Boreholes IGSR-03 and IGSR-19 had concentrations of lead that were ten times greater than the most restrictive ecological screening level and two other boreholes had concentrations of lead that exceeded the ecological screening level (Table 11-3). Given the location of these boreholes in the long- and short-range target berms, these results are not surprising.

Table 11-3. Iron Gate Shooting Range Boreholes with Lead that Exceed the California Site Investigation Work Plan Screening Levels

Sample Name ^a	Analyte	Result (mg/kg)	Human Health SL (mg/kg)	Leaching to Groundwater SL (mg/kg)	Ecological SL (mg/kg)
IGSR-02-0.0-0.5	Lead	60	80	N/A	34
IGSR-03-0.0-0.5	Lead	1,100 J	80	N/A	34
IGSR-03-0.0-0.5-FD	Lead	840 J	80	N/A	34
IGSR-03-1.0-1.5	Lead	1,400	80	N/A	34
IGSR-19-0.0-0.5	Lead	8,900	80	N/A	34
IGSR-19-1.0-1.5	Lead	1,400	80	N/A	34
IGSR-19-2.0-2.5	Lead	410	80	N/A	34
IGSR-21-0.0-0.5	Lead	160	80	N/A	34

Notes:

^a Sample names are a composite of the site code (IGSR), borehole number (e.g., 02), and sample depth range (e.g., 0.0-0.5) in feet bgs.

FD = field duplicate

J = estimated value that is less than the reporting limit but greater than the method detection limit

N/A = not applicable; there are no leaching screening levels for lead

SL = screening level

The COPCs carried forward into the risk assessments are based on the risk assessment screening criteria discussed in Sections 3.1 (human health), 3.2 (soil leaching to groundwater), and 3.3 (ecological).

11.4 Site-Specific Human Health Risk Assessment

11.4.1 Data Evaluation

The human health COPCs in soil at the Iron Gate Shooting Range are benzo(a)pyrene and metals (antimony, arsenic, cobalt, iron, lead, and manganese) (Appendix F).

11.4.1.1 Exposure Assessment

Default DTSC and the EPA exposure parameters were used (Appendix F) with modifications for the future passive recreational user (Section 3.1.2). Additional site-specific parameters were assumed for the future construction worker exposure scenario based on the input requirement in the RSL calculator. For general construction activities (excavation and grading), "soil-other construction activities" were selected for the RSL calculator, and the following conservative site-specific parameters were entered as inputs:

- Total area: 13 acres (conservative estimate of the limits of SIWP)
- Area dozed: 6.5 acres (conservative estimate of half the limits of SIWP)
- Area graded: 6.5 acres (conservative estimate of half the limits of SIWP)
- Area excavated: 26,000 square meters (conservative estimate of half the limits of SIWP)
- Dozing and grading blade length: 3.7 meters (based on standard equipment)
- Average depth of excavation: 3 meters

Areas are considered to be conservative because they include the total of the limits of SIWP (Figure 11-1), which are larger than impacted long- and short-range target areas.

11.4.2 Toxicity Evaluation

No COPCs required surrogate toxicity values.

11.4.3 Human Health Risk Assessment Results

The HHRA analysis indicates that for the future passive recreational user and future construction worker scenarios, the cumulative ELCRs and HIs do not exceed $1E-06$ and 1, respectively, for surface soil and mixed-zone soil (Table 11-4).

For the hypothetical future residential scenario, the cumulative ELCRs do not exceed $1E-06$ for surface soil and mixed-zone soil. The HI is 2 for both surface soil and mixed-zone soil, which exceed the target HI of 1. The primary contributors to the HI in both surface and mixed-zone soil are cobalt and iron, and manganese; however, individual HQs do not exceed 1. Cobalt, iron, and manganese are naturally occurring metals and not considered to be site related. Excluding cobalt, iron, and manganese, the HI is 0.2 for both surface soil and mixed-zone soil, less than the target HI of 1.

The EPCs of lead are 501 mg/kg in surface soil and 421 mg/kg in mixed-zone soil, which exceed the DTSC Note 3 value (DTSC 2022a) for the residential exposure scenario (80 mg/kg). The EPC of lead in surface soil also exceeds the DTSC Note 3 value for the industrial exposure scenario (500 mg/kg), which is used to evaluate risk to the future construction worker.

Therefore, risks from exposure to lead for the future passive recreational user, the future construction worker, and the hypothetical future residential exceed DTSC Note 3 (DTSC 2022a) target criteria.

11.4.4 Uncertainty Discussion

In general, the number and location of soil samples are considered adequate for risk assessment purposes, and the type of COPCs and EPCs identified are considered representative of potential releases within the Iron Gate Shooting Range. Because samples were collected at suspected release locations, the exposure area data are likely biased high and the risks potentially overestimated.

11.4.5 Human Health Risk Assessment Conclusions

Risks from exposure to lead exceed DTSC Note 3 (DTSC 2022a) target criteria for the future construction worker at soil borings IGSR-03 and IGSR-19, and for the future passive recreational user and hypothetical future resident at soil borings IGSR-03, IGSR-19, and IGSR-21 (Table 11-3).

Estimated risks to future passive recreational users, future construction workers, and hypothetical future residents from potential exposure to non-lead COPCs in soil do not exceed target risk criteria at the Iron Gate Shooting Range.

11.5 Leaching to Groundwater Evaluation

No soil leaching COPCs were identified at the Iron Gate Shooting Range (Appendix F).

11.6 Ecological Risk Assessment

The streamlined ERA completed for the Iron Gate Shooting Range was conducted on a sample-by-sample basis. Sample-specific risk estimates are presented in Appendix G, Table G-16 and Table G-18, and results are summarized in Table 11-5.

Several metals exceeded their respective No Effect ESLs (Step 1) and Low Effect ESLs (Step 2). Lead exceeded the bird and mammal EcoPRGs and vanadium exceeded the bird EcoPRG assuming 100 percent site use; however, vanadium did not exceed background BTV. The AUFs for birds and mammals at the Iron Gate Shooting Range remained 1 as the site size exceeds the home range size for the most sensitive representative species (hermit thrush and vagrant shrew). Lead was retained for risk management analysis for ecological receptors. Sample-by-sample chemical group HIs were less than 1 for all chemical groups with and without application of AUFs.

The weight of evidence rationale for each analyte is summarized as follows:

- Weight of Evidence Code "A" – Chemical is retained for risk management analysis for ecological receptors. Detected results exceeded the No Effect ESL, Low Effect ESL, regional background concentrations, as well as bird and mammal EcoPRGs. This code applies to lead.
- Weight of Evidence Code "B" – Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs for birds or mammals. In addition, there were no exceedances of metal BTVs (where available). This weight of evidence code applies to barium, chromium, cobalt, mercury, and thallium.
- Weight of Evidence Code "C" – Chemical is not retained for risk management analysis for ecological receptors. One sample had concentrations exceeding BTVs but there were no exceedances of the No Effect ESL, Low Effect ESL, bird or mammal EcoPRGs. This weight of evidence code applies to silver.
- Weight of Evidence Code "D" – Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect ESL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals (100 percent site use). This weight of evidence code applies to antimony, boron, copper, manganese, selenium, and zinc.
- Weight of Evidence Code "E" – Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect ESL as well as the Low Effect EcoPRG for birds (100 percent site use). However, none of the samples exceeded the BTV. This weight of evidence code applies to vanadium.

With the exception of lead, no analytes in site soil were retained for risk management based on potential risks to ecological receptors.

11.7 Recommended Actions

Lead exceeds human health criteria at IGSR-03, IGSR-19, and IGSR-21 and exceeds ecological risk criteria at these locations and at IGSR-02. No soil leaching COPCs were identified at the Iron Gate Shooting Range.

This is an informal shooting range that is used occasionally by the general public and is not subject to daily use by multiple shooters. The shooting range will be closed when the Iron Gate Dam is demolished. The results and conclusions of this sampling event are likely indicative of site conditions after the shooting range is closed.

Based on the results of this sampling, PacifiCorp proposes that the lead-contaminated soil at the long-range and short-range targets be addressed as follows:

- Excavate to a depth of 2 feet bgs in a 75-foot by 110-foot area at the long-range target and 6 vertical feet up the hillside behind the target (Figure 11-2).
- Excavate the northeast one-third of the berm at the short-range target to match the surrounding ground surface and excavate to a depth of 1 foot bgs in a 50-foot by 50-foot area in front of the short-range target berm (Figure 11-2).
- Perform confirmation sampling on excavation sidewalls and bottom to verify lead concentrations in remaining soil are less than 34 mg/kg.
- Dispose of the excavated material offsite.
- Backfill the excavation with clean material and grade to match surrounding land surface.

The KRRC will be disposing of debris from the removal of Iron Gate Dam on top of the shooting range. The placement of thousands of cubic yards of material in this location as part of the dam removal project will result in a low likelihood of wildlife ingesting lead shot/bullet fragments. If agreed upon by PacifiCorp, the KRRC, and the State of California, no removal action may be required.

Table 11-4. Human Health Risk Estimates for COPCs in Soil at Iron Gate Shooting Range

Type	COPC	CAS	MDC (mg/kg)	EPC (mg/kg)	EPC Basis	Background Related?	Future Recreational User				Future Construction Worker				Hypothetical Future Resident			
							RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index
Surface Soils (0 to 2 feet below ground surface)																		
Metals	Antimony	7440-36-0	1.1E+02	6.6E+00	95% UCL	No	--	5.2E+02	--	1.3E-02	--	1.4E+02	--	4.8E-02	--	3.1E+01	--	2.1E-01
Metals	Cobalt	7440-48-4	2.5E+01	1.6E+01	95% UCL	Yes	1.2E+04	3.9E+02	1.4E-09	4.2E-02	2.1E+03	8.5E+02	7.7E-09	1.9E-02	4.2E+02	2.3E+01	3.9E-08	7.1E-01
Metals	Iron	7439-89-6	6.2E+04	4.4E+04	95% UCL	Yes	--	9.1E+05	--	4.8E-02	--	2.4E+05	--	1.8E-01	--	5.5E+04	--	7.9E-01
Metals	Lead ^a	7439-92-1	8.9E+03	5.0E+02	95% UCL	No	--	--	--	--	--	--	--	--	--	--	--	--
Metals	Manganese	7439-96-5	1.7E+03	1.2E+03	95% UCL	Yes	--	3.1E+04	--	3.9E-02	--	5.0E+03	--	2.4E-01	--	1.8E+03	--	6.6E-01
PAH	Benzo(a)pyrene	50-32-8	1.2E-01	8.6E-03	95% UCL	No	2.0E+00	3.0E+02	4.2E-09	2.9E-05	1.8E+01	6.3E+01	4.9E-10	1.4E-04	1.1E-01	1.8E+01	7.8E-08	4.8E-04
									Cumulative Risk and Hazard:		6E-09	0.1	8E-09	0.5	1E-07	2		
									Cumulative Risk and Hazard Excluding Background Metals:		4E-09	0.01	5E-10	0.05	8E-08	0.2		
Mixed Zone Soils (0 to 10 feet below ground surface)																		
Metals	Antimony	7440-36-0	1.1E+02	5.5E+00	95% UCL	No	--	5.2E+02	--	1.1E-02	--	1.4E+02	--	4.1E-02	--	3.1E+01	--	1.8E-01
Metals	Cobalt	7440-48-4	2.5E+01	1.6E+01	95% UCL	No	1.2E+04	3.9E+02	1.4E-09	4.1E-02	2.1E+03	8.5E+02	7.5E-09	1.9E-02	4.2E+02	2.3E+01	3.8E-08	6.9E-01
Metals	Iron	7439-89-6	6.2E+04	4.3E+04	95% UCL	No	--	9.1E+05	--	4.8E-02	--	2.4E+05	--	1.8E-01	--	5.5E+04	--	7.9E-01
Metals	Lead ^a	7439-92-1	8.9E+03	4.2E+02	95% UCL	No	--	--	--	--	--	--	--	--	--	--	--	--
Metals	Manganese	7439-96-5	2.7E+03	1.2E+03	95% UCL	No	--	3.1E+04	--	4.0E-02	--	5.0E+03	--	2.4E-01	--	1.8E+03	--	6.7E-01
PAH	Benzo(a)pyrene	50-32-8	1.2E-01	7.2E-03	95% UCL	No	2.0E+00	3.0E+02	3.5E-09	2.4E-05	1.8E+01	6.3E+01	4.1E-10	1.1E-04	1.1E-01	1.8E+01	6.6E-08	4.0E-04
									Cumulative Risk and Hazard:		5E-09	0.1	8E-09	0.5	1E-07	2		
									Cumulative Risk and Hazard Excluding Background Metals:		4E-09	0.01	4E-10	0.04	7E-08	0.2		

Notes:

^aLead is evaluated by comparing EPCs to target concentrations protective of blood lead levels. See Sections 3.1.1.4 and 10.4.4.

Bold indicates cancer risk exceeds 1E-6 or hazard quotient exceeds 1.

-- = not applicable

bgs = below ground surface

CAS = chemical abstract service

COPC = constituent of potential concern

EPC = Exposure Point Concentration

MDC = maximum detected concentration

mg/kg = milligram(s) per kilogram

RBC = risk-based concentration

Table 11-5. Weight of Evidence for Ecological Receptors at Iron Gate Shooting Range

REC Name			Background Comparison	Step 1 Screening Evaluation	Step 2 Refined Evaluation	Step 3 Site-Specific Evaluation				Step 4 Weight of Evidence			
			Class	Detected Analytes	Background	No Effect	Low Effect	Bird EcoPRG	Mammal EcoPRG	Bird AUF Adjusted	Mammal AUF Adjusted	Retain for Risk Management?	Rationale
					HQ>1	HQ>1	HQ>1	HQ>1	HQ>1	HQ>1	HQ>1		
CA-Iron Gate Shooting Range	Metal	Antimony	8	14	2	--	--	--	--	No	D		
CA-Iron Gate Shooting Range	Metal	Barium	--	67	--	--	--	--	--	No	B		
CA-Iron Gate Shooting Range	Metal	Boron	--	35	3	--	--	--	--	No	D		
CA-Iron Gate Shooting Range	Metal	Chromium	--	2	--	--	--	--	--	No	B		
CA-Iron Gate Shooting Range	Metal	Cobalt	--	59	--	--	--	--	--	No	B		
CA-Iron Gate Shooting Range	Metal	Copper	15	38	26	--	--	--	--	No	D		
CA-Iron Gate Shooting Range	Metal	Lead	9	13	10	5	1	5	1	Yes	A		
CA-Iron Gate Shooting Range	Metal	Manganese	1	76	1	--	--	--	--	No	D		
CA-Iron Gate Shooting Range	Metal	Mercury	--	8	--	--	--	--	--	No	B		
CA-Iron Gate Shooting Range	Metal	Selenium	76	76	76	--	--	--	--	No	D		
CA-Iron Gate Shooting Range	Metal	Silver	1	--	--	--	--	--	--	No	C		
CA-Iron Gate Shooting Range	Metal	Thallium	--	64	--	--	--	--	--	No	B		
CA-Iron Gate Shooting Range	Metal	Vanadium	--	76	76	71	--	71	--	No	E		
CA-Iron Gate Shooting Range	Metal	Zinc	2	70	4	--	--	--	--	No	D		

Notes:

Number presented under each step identifies the number of samples collected from 0 to 6 feet bgs that exceeded the indicated screening level or EcoPRG.

Yes = Retained for Risk Management

-- - no samples had exceedances; analyte not retained for further evaluation.

AUF = area use factor

BTV = background threshold value

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient

REC = recognized environmental condition

RSL = regional screening level

Weight of Evidence Rationale Codes:

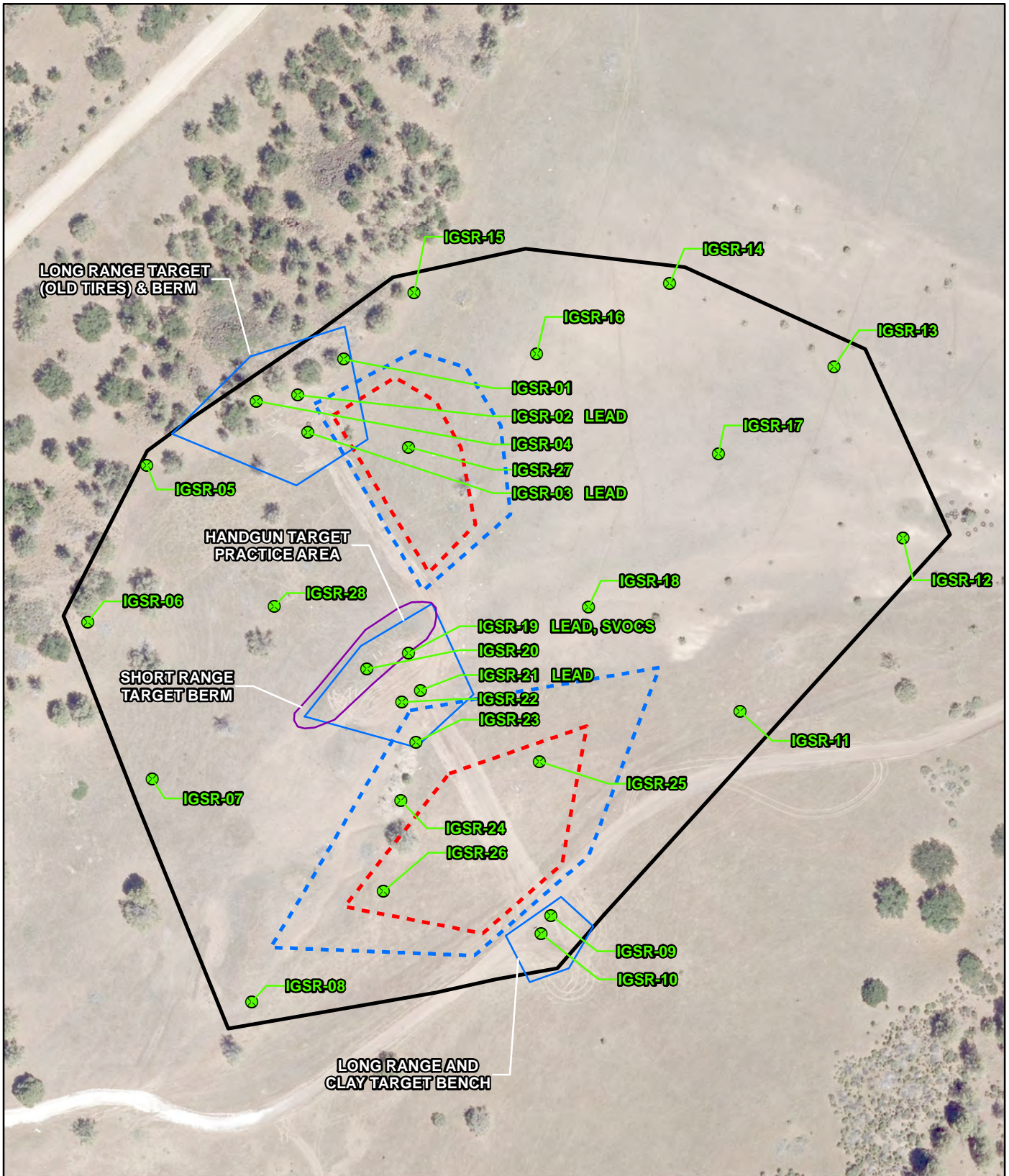
A = Chemical is retained for risk management analysis for ecological receptors. Detected results exceeded the No Effect ESL, Low Effect RSL, regional background concentrations, as well as bird and mammal EcoPRGs.

B = Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect RSL or EcoPRGs for birds or mammals. In addition, there were no exceedances of metal BTVs (where available).

C = Chemical is not retained for risk management analysis for ecological receptors. One sample had concentrations exceeding background; however, there were no exceedances of the No Effect ESL, Low Effect RSL, bird or mammal EcoPRGs.

D = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect RSL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals (100 percent site use).

E = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect RSL as well as the Low Effect EcoPRG for birds (100 percent site use). However, none of the samples exceeded the BTV.



LEGEND

- Limits of SIWP
- Site Features
- Target Berm
- Clay Target Remnants
- Lead Shot Remnants
- x Soil Boring with SL Exceedance

Notes:
 All boreholes had exceedances for metals above screening levels. Only exceedances for lead and organics are listed

Borehole: IGSR-01
 Analytes: LEAD

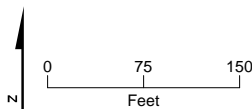
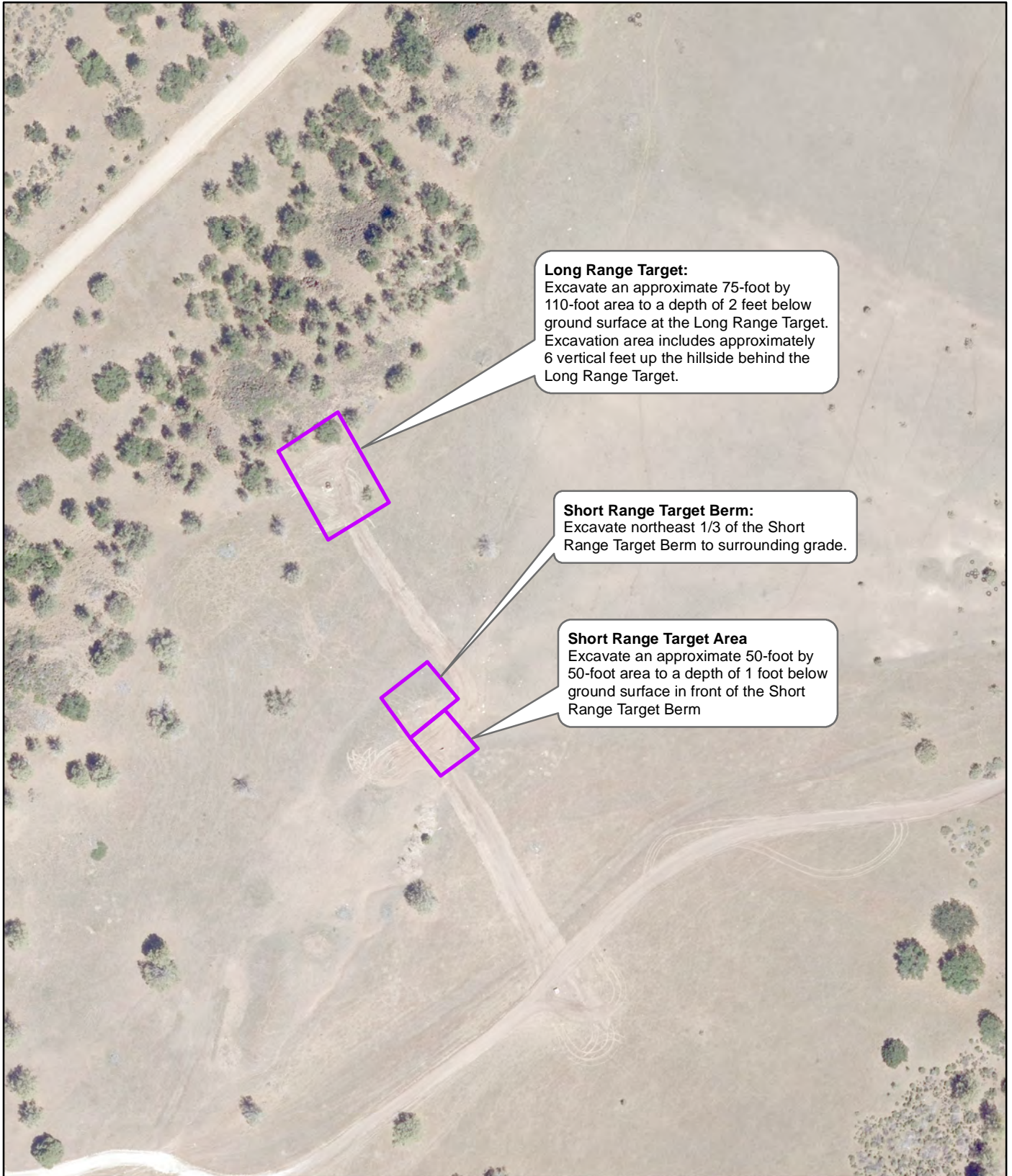



FIGURE 11-1
Iron Gate Shooting Range
Lower Klamath Hydroelectric Project



LEGEND

 Excavation Area

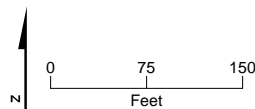


FIGURE 11-2
Iron Gate Shooting Range Excavation Areas
Lower Klamath Hydroelectric Project

12. Iron Gate Hatchery Burn Pit

This section summarizes the field activities and analytical laboratory results and provides the risk assessments and recommended next steps for closure of the Iron Gate Hatchery Burn Pit.

12.1 Background

An approximate 20- by 20-foot burn pit (Photograph 12-1) is located approximately 100 feet south of Bogus Creek and approximately 400 east of the Iron Gate Hatchery settling ponds (Figure 12-1). Soil within the Iron Gate Hatchery Burn Pit is generally classified as Lassen-Kuck complex, stony (USDA 2021).



Photograph 12-1. Iron Gate Burn Pit Looking Southeast (Jacobs 2022a)

In February 2018, a soil investigation was conducted to assess the presence of potential contaminants that may have been introduced from the burning of wood pallets and other wastes at the site (AECOM 2019). Three soil borings were advanced to a depth of 1.5 feet bgs within the burn pit, and two soil samples were collected from each boring. The soil samples were analyzed for CAM 17 metals, mercury, TPH-G, TPH-D, TPH-MO (with and without silica gel clean up), VOCs, SVOCs, and PCBs. Concentrations of metals were less than background concentrations for the Cascade Range (ODEQ 2013); VOCs, SVOCs, and PCBs were not detected. TPH-g, TPH-d, and TPH-MO were detected at concentrations that are less than the SFRWQCB (2019) environmental screening levels. Acetone, di-n-butyl phthalate, and bis[2-ethylhexyl] phthalate were also detected, but the detections were considered by AECOM (2019) to be laboratory contaminants.

Because dioxins and furans were not analyzed under the Phase II performed by AECOM (2019) and because the burn pit may have been utilized after the Phase II was performed, additional sampling was recommended in the California SIWP.

12.2 Field Activities

On May 2, 2022, the planned soil borings for Iron Gate Hatchery Burn Pit were marked and cleared for utilities. Visually impacted areas were delineated with a GPS unit and select soil borings were moved to be better located within visually impacted areas of the burn pit.

The burn pit was confirmed to be approximately 20-feet by 20-feet, with slightly varying slopes on the northern and southern sides of the pit. Within the pit, burned material/debris was observed from surface grade to approximately 0.5 foot bgs and then grading to native material (hard clay with gravel) at approximate depths of 0.5 foot to 1.75 feet bgs. Burn material was also observed to have been pushed or scraped from the footprint of the burn pit into a berm on the south side. The volume of burn material within the burn pit is estimated to be 7.5 cubic yards, and the volume of burned material piled outside the burn pit is estimated to be 22.25 cubic yards.

Additional soil sample locations were marked based on observations that the burn pit had well-delineated northern, eastern, and western sidewalls with minimal amounts of accumulated burn material and that a southern sidewall had likely been created by scraping burn material towards the south (Photograph 12-1). Consequently, an additional composite sample (IGBP-C2) of visually impacted material was collected from three locations along the southern sidewall, and a second soil boring (IGBP-02) was advanced in the southwestern corner of the burn pit (Figure 12-1). On May 2, 2022, two composite samples were collected from the burn pit. The composite samples were composed of visually impacted burn material from ground surface to 0.5 foot bgs. Composite sample IGBP-C1 was collected from four locations within the burn pit, and composite sample IGBP-C2 was collected from three locations along the southern wall of the burn pit (Figure 12-1). Soil borings IGBP-01 and IGBP-02 were advanced by hand auger to depths of 1.75 to 0.5 foot bgs, respectively, where refusal was met.

On May 13, 2022, a DPT rig was used to advance soil boring IGBP-01 to a depth of 6 feet bgs. Two adjacent soil borings were advanced to obtain a sufficient volume of material for laboratory analysis at various depths (Table 12-1). As a result of poor soil recovery, the sample intervals were changed from 3.0-3.5 to 2.5-3.5 feet bgs and from 5.5-6.0 to 5.0-6.0 feet bgs. Groundwater was not observed in any of the soil borings.

Table 12-1. Iron Gate Burn Pit Boreholes

Borehole ID	Sample Intervals (feet bgs)	Depth (feet)	Method	Comments
IGBP-01	0-0.5, 0.5-1.5, 2.5-3.5, 5-6	6.0	HA/DPT	Located in center of burn pit, hand auger met refusal at 1.75 feet bgs
IGBP-02	0-0.5	0.5	HA	To delineate southwest corner
IGBP-C1	0-0.5	0.5	HA	Composite sample collected from four locations of the floor of the burn pit
IGBP-C2	0-0.5	0.5	HA	Composite sample collected from three locations of the south wall of the burn pit

Notes:

bgs = below ground surface; HA = hand auger; DPT = direct-push technology

12.3 Analytical Results

The analytical results were compared to the site-specific screening levels (Appendix D) established in the California SIWP. Human health screening levels were exceeded for DROs, arsenic, and benzene. Leaching to groundwater screening levels were exceeded for benzene, diethylphthalate, hexachlorobutadiene, and naphthalene. Ecological screening levels were exceeded for dioxin, boron, cobalt, selenium, bis(2-ethylhexyl) phthalate, and hexachlorobutadiene (Table 12-2, Figure 12-1).

Table 12-2. Iron Gate Burn Pit Boreholes with Compounds in Soil that Exceed the California Site Investigation Work Plan Screening Levels

Borehole	Human Health SLs	Leaching to Groundwater SLs	Ecological SLs
IGBP-01	Diesel Range Organics	Benzene, Diethylphthalate	Dioxin, Boron, Cobalt, Selenium, Bis (2-ethylhexyl) phthalate
IGBP-02	Arsenic	Benzene, Hexachlorobutadiene, Naphthalene	Dioxin, Antimony, Arsenic, Boron, Cobalt, Copper, Lead, Selenium, Zinc, Hexachlorobutadiene
IGBP-C1	<SLs	Benzene	Dioxin, Boron, Cobalt, Selenium
IGBP-C2	Arsenic, Benzene	Benzene, Naphthalene	Dioxin, Antimony, Arsenic, Boron, Cobalt, Copper, Selenium

Notes:

SLs = screening levels

<SLs = does not exceed screening levels

The COPCs carried forward into the risk assessments are based on the risk assessment screening criteria discussed in Sections 3.1 (human health), 3.2 (soil leaching to groundwater), and 3.3 (ecological).

12.4 Site-Specific Human Health Risk Assessment

12.4.1 Data Evaluation

The human health COPCs in soil at the Iron Gate Hatchery Burn Pit are DRO, benzene, and metals (antimony, arsenic, cobalt, and iron) (Appendix F). Antimony is included because concentrations of antimony exceed both the background value and the risk-based screening level based on a HQ of 0.1 (Section 3.1). Cobalt and iron are included because they do not have background values and because concentrations exceed their risk-based screening level based on a HQ of 0.1.

12.4.2 Exposure Assessment

Default DTSC and EPA exposure parameters were used (Appendix F) with modifications for the future passive recreational user (Section 3.1.2). Additional site-specific parameters were assumed for the future construction worker exposure scenario based on the input requirement in the RSL calculator. For general construction activities (excavation and grading), "soil-other construction activities" were selected for the RSL calculator, and the following conservative site-specific parameters were entered as inputs:

- Total area: 0.5 acre (minimum input for RSL calculator)
- Area dozed: 0.04 acre (conservative estimate of site size)
- Area graded: 0.04 acre (conservative estimate of site size)
- Area excavated: 150 square meters (assumes entire site is excavated)

- Dozing and grading blade length: 3.7 meters (based on standard equipment)
- Average depth of excavation: 3 meters

12.4.3 Toxicity Evaluation

No COPCs required surrogate toxicity values.

12.4.4 Human Health Risk Assessment Results

For the future passive recreational scenario, the cumulative ELCR is $4E-05$ for both surface soil and mixed-zone soil (Table 12-3), which exceeds the EPA point of departure of $1E-06$, but does not exceed the EPA risk management range ($1E-06$ to $1E-04$) (EPA 1989). Arsenic is the primary contributor to the ELCRs. The HI is 13 for both surface soil and mixed-zone soil, which exceed the target HI of 1. The only primary contributor to the HI in both surface and mixed-zone soil is arsenic.

For the future construction worker scenario, the cumulative ELCR is $4E-06$ for both surface soil and mixed-zone soil (Table 12-3), which exceeds the EPA point of departure of $1E-06$, but does not exceed the EPA risk management range ($1E-06$ to $1E-04$) (EPA 1989). Arsenic is the only primary contributor to the ELCRs. The HIs are less than 1 for both surface soil and mixed-zone soil.

For the hypothetical future residential scenario, the cumulative ELCR is $8E-04$ for both surface soil and mixed-zone soil (Table 12-3), which exceeds the EPA risk management range ($1E-06$ to $1E-04$) (EPA 1989). Arsenic is the only primary contributor to the ELCRs. The HI is 212 for both surface soil and mixed-zone soil. The only primary contributor to the HI is arsenic.

12.4.5 Uncertainty Discussion

Because samples were collected at suspected release locations, the exposure area data are likely biased high and the risks potentially overestimated.

Because of the few samples collected, a 95 percent UCL could not be calculated for arsenic, and the maximum detected concentration was used as the EPC, which overestimates the risks. Arsenic exceeded the background concentration of 19 mg/kg in two shallow surface soil samples collected from 0 to 0.5 foot bgs (33 mg/kg at IGBP-02 and 86 mg/kg in composite sample IGBP-C2).

12.4.6 Human Health Risk Assessment Conclusions

Estimated cancer risks and HIs for future passive recreational users, future construction workers, and hypothetical future residents potentially exposed to COPCs in soil exceed target risks of $1E-06$ and 1, respectively. The primary contributor to the ELCRs and HIs is arsenic.

12.5 Leaching to Groundwater Evaluation

The soil leaching COPCs at the Iron Gate Hatchery Burn Pit are benzene, hexachlorobutadiene, naphthalene, and diethylphthalate (Table 12-2, Appendix F). Groundwater was not encountered during sampling and depth to groundwater is not known. Bogus Creek is located approximately 100 feet northwest of the Iron Gate Hatchery Burn Pit and is approximately 12 feet lower in elevation.

Because EPCs of hexachlorobutadiene and diethylphthalate are less than the soil leaching screening levels and the soil leaching values protective of groundwater as a nondrinking water resource (Table 12-4), the migration to groundwater pathway is considered incomplete for these COPCs.

EPCs of benzene and naphthalene exceed the soil leaching screening levels protective of drinking water (Table 12-4). However, the EPCs of benzene (0.2 mg/kg) and naphthalene (0.043 mg/kg) are less than the soil leaching values protective of groundwater as a nondrinking water resource (2.8 mg/kg and 6 mg/kg, respectively) (Table 12-4).

12.5.1 Benzene

Benzene was detected at a concentration exceeding the soil leaching screening level of 0.025 mg/kg in 4 of 7 samples. Exceedances ranged from 0.037 mg/kg to 0.37 mg/kg and only occurred in shallow surface soil samples collected from 0 to 0.5 foot bgs. Benzene was not detected in the deeper samples collected from 0.5 foot to 1.5 feet bgs, 2.5 to 3.5 feet bgs, and 5 to 6 feet bgs at location IGBP-01. Since the site is very small, the deeper samples collected at IGBP-01 are considered representative of the site subsurface. The vertical extent is delineated. Because only the shallowest surface soil concentrations exceed the soil leaching screening level but not deeper samples, infiltration is not occurring and the migration to groundwater pathway is considered incomplete for benzene.

12.5.2 Naphthalene

Naphthalene was detected at a concentration exceeding the soil leaching screening level of 0.042 mg/kg in 1 of 7 samples (0.075 mg/kg at location IGBP-02 in shallow surface soil sample collected from 0 to 0.5 foot bgs). Naphthalene did not exceed the soil leaching screening level in the deeper samples collected from 0.5 foot to 1.5 feet bgs, 2.5 to 3.5 feet bgs, and 5 to 6 feet bgs at location IGBP-01. Since the site is very small, the deeper samples collected at IGBP-01 are considered representative of the site subsurface. The vertical extent is delineated. Because only one shallow surface soil sample exceeds the soil leaching screening level but not deeper samples, infiltration is not occurring and the migration to groundwater pathway is considered incomplete for naphthalene.

12.5.3 Leaching to Groundwater Evaluation Conclusions

The migration to groundwater pathway is incomplete for the soil leaching COPCs (benzene, hexachlorobutadiene, naphthalene and diethylphthalate) at the Iron Gate Hatchery Burn Pit.

12.6 Ecological Risk Assessment

The streamlined ERA completed for the Iron Gate Fish Hatchery Burn Pit was conducted on a sample-by-sample basis. Sample-specific risk estimates are presented in Appendix G, Table G-17 and Table G-18, and results are summarized in Table 12-5.

Several metals, 2,3,7,8-TCDD TEQ Mammal, bis(2-ethylhexyl) phthalate, and hexachlorobutadiene exceeded their respective No Effect ESLs (Step 1) and Low Effect ESLs (Step 2). Vanadium and 2,3,7,8-TCDD TEQ Mammal exceeded EcoPRGs assuming 100 percent site use but did not exceed when the AUF was applied. The maximum detected concentration of vanadium did not exceed the regional background level. Sample-by-sample chemical group HIs were less than 1 for all chemical groups with and without application of AUFs.

The weight of evidence rationale for each analyte is summarized as follows:

- Weight of Evidence Code "A" – Chemical is not retained for risk management for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs for birds or mammals. In addition, there were no exceedances of the BTV (metals). This weight of evidence rationale applies to the following:
 - Metals: barium, cobalt, manganese, mercury, and thallium

- SVOC: hexachlorobutadiene
- Weight of Evidence Code “B” – Chemical is not retained for risk management for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect ESL or EcoPRGs for birds or mammals. This weight of evidence rationale applies to antimony.
- Weight of Evidence Code “C” – Chemical is not retained for risk management for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect ESL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals (100 percent site use). This weight of evidence rationale applies to the following:
 - Metals: arsenic, boron, chromium, copper, lead, selenium, and zinc
 - SVOC: bis (2-ethylhexyl) phthalate
- Weight of Evidence Code “D” – Chemical is not retained for risk management for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect ESL as well as the Bird EcoPRG assuming 100 percent site use; however, there were no exceedances of the AUF-adjusted EcoPRGs. This weight of evidence rationale applies to the following:
 - Metals: vanadium
 - Dioxins: 2,3,7,8-TCDF TEQ Mammal

No analytes in site soil were retained for risk management based on potential risks to ecological receptors.

12.7 Recommended Actions

The leaching to groundwater evaluation indicated that the migration to groundwater pathway is incomplete for the soil leaching COPCs and the ERA indicated that site COPCs detected above ecological screening levels do not need to be retained for risk management purposes. However, the HHRA results indicate that estimated cancer risks and HIs exceed target risks of 1E-06 and 1, respectively, for future passive recreational users, future construction workers, and hypothetical future residents because there is arsenic in soil from surface grade to a depth of 0.5 foot bgs and in the berm pushed up at the back of the pit.

The top 0.5 foot of soil and berm material within the limits of the burn pit are recommended to be excavated and disposed of offsite (Figure 12-2). The estimated volume of soil and burned material to be excavated from the burn pit is approximately 7.5 cubic yards, and the estimated volume of soil and burned material to be excavated around the outside the burn pit is approximately 22.25 cubic yards. Excavating will be considered complete when confirmation samples from the excavation floor and four sidewalls indicate that arsenic concentrations do not exceed background levels (19 mg/kg).

Table 12-3. Human Health Risk Estimates for COPCs in Soil at Iron Gate Hatchery Burn Pit

Type	COPC	CAS	MDC (mg/kg)	EPC (mg/kg)	EPC Basis	Background Related?	Future Recreational User				Future Construction Worker				Hypothetical Future Resident				
							RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	RBC Cancer (mg/kg)	RBC Non-cancer (mg/kg)	Cancer Risk	Non-cancer Hazard Index	
Surface Soils (0 to 2 feet below ground surface)																			
Metals	Antimony	7440-36-0	7.8E+00	7.8E+00	MDC	No	--	5.2E+02	--	1.5E-02	--	1.4E+02	--	5.7E-02	--	3.1E+01	--	2.5E-01	
Metals	Arsenic	7440-38-2	8.6E+01	8.6E+01	MDC	No	2.0E+00	6.8E+00	4.2E-05	1.3E+01	2.4E+01	--	3.6E-06	--	1.1E-01	4.1E-01	7.8E-04	2.1E+02	
Metals	Cobalt	7440-48-4	2.1E+01	2.1E+01	MDC	No	1.2E+04	3.9E+02	1.8E-09	5.4E-02	4.2E+03	9.3E+02	5.0E-09	2.3E-02	4.2E+02	2.3E+01	5.0E-08	9.1E-01	
Metals	Iron	7439-89-6	5.3E+04	5.3E+04	MDC	No	--	9.1E+05	--	5.8E-02	--	2.4E+05	--	2.2E-01	--	5.5E+04	--	9.6E-01	
TPH	Diesel Range Organics	DRO	3.4E+02	3.4E+02	MDC	No	--	1.6E+04	--	2.1E-02	--	9.3E+02	--	3.7E-01	--	9.6E+02	--	3.6E-01	
VOC	Benzene	71-43-2	3.7E-01	3.7E-01	MDC	No	8.7E+00	1.8E+02	4.3E-08	2.1E-03	2.8E+01	2.4E+02	1.3E-08	1.5E-03	3.3E-01	1.1E+01	1.1E-06	3.4E-02	
							Cumulative Risk and Hazard:			4E-05	13			4E-06	0.7			8E-04	212
							Cumulative Risk and Hazard Excluding Background Metals:			4E-05	13			4E-06	0.7			8E-04	212
Mixed Zone Soils (0 to 10 feet below ground surface)																			
Metals	Antimony	7440-36-0	7.8E+00	7.8E+00	MDC	No	--	5.2E+02	--	1.5E-02	--	1.4E+02	--	5.7E-02	--	3.1E+01	--	2.5E-01	
Metals	Arsenic	7440-38-2	8.6E+01	8.6E+01	MDC	No	2.0E+00	6.8E+00	4.2E-05	1.3E+01	2.4E+01	--	3.6E-06	--	1.1E-01	4.1E-01	7.8E-04	2.1E+02	
Metals	Cobalt	7440-48-4	2.1E+01	2.0E+01	95% UCL	No	1.2E+04	3.9E+02	1.8E-09	5.2E-02	4.2E+03	9.3E+02	4.8E-09	2.2E-02	4.2E+02	2.3E+01	4.9E-08	8.9E-01	
Metals	Iron	7439-89-6	5.3E+04	5.1E+04	95% UCL	No	--	9.1E+05	--	5.6E-02	--	2.4E+05	--	2.1E-01	--	5.5E+04	--	9.2E-01	
TPH	Diesel Range Organics	DRO	3.4E+02	1.8E+02	95% UCL	No	--	1.6E+04	--	1.1E-02	--	9.3E+02	--	1.9E-01	--	9.6E+02	--	1.9E-01	
VOC	Benzene	71-43-2	3.7E-01	2.0E-01	95% UCL	No	8.7E+00	1.8E+02	2.3E-08	1.1E-03	2.8E+01	2.4E+02	7.0E-09	8.3E-04	3.3E-01	1.1E+01	6.0E-07	1.8E-02	
							Cumulative Risk and Hazard:			4E-05	13			4E-06	0.5			8E-04	212
							Cumulative Risk and Hazard Excluding Background Metals:			4E-05	13			4E-06	0.5			8E-04	212

Notes:

Bold indicates cancer risk exceeds 1E-6 or hazard quotient exceeds 1.

-- = not applicable

bgs = below ground surface

CAS = chemical abstract service

COPC = constituent of potential concern

EPC = Exposure Point Concentration

MDC = maximum detected concentration

mg/kg = milligram(s) per kilogram

RBC = risk-based concentration

Table 12-4. Soil Leaching to Groundwater Evaluation at Iron Gate Hatchery Burn Pit

COPC	CAS	Site EPC (mg/kg)	EPC Basis	Organic Carbon Coefficient (K_{oc}) (cm^3/g)	Henry's Law Constant (H) ($atm\cdot m^3/mole\cdot ^\circ K$)	Dilution/Attenuation Factor (DAF)	Target Groundwater Concentrations		Leaching SLs			
							Drinking Water Resource (ESL Table S-3) ($\mu g/L$)	Nondrinking Water Resource based on Freshwater Habitat (ESL Table S-3) ($\mu g/L$)	Protection of Drinking Water Resource SL ^a (mg/kg)	EPC Exceeds Drinking Water Resource SL? (Yes/No)	Protection of Nondrinking Water Resource based on Freshwater Habitat SL ^a (mg/kg)	EPC Exceeds Nondrinking Water Resource SL? (Yes/No)
Benzene	71-43-2	2.0E-01	95% UCL	1.50E+02	5.62E-03	5.98E+01	4.2E-01	4.6E+01	2.5E-02	Yes	2.8E+00	No
Hexachlorobutadiene	87-68-3	1.4E-02	Average	8.50E+02	1.03E-02	2.05E+02	1.4E-01	4.7E+00	2.8E-02	No	9.5E-01	No
Naphthalene	91-20-3	4.3E-02	95% UCL	1.50E+03	4.40E-04	2.52E+02	1.7E-01	2.4E+01	4.2E-02	Yes	6.0E+00	No
Diethylphthalate	84-66-2	2.5E-02	Average	1.00E+02	6.11E-07	1.66E+01	1.5E+00	1.5E+00	2.5E-02	No	2.5E-02	No

Notes:

^a Soil Leaching SL calculated per the formula in Section 3.1.2.

Target groundwater concentrations from Table S-3 in SFRWQCB (2019).

Groundwater Category Drinking Water Resource - protective of groundwater that is a source of drinking water AND protective of discharge of groundwater to surface water and subsequent effects on aquatic life.

-- = not applicable

$\mu g/L$ = micrograms per kilogram

$atm\cdot m^3/mole\cdot ^\circ K$ = standard atmosphere meters cubed per mole

CAS = Chemical Abstract Service

cm^3/g = cubic centimeters per gram

COPC = constituent of potential concern

EPC = exposure point concentration for soil data from all depths

ESL = environmental screening level, SFRWQCB 2019

K_{oc} = organic carbon partition coefficient

MDC = maximum detected concentration; used because there are too few detected values to calculate a UCL

mg/kg = milligrams per kilogram

SL = screening level

UCL = upper confidence limit on the mean

Table 12-5. Weight of Evidence for Ecological Receptors at Iron Gate Fish Hatchery Burn Pit

			Background Comparison	Step 1 Screening Evaluation	Step 2 Refined Evaluation	Step 3				Step 4	
						Site-Specific Evaluation				Weight of Evidence	
REC Name	Class	Detected Analytes	Background HQ>1	No Effect HQ>1	Low Effect HQ>1	Bird EcoPRG HQ>1	Mammal EcoPRG HQ>1	Bird AUF Adjusted HQ>1	Mammal AUF Adjusted HQ>1	Retain for Risk Management?	Rationale
Iron Gate Fish Hatchery Burn Pit	Metal	Antimony	2	6	--	--	--	--	--	No	B
Iron Gate Fish Hatchery Burn Pit	Metal	Arsenic	2	4	1	--	--	--	--	No	C
Iron Gate Fish Hatchery Burn Pit	Metal	Barium	--	8	--	--	--	--	--	No	A
Iron Gate Fish Hatchery Burn Pit	Metal	Boron	--	6	3	--	--	--	--	No	C
Iron Gate Fish Hatchery Burn Pit	Metal	Chromium	--	4	1	--	--	--	--	No	C
Iron Gate Fish Hatchery Burn Pit	Metal	Cobalt	--	8	--	--	--	--	--	No	A
Iron Gate Fish Hatchery Burn Pit	Metal	Copper	2	8	2	--	--	--	--	No	C
Iron Gate Fish Hatchery Burn Pit	Metal	Lead	1	2	2	--	--	--	--	No	C
Iron Gate Fish Hatchery Burn Pit	Metal	Manganese	--	8	--	--	--	--	--	No	A
Iron Gate Fish Hatchery Burn Pit	Metal	Mercury	--	7	--	--	--	--	--	No	A
Iron Gate Fish Hatchery Burn Pit	Metal	Selenium	8	8	8	--	--	--	--	No	C
Iron Gate Fish Hatchery Burn Pit	Metal	Thallium	--	8	--	--	--	--	--	No	A
Iron Gate Fish Hatchery Burn Pit	Metal	Vanadium	--	8	8	8	--	--	--	No	D
Iron Gate Fish Hatchery Burn Pit	Metal	Zinc	1	8	3	--	--	1	--	No	C
Iron Gate Fish Hatchery Burn Pit	DXN	2,3,7,8-TCDD TEQ Mammal	--	5	3	--	1	--	--	No	D
Iron Gate Fish Hatchery Burn Pit	SVOC	Bis (2-ethylhexyl) phthalate	--	3	1	--	--	--	--	No	C
Iron Gate Fish Hatchery Burn Pit	VOC	Hexachlorobutadiene	--	1	--	--	--	--	--	No	A

Notes:

Number presented under each step identifies the number of samples collected from 0 to 6 feet bgs that exceeded the indicated screening level or EcoPRG.

-- no samples had exceedances; analyte not retained for further evaluation.

AUF = area use factor

BTV = background threshold value

DXN = dioxin/furan

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient

PAH = polynuclear aromatic hydrocarbon

REC = recognized environmental condition

RSL = regional screening level

SVOC = semivolatile organic compound

VOC = volatile organic compound

Weight of Evidence Rationale Codes:

A = Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect RSL or EcoPRGs for birds or mammals. In addition, there were no exceedances of the BTV (metals).





B = Chemical is not retained for risk management analysis for ecological receptors. Although some individual sample results exceeded the No Effect ESL, none of the detected results exceeded the Low Effect RSL or EcoPRGs for birds or mammals.

C = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded both the No Effect ESL and the Low Effect RSL; however, none of the results exceeded the site-specific EcoPRGs for birds or mammals (100 percent site use).

D = Chemical is not retained for risk management analysis for ecological receptors. Some detected results exceeded the No Effect ESL and Low Effect RSL as well as the Bird EcoPRG assuming 100 percent site use; however, there were no exceedances of the AUF-adjusted EcoPRGs.



LEGEND

-  Limits of SIWP
-  Approximate Limits of Visually Impacted Area
-  Soil Boring with SL Exceedance
-  Klamath River

Borehole: IGSR-01
Analytes: LEAD

Notes:

1. One 4-point composite grab sample of visually impacted material will be collected for every 1,000 cubic yards of visually impacted material observed.

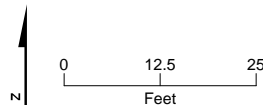





FIGURE 12-1
Iron Gate Hatchery Burn Pit
Lower Klamath Hydroelectric Project



Excavate Burn Pit floor to depth of 0.5 feet below ground surface. Excavate sidewalls to 0.5 feet below depth of burn material. Top of excavation is approximately 33 feet by 35 feet and includes estimated burn material in sidewalls.

LEGEND

-  Approximate Limits of Visually Impacted Area
-  Excavation Area
-  Bogus Creek

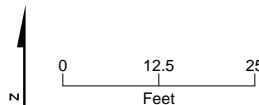


FIGURE 12-2
Iron Gate Hatchery Burn Pit Excavation Area
Lower Klamath Hydroelectric Project

13. Iron Gate Hatchery Settling Ponds

The Iron Gate Hatchery is located at 8638 Lakeview Road in Hornbrook, California, about one-third mile downstream of Iron Gate Dam. The hatchery is owned by PacifiCorp and is operated by the California Department of Fish and Wildlife. Two settling ponds (Photograph 13-1) receive wastewater from hatchery operations in the incubation building and from the raceways when they are being cleaned. Soil within the Iron Gate Hatchery Settling Ponds site is generally classified as Lassen-Kuck complex, stony (USDA 2021).



Photograph 13-1. Iron Gate Hatchery Settling Ponds (Jacobs 2021a)

13.1 Field Activities

Field activities at the Iron Gate Hatchery Settling Ponds were not recommended in the California SIWP (Jacobs 2022a) based on the analytical results from a prior study of settling pond sediment (Watercourse 2018). The results of the study, performed at North Coast Regional Water Quality Control Board request, indicated that pond sediment did not contain metals greater than background concentrations or VOCs, SVOCs, pesticides, and PCBs that exceeded laboratory detection limits. The sediment in the settling ponds is not regulated federally or under the California Code of Regulations.

13.2 Recommended Actions

The Iron Gate Hatchery Settling Ponds are recommended for closure (Section 1.2) based on the following:

- Pond sediment did not contain metals that exceeded background concentrations.
- VOCs, SVOCs, pesticides, and PCBs were not detected in pond sediment.
- The pond sediment is not regulated federally or under the California Code of Regulations.

14. Summary of Recommendations

This section summarizes the recommendations for further action at the 11 sites assessed according to the California SIWP in February, March, and May of 2022. Based on the analytical results and risk assessments, five sites are recommended for closure under a process developed between PacifiCorp, the KRRC, and the State of California, thereby satisfying the requirements of the Agreement. Six sites are recommended for removal action through excavation and offsite disposal of impacted soil and through collection of soil samples from the excavation floors and sidewalls to confirm that all impacted soil has been removed (Table 14-1).

14.1 Sites Recommended for Closure

The following sites are recommended for closure (Section 1.2):

- **Copco No. 1 Dynamite Cave:** The site is recommended for closure because residual explosives and explosive residue were not observed or detected in the cave.
- **Copco No. 1 Debris Pile/Scrap Yard:** The site is recommended for closure because there were no remaining constituents of concern upon evaluation of the analytical results against screening levels and completion of the risk assessments.
- **Copco No. 2 Former Mobile Oil Containment Building and Underground Storage Tanks:** These two sites are recommended for closure because there are no documented spills or releases at either site and because there is no evidence of an existing UST based on the results of the geophysical survey. No further action is required for soil at these sites because:
 - Soil cores from initial and redrilled borings were not observed to be impacted by TPHs (soil was not stained, odorous, or characterized by PID readings greater than 50 ppmv) or other compounds.
 - Soil samples from all site borings did not contain COPCs at concentrations above site-specific soil screening levels.
 - There were no retained COPCs in soil from the risk assessments.

No further action is required for groundwater at these sites because:

- COPCs exceeded screening levels in one groundwater sample, but COPCs did not exceed screening levels in the duplicate sample.
 - The same COPCs did not exceed screening levels in groundwater samples from five other temporary wells.
 - The COPC exceedances in a single groundwater sample are not representative of groundwater at the site.
- **Iron Gate Hatchery Settling Ponds:** The settling ponds are recommended for closure because pond sediment is not state or federally regulated and because COPCs were previously not detected or were detected at less than background concentrations.

14.2 Sites Recommended for Removal Action

Consistent with the assessment conducted per the California SIWP and analysis in this report, the following six sites are recommended for further action (Table 14-1; Figures 6-2, 7-2, 8-2, 10-2, 11-2, and 12-2):

- **Copco No. 2 Wood-Stave Penstock:** Excavate and dispose of soil from beneath the former penstock (Figure 6-2) after it is decommissioned and removed by the KRRC. Unless further investigation is conducted following removal of the penstock, an approximate 50,000-square-foot area will be excavated to an approximate depth of 1 foot bgs or refusal from bedrock or boulders.
- **Copco No. 2 Wood Pile:** Excavate and dispose of soil from beneath Wood Pile No. 2 (Figure 7-2). An approximate 1,500-square-foot area will be excavated in 2-foot lifts to an approximate depth of 6 feet bgs. No remedial activities are recommended for Wood Piles No. 1 and No. 3, based on the results of the risk assessments.
- **Copco No. 2 Powerhouse Transformer Fire:** Excavate and dispose of soil from the southeast corner of the powerhouse to a depth of 2 feet bgs (Figure 8-2). An approximate 50-square-foot area will be excavated to an approximate depth of 2 feet bgs (4 cy³ total).
- **Copco No. 2 Burn Pit:** Excavate and dispose of soil from the immediate vicinity of the burn pit, the concrete rubble area, and where the backhoe was parked (Figure 10-2). An approximate 2,300-square-foot area will be excavated to approximate depths of 1 and 4 feet bgs (255 cy³ total).
- **Iron Gate Shooting Range:** Excavate and dispose of soil from defined areas of the shooting range (Figure 11-2). An approximate 10,750-square-foot area will be excavated to approximate depths of 1 and 2 feet bgs (700 cy³ total). Alternatively, because this site will be used for disposal of material from the removal of Iron Gate Dam, which will completely bury the site, the likelihood of wildlife ingesting lead shot/bullet fragments will be low. If agreed upon by PacifiCorp, the KRRC, and the State of California, no removal action may be required.

- **Iron Gate Hatchery Burn Pit:** Excavate and dispose of soil from and surrounding the burn pit (Figure 12-2). An approximate 1,155-square-foot area will be excavated to an approximate depth of 0.5 foot bgs (21 cy³ total).

PacifiCorp will prepare removal action plans for excavation and offsite disposal of impacted soil at each site. The removal action plans will at a minimum address proper excavation technique and safety, confirmation sampling for excavation floors and sidewalls, soil management methods, waste management and disposal of soil, and backfill and compaction requirements.

A site removal action report will be prepared upon completion of the removal actions. The report will contain a summary of the remedial activities performed, waste manifests that document proper transport and disposal of excavated soil, and tables and figures of the analytical results from confirmation sampling for the contaminants of concern at each site. This site removal action report is intended to be the site closeout report that will provide the necessary documentation to close these sites per the process developed between PacifiCorp, the KRRC, and the State of California.

Table 14-1. Summary of Recommended Future Actions

Site/REC	Constituents of Concern after Risk Assessments	Approximate Areal Extent of Impacted Soil (square feet)	Approximate Depth of Impacted Soil (feet)	Approximate Volume of Impacted Soil (cubic yards)	Recommended Future Action
Copco No. 1 Dynamite Cave	Not applicable	N/A	N/A	N/A	Close site. Explosives/explosive residue confirmed to be absent from the cave.
Copco No. 1 Debris Pile/Scrap Yard	None	N/A	N/A	N/A	Close site. No COPCs were retained for risk assessment.
Copco No. 2 Wood-Stave Penstock	PCP and PAHs (benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene)	50,000	1	1,852	Prepare a remedial action plan for excavation and offsite disposal of soil beneath the penstock. (Note that excavating will be difficult over this large area and that this site may be a good site to further assess after the penstock is removed.)
Copco No. 2 Wood Pile	PCP	1,500	6	333	Prepare a remedial action plan for excavation and offsite disposal of soil beneath Wood Pile No. 2.
Copco No. 2 Powerhouse Transformer Fire	DRO and PCB (Aroclor 1262)	200	2	15	Prepare a remedial action plan for excavation and offsite disposal of soil in the immediate vicinity of soil boring at C2TF-01.
Copco No. 2 Former Mobile Oil Containment Building and Underground Storage Tanks	PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene)	N/A	N/A	N/A	Close site. PAHs detections in groundwater were in one temporary well (C2UT-12) out of six total temporary wells. The duplicate groundwater sample from temporary well C2UT-12 did not contain three of the PAHs detected in the primary sample, and the fourth PAH was detected below the groundwater screening level. The four PAHs were not detected above screening levels in soil samples collected from boring C2UT-12 or and other site borings.

Table 14-1. Summary of Recommended Future Actions

Site/REC	Constituents of Concern after Risk Assessments	Approximate Areal Extent of Impacted Soil (square feet)	Approximate Depth of Impacted Soil (feet)	Approximate Volume of Impacted Soil (cubic yards)	Recommended Future Action
Copco No. 2 Burn Pit	Dioxin (2,3,7,8-TCDD), naphthalene, and PAHs	2,316	1 & 4	255	Prepare a remedial action plan for excavation and offsite disposal of soil in the immediate vicinity of the backhoe, burn pit, and concrete rubble areas.
Iron Gate Shooting Range	Lead	10,750	1 & 2	700	Prepare a remedial action plan for excavation and offsite disposal of soil within defined areas of the shooting range or if acceptable to the KRRC and the State of California, allow the site to be covered with debris from dam removal in lieu of removing impacted soil.
Iron Gate Hatchery Burn Pit	Arsenic	1,155	0.5	21	Prepare a remedial action plan for excavation and offsite disposal of soil in the immediate vicinity of the burn pit.
Iron Gate Hatchery Settling Ponds	None	N/A	N/A	N/A	Close site. Pond sediment is not regulated federally or by the state; COPCs either were not detected or were detected at less than background concentrations.

Notes:

COPCs = constituents of potential concern

DRO = diesel range organics

N/A = not applicable

PAH = polynuclear aromatic hydrocarbons

PCP = pentachlorophenol

15. References

AECOM Technical Services, Inc. (AECOM). 2018. J.C. Boyle Dam, Copco No. 1 Dam, Copco No. 2 Dam, Iron Gate Dam, and Iron Gate Fish Hatchery Phase I Environmental Site Assessments. Prepared for Klamath River Renewal Corporation. November.

AECOM Technical Services, Inc. (AECOM). 2019. *Burn Pit at Iron Gate Hatchery Phase II Soil Investigation*. Prepared for Klamath River Renewal Corporation. September.

AECOM Technical Services, Inc. (AECOM). 2020a. *Draft Phase I Environmental Site Assessment of the Parcel B Lands*. Prepared for Klamath River Renewal Corporation. March.

AECOM Technical Services, Inc. (AECOM). 2020b. *Draft Wood-Stave Penstock and Soil Investigation*. Prepared for Klamath River Renewal Corporation. January.

Baes, C. F., III, R. C. Sharp, A. L. Sjoren, and R. W. Shor. 1984. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture*. Oak Ridge National Laboratory, Oak Ridge, TN. ORNL-5786.

Bechtel-Jacobs. 1998. *Empirical Models for the Uptake of Inorganic Chemicals from Soil by Plants*. Prepared for U.S. Department of Energy. BJC/OR-133. September.

Department of Toxic Substances Control (DTSC). 1996. *Guidance for Ecological Risk Assessment at Hazardous Waste Sites and Permitted Facilities*. California Environmental Protection Agency. July 4.

Department of Toxic Substances Control (DTSC). 2017. *Human Health Risk Assessment Note Number 2 - Soil Remedial Goals for Dioxins and Dioxin-like Compounds for Consideration at California Hazardous Waste Sites*. California Environmental Protection Agency. April.

Department of Toxic Substances Control (DTSC). 2019a. *Human Health Risk Assessment Note 1 - Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Hazardous Waste Sites and Permitted Facilities*. California Environmental Protection Agency. April 9.

Department of Toxic Substances Control (DTSC) 2019b. *Human Health Risk Assessment Note 10 - Toxicity Criteria*. Human and Ecological Risk Office (HERO). California Environmental Protection Agency. April 9.

Department of Toxic Substances Control (DTSC). 2021. *Human Health Risk Assessment Note 12 - Guidance for Evaluating Human Health Risk at Sites Contaminated by Petroleum Hydrocarbons and Related Chemicals of Potential Concern (COPC)*. California Environmental Protection Agency. June.

Department of Toxic Substances Control (DTSC). 2022a. *Human Health Risk Assessment Note 3 - DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities*. California Environmental Protection Agency. May.

Department of Toxic Substances Control (DTSC). 2022b. *Human Health Risk Assessment Note 4 - Guidance for Screening Level Human Health Risk Assessments*. California Environmental Protection Agency. March 29.

California Site Investigation Report

Environmental Council of the States (ECOS). 2007. *Issue Paper on Identification and Selection of Toxicity Values/ Criteria for CERCLA and Hazardous Waste Site Risk Assessments in the Absence of IRIS Values*. April.

Jacobs Engineering Group Inc. (Jacobs). 2021a. *California Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Jacobs Engineering Group Inc. (Jacobs). 2021b. *Oregon Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Jacobs Engineering Group Inc. (Jacobs). 2022a. *California Site Investigation Supplement*. Prepared for PacifiCorp. August.

Jacobs Engineering Group Inc. (Jacobs). 2022b. *Oregon Site Investigation Supplement*. Prepared for PacifiCorp. August.

Jacobs Engineering Group Inc. (Jacobs). 2023. *Oregon Site Investigation Report*. Prepared for PacifiCorp. March.

Los Alamos National Laboratory (LANL). 2020. EcoRisk Database Release 4.2. Available online at <https://www.intellusnm.com/documents/documents.cfm>.

Lowy, Lloyd, Klamath River Renewal Corporation. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.

Matthews, Chris, Oregon Department of Justice. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.

Oregon Department of Environmental Quality (ODEQ). 2013. *Development of Oregon Background Metals Concentrations in Soil*. Technical Report. March. Accessed June 2021. <https://www.oregon.gov/deq/FilterDocs/DebORbackgroundMetal.pdf>.

Parametrix. 2006. *Technical Memorandum: Summary of Findings for Phase II ESA, Copco No. 2 Powerhouse*. August 29.

Sample, B. E., D. M. Opresko, and G. W. Suter II. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*. Oak Ridge National Laboratory, Oak Ridge, Tennessee. ES/ER/TM-86/R3.

Sample, B., J. J. Beauchamp, R. A. Efroymsen, G. W. Suter, and T. L. Ashwood. 1998a. *Development and Validation of Bioaccumulation Models for Earthworms*. February.

Sample, B., J. J. Beauchamp, R. A. Efroymsen, and G. W. Suter. 1998b. *Development and Validation of Bioaccumulation Models for Small Mammals*. February.

San Francisco Regional Water Quality Control Board (SFRWQCB). 2019. *Environmental Screening Levels*. Interim Final. January.

Total Petroleum Hydrocarbon Criteria Working Group (TPHCWG). 1997. *Development of Fraction Specific Reference Doses (RfDs) and Reference Concentrations (RfCs) for Total Petroleum Hydrocarbons (TPH)*. Total Petroleum Hydrocarbon Criteria Working Group Series. Volume 4.

- U.S. Environmental Protection Agency (EPA). 1989. *Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual (Part A)*. EPA Office of Emergency and Remedial Response. Interim Final. EPA/540/1-89/002.
- U.S. Environmental Protection Agency (EPA). 1997. *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final*.
- U.S. Environmental Protection Agency (EPA). 1998. *Final Guidelines for Ecological Risk Assessment*. Risk Assessment Forum, EPA, Washington D.C. EPA/630/R-95/002F. April.
- U.S. Environmental Protection Agency (EPA). 2001. *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments*. Office of Solid Waste and Emergency Response – EcoUpdate. EPA 540/ F-01/014. June.
- U.S. Environmental Protection Agency (EPA). 2003. *Human Health Toxicity Values in Superfund Risk Assessments*. OSWER Directive 9285.7-53. December 5.
- U.S. Environmental Protection Agency (EPA). 2005a. *Ecological Soil Screening Levels for Antimony*. Interim Final. OSWER Directive 9285.7. Office of Solid Waste and Emergency Response. November.
- U.S. Environmental Protection Agency (EPA). 2005b. *Ecological Soil Screening Levels for Arsenic*. Interim Final. OSWER Directive 9285.7-62, Revised. Office of Solid Waste and Emergency Response. March.
- U.S. Environmental Protection Agency (EPA). 2007a. *Guidance for Developing Ecological Soil Screening Levels (Eco-SSLs)*. OSWER Directive 9285.7-55, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Issued November 2003. Revised April.
- U.S. Environmental Protection Agency (EPA). 2007b. *Ecological Soil Screening Levels for Copper*. Interim Final. OSWER Directive 9285.7-68, Revised. Office of Solid Waste and Emergency Response. February.
- U.S. Environmental Protection Agency (EPA). 2007c. *Ecological Soil Screening Levels for Manganese*. Interim Final. OSWER Directive 9285.7-71, Revised. Office of Solid Waste and Emergency Response. April.
- U.S. Environmental Protection Agency (EPA). 2008a. *Ecological Soil Screening Levels (EcoSSLs)*. OSWER Directive 9285.7-55 as updated from 2003-2008. <http://www.epa.gov/ecotox/ecossil/SOPs.htm>.
- U.S. Environmental Protection Agency (EPA). 2008b. *Ecological Soil Screening Levels for Chromium*. Interim Final. OSWER Directive 9285.7-66, Revised. Office of Solid Waste and Emergency Response. April.
- U.S. Environmental Protection Agency (EPA). 2009. *Provisional Peer-Reviewed Toxicity Values for Complex Mixtures of Aliphatic and Aromatic Hydrocarbons (CASRN Various)*. September 30.
- U.S. Environmental Protection Agency (EPA). 2013. *Regional Tier 3 Toxicity Value Workgroup, OSWER Human Health Regional Risk Assessors Forum*. OSWER Directive 9285.7-86. May.
- U.S. Environmental Protection Agency (EPA). 2014. *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors*. February. Accessed September 16, 2020. <https://www.epa.gov/risk/update-standard-default-exposure-factors>.
- U.S. Environmental Protection Agency (EPA). 2016a. *ProUCL Version 5.1.002 Technical Guide. Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations*. May.

U.S. Environmental Protection Agency (EPA). 2016b. Memorandum. "Updated Scientific Considerations for Lead in Soil Cleanups" revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities (Office of Solid Waste and Emergency Response [OSWER] Directive 9355.4-12. December 22.

U.S. Environmental Protection Agency (EPA). 2018. *Supplemental Guidance to ERAGS: Region 4, Ecological Risk Assessment*. March 2018 Update. Scientific Support Section Superfund Division.

U.S. Environmental Protection Agency (EPA). 2021. U.S. Environmental Protection Agency Integrated Risk Information System (IRIS) database. https://iris.epa.gov/AtoZ/?list_type=alpha.

U.S. Environmental Protection Agency (EPA). 2022a. *Regional Screening Levels (RSLs) – Generic Tables*. May. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>.

U.S. Environmental Protection Agency (EPA). 2022b. *Regional Screening Levels (RSLs) – User's Guide*. November. May. <https://www.epa.gov/risk/regional-screening-levels-rsls-users-guide>.

U.S. Environmental Protection Agency (EPA). 2022c. *RSL Calculator*. Accessed July, 2022. https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search.

Watercourse Engineering, Inc. (Watercourse). 2018. *Iron Gate Fish Hatchery Settling Ponds Evaluation, 2018*. Prepared for PacifiCorp by Watercourse Engineering, Inc. September.

Appendix A
Siskiyou County Well Permits

Siskiyou County Community Development-Environmental Health Division

806 South Main Street, Yreka CA 96097
 Telephone: (530) 841-2100 FAX: (530) 841-4076

T 48N R 4W S 29

WATER WELL PERMIT

PERMIT# W22026

APPLICANT (Must be licensed contractor or property owner and must be legible)

Name Jacobs - c/o David Poley
 Address 1000 Wilshire Blvd., Suite 2100
 Mailing Address 1000 Wilshire Blvd., Suite 2100
 City, State, Zip Code Los Angeles, CA 90017
 Telephone (310) 795-2445

Well Type	Annular Seal Depth
<input type="checkbox"/> Domestic	20 foot minimum
<input type="checkbox"/> Industrial	50 foot minimum
<input type="checkbox"/> Agricultural	20 foot minimum
<input type="checkbox"/> Public	50 foot minimum
<input type="checkbox"/> Monitoring	as approved #.....
<input type="checkbox"/> Deepening	n/a
<input type="checkbox"/> Destruction	n/a
<input checked="" type="checkbox"/> Soil bores	as approved # <u>17</u>
<input type="checkbox"/> Other	as approved

Minimum thickness of annular space seal is 2 inches

A PLOT PLAN MUST be submitted on an 8 1/2 x 11 sheet of paper. It must include all property boundaries, waterways, roads, septic systems and structures, location of the proposed well in relationship to the property boundaries.

- Permit Conditions**
- Well driller must provide a minimum of 24 hours notice prior to installing or placing annular seal.
 - All wells must be drilled under a C-57 license
 - Applicant/well driller is responsible for maintaining all setbacks as approved by on location map below including a minimum of 100 feet from any established on-site sewage disposal location.
 - Owner and well contractor are required to submit a completed well log within 30 days of well completion.
 - This permit does not guarantee issuance of any other development permits or land use requests for this property.
 - This permit expires six months from the date of issuance.

Owner/Contractor Signatures

SIGNATURE OF OWNER: (required on all applications)

I am the owner of the property and certify that the information contained herein is accurate. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply. I hereby authorize SISKIYOU COUNTY to enter the property for inspection purposes.

I hereby authorize the contractor listed herein to obtain the permit.

David Poley 2/8/2022
 Signature Date

Signature of Contractor (required on all applications)
 I certify that I possess a valid C-57 contractor's license that is in full force and effect. I certify that I have read this application and the above information is correct. I agree to comply with all Siskiyou County Ordinances and State Laws relating this well construction. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply.

ST Mat 02-08-22
 Contractor Date

Property Location
 Property Owner PacificCorp
 Assessors parcel # 004-050-380
 Location Copco No. 1 Dam Debris Pile/Scrap Yard
 Parcel Size 321 acres

WELL CONTRACTOR
 Name J & H Drilling Co., Inc.
 Mailing Address 13124 Firestone Blvd.
 City, State, Zip Code Santa Fe Springs, CA 90670
 Telephone (714) 994-0402
 License # 740854

FEES-Subject to Change

Water Well permit	\$360
Water Well Deepening	\$185
Water Well destruction	\$185
Monitoring Well(s) construction or destruction and Soil bores	First three \$360 \$75 for each additional bore/MW construction/destruction

For Official Use Only

Property Owner Verification	Date <u>2/9/22</u>	Initials <u>LF</u>
Set back Requirements	_____	
Flood	_____	
Zoning	_____	

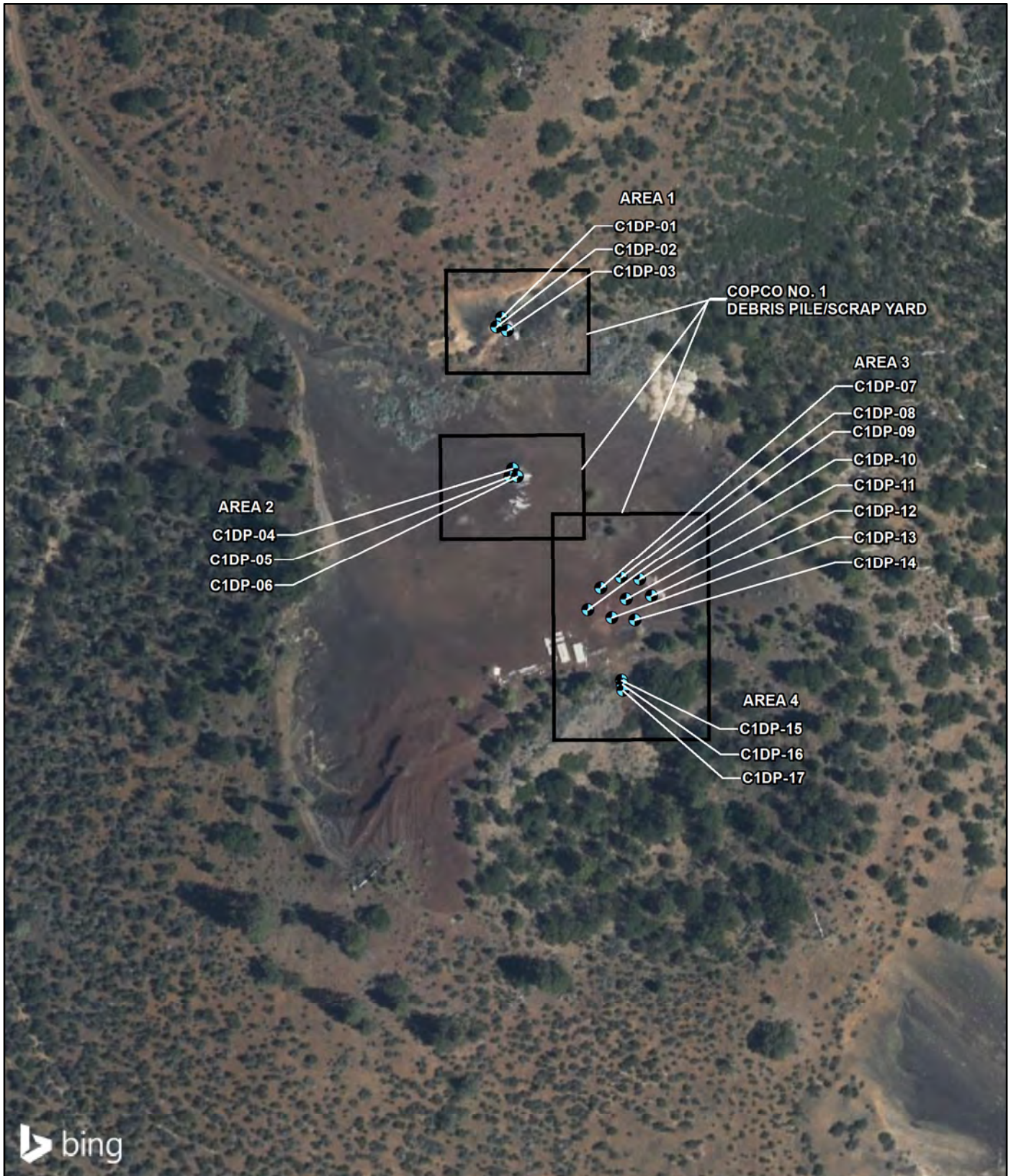
Received by LF Date 2/14/22
 Fee Received \$1410 ck# 9106

Permission is hereby granted for the above well work in accordance with all State and County laws and standards as provided in Siskiyou County Code, Title 5, Chapter 8 and any conditions as set forth in this permit.

Issued by [Signature] Date 2/15/22
 Seal Inspection _____ Date _____
 Seal Depth _____
 Final Inspection by _____ Date _____
 Inspection Notes: _____
 Date Well Log Received _____ Log # _____

LOCATION MAP
 (to be completed by department)

See Attached site map



LEGEND

- Limits of SIWP
- Proposed Soil Boring Location

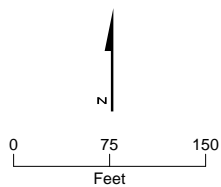
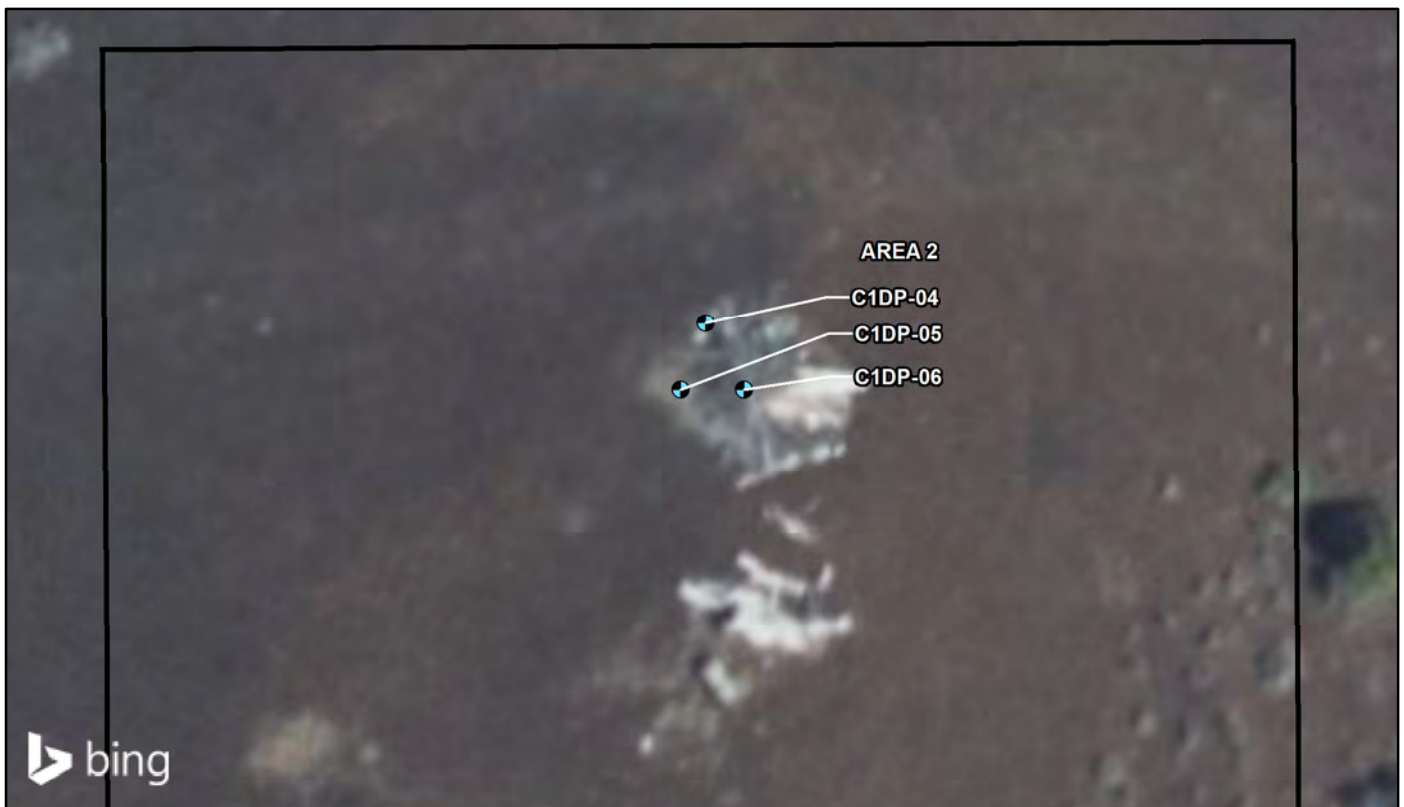


FIGURE 4
Copco No. 1 Debris Pile/Scrap Yard
Siskiyou County Water Well Permit Application



LEGEND

- Limits of SIWP
- Proposed Soil Boring Location

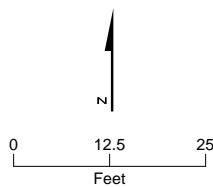
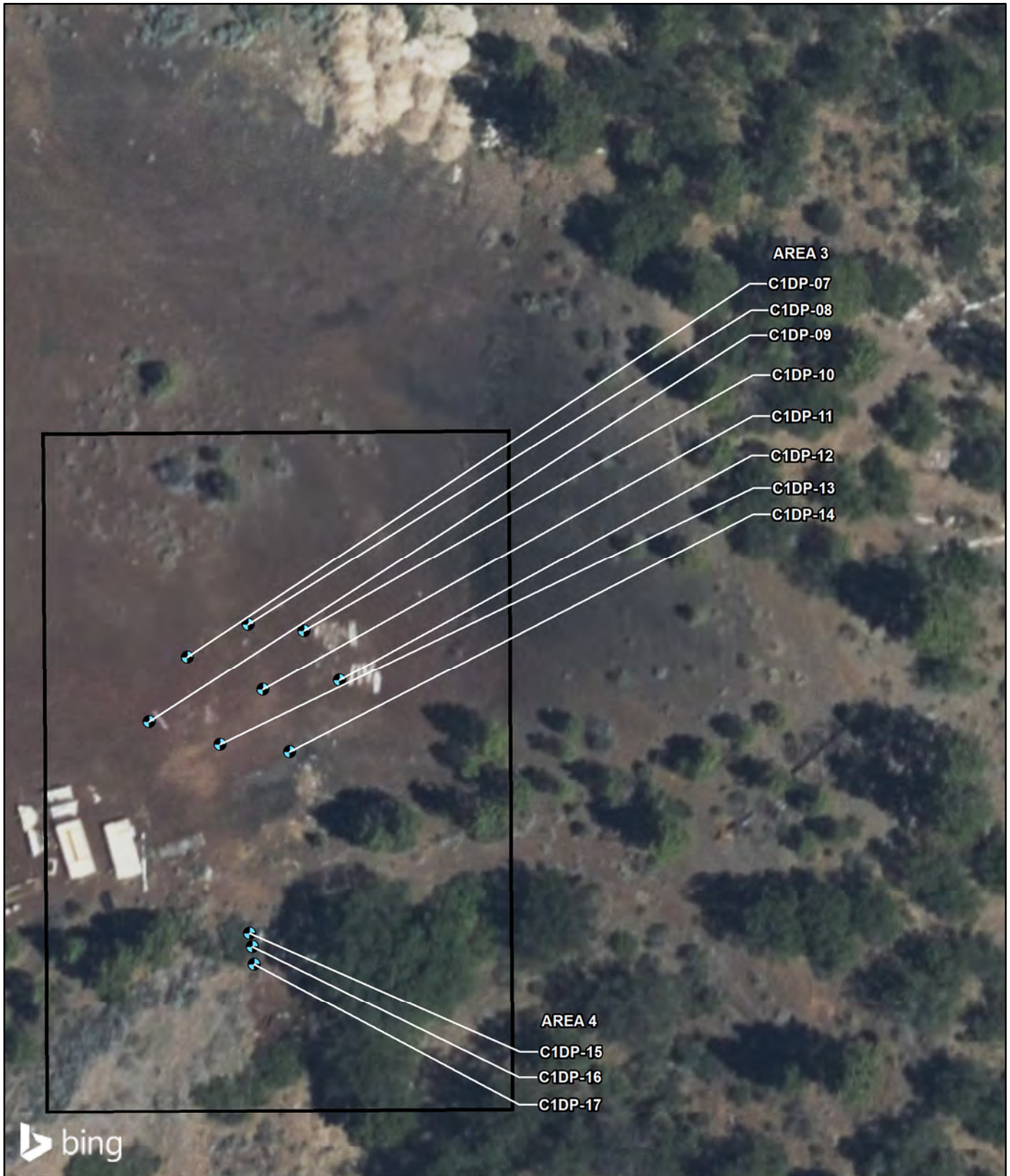


FIGURE 5
Copco No. 1 Debris Pile/Scrap Yard Area 1 and 2
Siskiyou County Water Well Permit Application



LEGEND

- Limits of SIWP
- Proposed Soil Boring Location

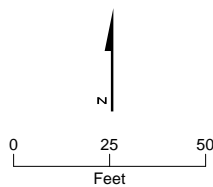


FIGURE 6
Copco No. 1 Debris Pile/Scrap Yard Area 3 and 4
Siskiyou County Water Well Permit Application

Siskiyou County Community Development-Environmental Health Division

806 South Main Street, Yreka CA 96097
 Telephone: (530) 841-2100 FAX: (530) 841-4076

T 48N R 4W S 31

WATER WELL PERMIT

PERMIT# W222027

APPLICANT (Must be licensed contractor or property owner and must be legible)

Name Jacobs - c/o David Poley

Address 1000 Wilshire Blvd., Suite 2100

Mailing Address 1000 Wilshire Blvd., Suite 2100

City, State, Zip Code Los Angeles, CA 90017

Telephone (310) 795-2445

Well Type	Annular Seal Depth
<input type="checkbox"/> Domestic	20 foot minimum
<input type="checkbox"/> Industrial	50 foot minimum
<input type="checkbox"/> Agricultural	20 foot minimum
<input type="checkbox"/> Public	50 foot minimum
<input type="checkbox"/> Monitoring	as approved # _____
<input type="checkbox"/> Deepening	n/a
<input type="checkbox"/> Destruction	n/a
<input checked="" type="checkbox"/> Soil bores	as approved # <u>33</u>
<input type="checkbox"/> Other	as approved

Minimum thickness of annular space seal is 2 inches

A PLOT PLAN MUST be submitted on an 8 1/2 x 11 sheet of paper. It must include all property boundaries, waterways, roads, septic systems and structures, location of the proposed well in relationship to the property boundaries.

- Permit Conditions**
- Well driller must provide a minimum of 24 hours notice prior to installing or placing annular seal.
 - All wells must be drilled under a C-57 license
 - Applicant/well driller is responsible for maintaining all setbacks as approved by on location map below including a minimum of 100 feet from any established on-site sewage disposal location.
 - Owner and well contractor are required to submit a completed well log within 30 days of well completion.
 - This permit does not guarantee issuance of any other development permits or land use requests for this property.
 - This permit expires six months from the date of issuance.

Owner/Contractor Signatures

SIGNATURE OF OWNER: (required on all applications)

I am the owner of the property and certify that the information contained herein is accurate. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply. I hereby authorize SISKIYOU COUNTY to enter the property for inspection purposes.

I hereby authorize the contractor listed herein to obtain the permit
R-E-J 2/8/2022
 Signature Date

Signature of Contractor (required on all applications)

I certify that I possess a valid C-57 contractor's license that is in full force and effect. I certify that I have read this application and the above information is correct. I agree to comply with all Siskiyou County Ordinances and State Laws relating this well construction. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply.

[Signature] 02-08-22
 Contractor Date

Property Location
 Property Owner PacifiCorp
 Assessors parcel # 004-050-100
 Location Copco No. 2 Dam (4 Sites)
 Parcel Size 638 acres

WELL CONTRACTOR
 Name J & H Drilling Co., Inc.
 Mailing Address 13124 Firestone Blvd
 City, State, Zip Code Santa Fe Springs, CA 90670
 Telephone (714) 994-0402
 License # 740854

FEES-Subject to Change

Water Well permit	\$360
Water Well Deepening	\$185
Water Well destruction	\$185
Monitoring Well(a) construction or destruction and Soil bores	First three \$360 \$75 for each additional bore/MW construction/destruction

For Official Use Only

Property Owner Verification	Date <u>2/9/22</u>	Initials <u>LF</u>
Set back Requirements	_____	
Flood	_____	
Zoning	_____	

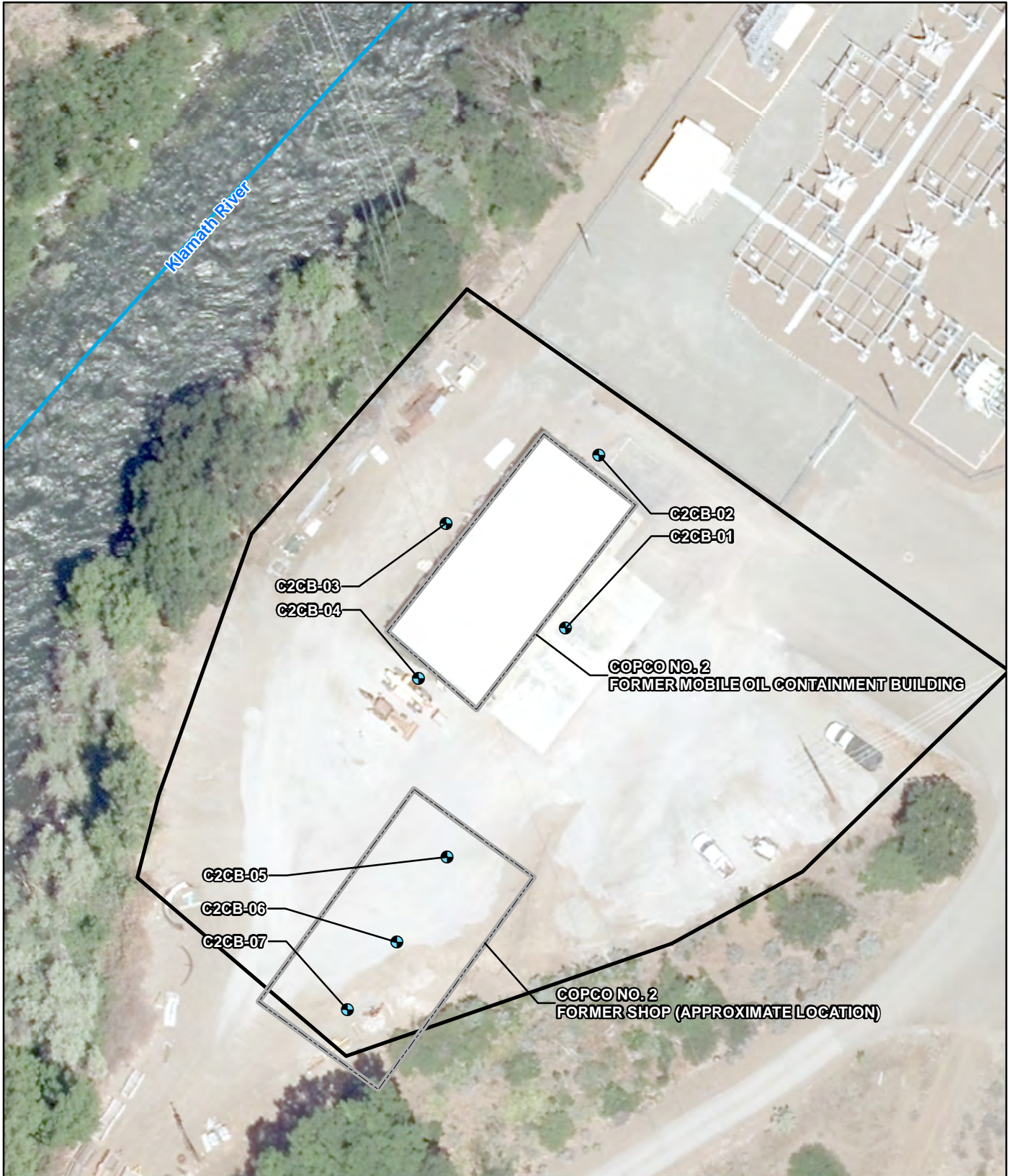
Received by LF Date 2/14/22
 Fee Received \$2,610 CK# 9106

Permission is hereby granted for the above well work in accordance with all State and County laws and standards as provided in Siskiyou County Code, Title 5, Chapter 6 and any conditions as set forth in this permit.





Issued by [Signature] Date 2/15/22
 Seal Inspection _____ Date _____
 Seal Depth _____
 Final Inspection by _____ Date _____
 Inspection Notes: _____
 Date Well Log Received _____ Log # _____

LOCATION MAP
 (to be completed by department)

See Attached Site map.



LEGEND

-  Limits of SIWP
-  Former Building
-  Proposed Soil Boring Location
-  Klamath River

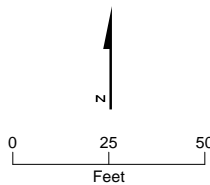
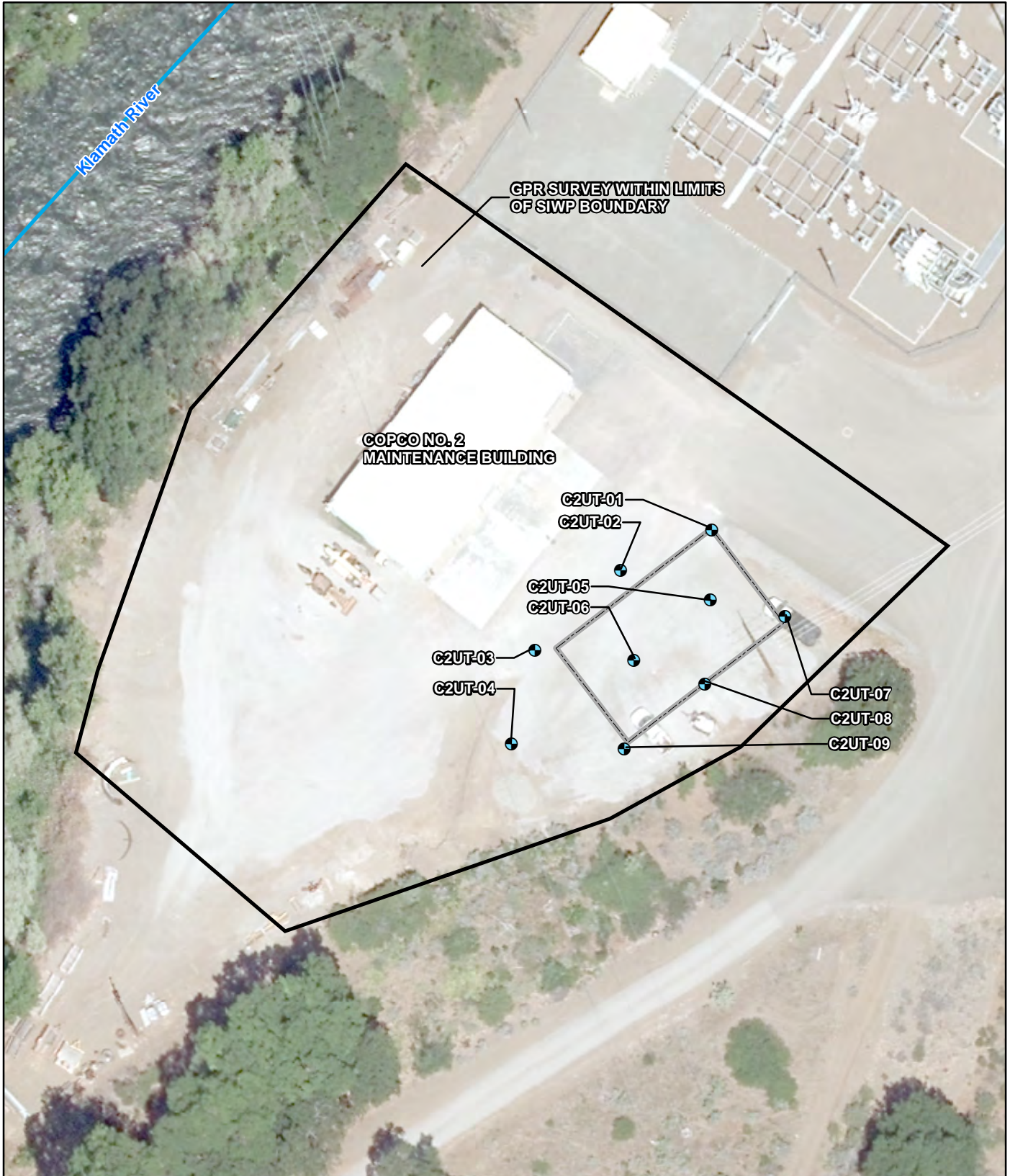






FIGURE 7
Copco No. 2 Former Mobile Oil Containment Building
Siskiyou County Water Well Permit Application



LEGEND

-  Limits of SIWP
-  Approximate Location of Fuel Pumps and USTs
-  Proposed Soil Boring Location
-  Klamath River
- GPR = Ground-Penetrating Radar

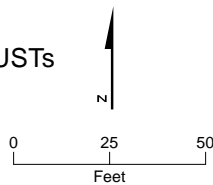


FIGURE 8
Copco No. 2 Underground Storage Tanks
Siskiyou County Water Well Permit Application



LEGEND

- Limits of SIWP
- Former Transformer
- Prior Soil Boring Location
- Proposed Soil Boring Location
- Klamath River

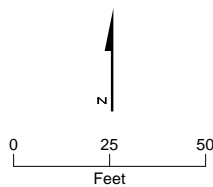


FIGURE 9
Copco No. 2 Transformer Fire
Siskiyou County Water Well Permit Application

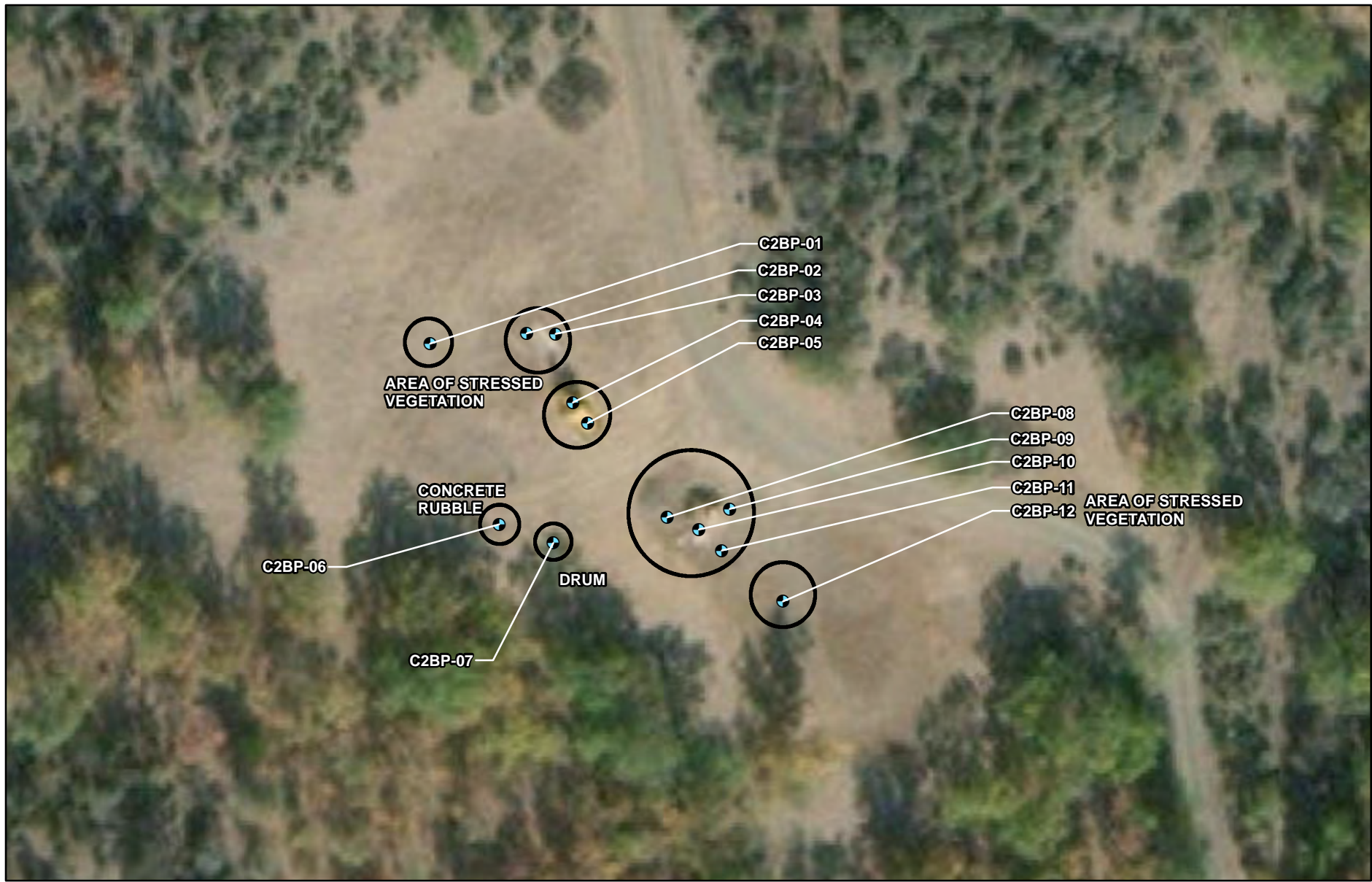


FIGURE 10
Copco No. 2 Burn Pit
Siskiyou County Water Well Permit Application

Siskiyou County Community Development-Environmental Health Division

806 South Main Street, Yreka CA 96097
 Telephone: (530) 841-2100 FAX: (530) 841-4076

T 47N R 5W S 16

WATER WELL PERMIT

PERMIT# W22028

APPLICANT (Must be licensed contractor or property owner and must be legible)

Name Jacobs - c/o David Poley

Address 1000 Wilshire Blvd., Suite 2100

Mailing Address 1000 Wilshire Blvd., Suite 2100

City, State, Zip Code Los Angeles, CA 90017

Telephone (310) 795-2445

Well Type	Annular Seal Depth
<input type="checkbox"/> Domestic	20 foot minimum
<input type="checkbox"/> Industrial	50 foot minimum
<input type="checkbox"/> Agricultural	20 foot minimum
<input type="checkbox"/> Public	50 foot minimum
<input type="checkbox"/> Monitoring	as approved #.....
<input type="checkbox"/> Deepening	n/a
<input type="checkbox"/> Destruction	n/a
<input checked="" type="checkbox"/> Soil bores	as approved # <u>1</u>
<input type="checkbox"/> Other	as approved

Minimum thickness of annular space seal is 2 inches

A PLOT PLAN MUST be submitted on an 8 1/2 x 11 sheet of paper. It must include all property boundaries, waterways, roads, septic systems and structures, location of the proposed well in relationship to the property boundaries.

- Permit Conditions**
- Well driller must provide a minimum of 24 hours notice prior to installing or placing annular seal.
 - All wells must be drilled under a C-57 license
 - Applicant/well driller is responsible for maintaining all setbacks as approved by on location map below including a minimum of 100 feet from any established on-site sewage disposal location.
 - Owner and well contractor are required to submit a completed well log within 30 days of well completion.
 - This permit does not guarantee issuance of any other development permits or land use requests for this property.
 - This permit expires six months from the date of issuance.

Owner/Contractor Signatures

SIGNATURE OF OWNER: (required on all applications)

I am the owner of the property and certify that the information contained herein is accurate. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply. I hereby authorize SISKIYOU COUNTY to enter the property for inspection purposes.

I hereby authorize the contractor listed herein to obtain the permit. [Signature] 2/8/2022
 Signature Date

Signature of Contractor (required on all applications)
 I certify that I possess a valid C-57 contractor's license that is in full force and effect. I certify that I have read this application and the above information is correct. I agree to comply with all Siskiyou County Ordinances and State Laws relating this well construction. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply.

[Signature] 02-08-22
 Contractor Date

Property Owner PacificCorp
 Property Location
 Assessors parcel # 041-070-110
 Location Iron Gate Fish Hatchery Burn Pit
 Parcel Size 651 acres

WELL CONTRACTOR
 Name J & H Drilling Co., Inc.
 Mailing Address 13124 Firestone Blvd.
 City, State, Zip Code Santa Fe Springs, CA 90670
 Telephone (714) 994-0402
 License # 740854

FEES-Subject to Change

Water Well permit	\$360
Water Well Deepening	\$185
Water Well destruction	\$185
Monitoring Well(s) construction or destruction and Soil bores	First three \$360
	\$75 for each additional bore/MW construction/destruction

For Official Use Only

Property Owner Verification	Date	Initials
<u>[Signature]</u>	<u>2/9/22</u>	<u>LF</u>
Set back Requirements		
Flood		
Zoning		

Received by LF Date 2/14/22
 Fee Received \$360 ck# 9106

Permission is hereby granted for the above well work in accordance with all State and County laws and standards as provided in Siskiyou County Code, Title 8, Chapter 4 and any conditions as set forth in this permit.

Issued by [Signature] Date 2/15/22

Seal Inspection _____ Date _____
 Seal Depth _____
 Final Inspection by _____ Date _____
 Inspection Notes: _____
 Date Well Log Received _____ Log # _____

LOCATION MAP
 (to be completed by department)
See Attached site map.



LEGEND

- Limits of SIWP
- Proposed Soil Boring Location
- Proposed 4-Point Composite Sampling Location
- Klamath River

Notes:

1. One 4-point composite grab sample of visually impacted material will be collected for every 1,000 cubic yards of visually impacted material observed.

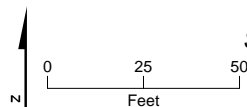


FIGURE 11
Iron Gate Fish Hatchery Burn Pit
Siskiyou County Water Well Permit Application

Siskiyou County Community Development-Environmental Health Division

806 South Main Street, Yreka CA 96097
 Telephone: (530) 841-2100 FAX: (530) 841-4076

T 48N R 4W S 30

WATER WELL PERMIT

PERMIT# _____

APPLICANT (Must be licensed contractor or property owner and must be legible)

Name Jacobs - c/o David Poley

Address 1000 Wilshire Blvd., Suite 2100

Mailing Address 1000 Wilshire Blvd., Suite 2100

City, State, Zip Code Los Angeles, CA 90017

Telephone (310) 795-2445

Well Type	Annular Seal Depth
<input type="checkbox"/> Domestic	20 foot minimum
<input type="checkbox"/> Industrial	50 foot minimum
<input type="checkbox"/> Agricultural	20 foot minimum
<input type="checkbox"/> Public	50 foot minimum
<input type="checkbox"/> Monitoring	as approved # _____
<input type="checkbox"/> Deepening	n/a
<input type="checkbox"/> Destruction	n/a
<input checked="" type="checkbox"/> Soil bores	as approved # <u>16</u>
<input type="checkbox"/> Other	as approved

Minimum thickness of annular space seal is 2 inches

A PLOT PLAN MUST be submitted on an 8 1/2 x 11 sheet of paper. It must include all property boundaries, waterways, roads, septic systems and structures, location of the proposed well in relationship to the property boundaries.

- Permit Conditions**
- Well driller must provide a minimum of 24 hours notice prior to installing or placing annular seal.
 - All wells must be drilled under a C-57 license
 - Applicant/well driller is responsible for maintaining all setbacks as approved by on location map below including a minimum of 100 feet from any established on-site sewage disposal location.
 - Owner and well contractor are required to submit a completed well log within 30 days of well completion.
 - This permit does not guarantee issuance of any other development permits or land use requests for this property.
 - This permit expires six months from the date of issuance.

Owner/Contractor Signatures

SIGNATURE OF OWNER: (required on all applications)

I am the owner of the property and certify that the information contained herein is accurate. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply. I hereby authorize SISKIYOU COUNTY to enter the property for inspection purposes.

I hereby authorize the contractor listed herein to obtain the permit.
David Poley 2/8/2022
 Signature Date

Signature of Contractor (required on all applications)
 I certify that I possess a valid C-57 contractor's license that is in full force and effect. I certify that I have read this application and the above information is correct. I agree to comply with all Siskiyou County Ordinances and State Laws relating this well construction. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply.
ST Mack 02-08-22
 Contractor Date

Property Location PacificCorp
 Property Owner _____
 Assessors parcel # 004-050-010
 Location Copco No. 2 Dam Wood Stave Penstock
 Parcel Size 200 acres

WELL CONTRACTOR
 Name J & H Drilling Co., Inc.
 Mailing Address 13124 Firestone Blvd.
 City, State, Zip Code Santa Fe Springs, CA 90670
 Telephone (714) 994-0402
 License # 740854

FEES-Subject to Change

Water Well permit	\$360
Water Well Deepening	\$185
Water Well destruction	\$185
Monitoring Well(s) construction and Soil bores	First three \$360
	\$75 for each additional bore/MW construction/destruction

For Official Use Only

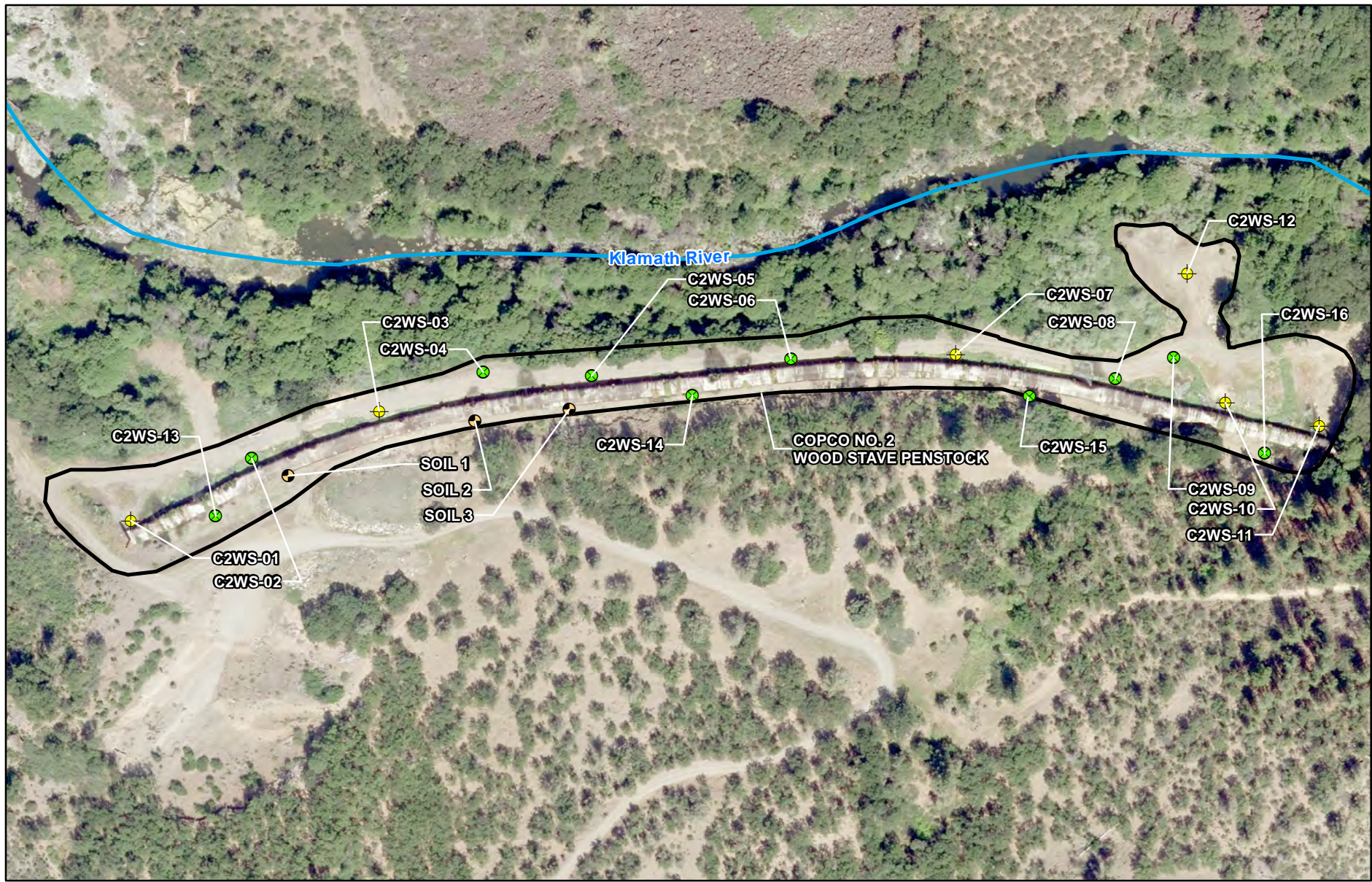
Property Owner Verification	Date	Initials
_____	<u>2/9/22</u>	<u>LF</u>
Set back Requirements	_____	_____
Flood	_____	_____
Zoning	_____	_____

Received by LF Date 2/11/22
 Fee Received \$ 1335 ck# 9106






Permission is hereby granted for the above well work in accordance with all State and County laws and standards as provided in Siskiyou County Code, Title 5, Chapter 8 and any conditions as set forth in this permit.

Issued by [Signature] Date 2/15/22
 Seal Inspection _____ Date _____
 Seal Depth _____
 Final Inspection by _____ Date _____
 Inspection Notes: _____
 Date Well Log Received _____ Log # _____

LOCATION MAP
 (to be completed by department)
SEE Attached Site MAP.



LEGEND

-  Limits of SIWP
-  Prior Soil Sample Location
-  Proposed Shallow Soil Boring Location
-  Proposed Deep Soil Boring Location
-  Klamath River

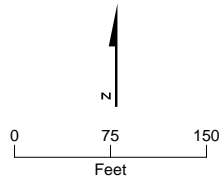


FIGURE 12
Copco No. 2 Wood Stave Penstock
Siskiyou County Water Well Permit Application

Siskiyou County Community Development-Environmental Health Division

806 South Main Street, Yreka CA 96097
 Telephone: (530) 841-2100 FAX: (530) 841-4076

T 47N R 5W S 9

WATER WELL PERMIT

PERMIT# _____

APPLICANT (Must be licensed contractor or property owner and must be legible)

Name Jacobs - c/o David Poley

Address 1000 Wilshire Blvd., Suite 2100

Mailing Address 1000 Wilshire Blvd., Suite 2100

City, State, Zip Code Los Angeles, CA 90017

Telephone (310) 795-2445

Well Type	Annular Seal Depth
<input type="checkbox"/> Domestic	20 foot minimum
<input type="checkbox"/> Industrial	50 foot minimum
<input type="checkbox"/> Agricultural	20 foot minimum
<input type="checkbox"/> Public	50 foot minimum
<input type="checkbox"/> Monitoring	as approved # _____
<input type="checkbox"/> Deepening	n/a
<input type="checkbox"/> Destruction	n/a
<input checked="" type="checkbox"/> Soil bores	as approved # <u>28</u>
<input type="checkbox"/> Other	as approved

Minimum thickness of annular space seal is 2 inches

A PLOT PLAN MUST be submitted on an 8 1/2 x 11 sheet of paper. It must include all property boundaries, waterways, roads, septic systems and structures, location of the proposed well in relationship to the property boundaries.

- Permit Conditions**
- Well driller must provide a minimum of 24 hours notice prior to installing or placing annular seal.
 - All wells must be drilled under a C-57 license
 - Applicant/well driller is responsible for maintaining all setbacks as approved by on location map below including a minimum of 100 feet from any established on-site sewage disposal location.
 - Owner and well contractor are required to submit a completed well log within 30 days of well completion.
 - This permit does not guarantee issuance of any other development permits or land use requests for this property.
 - This permit expires six months from the date of issuance.

Owner/Contractor Signatures

SIGNATURE OF OWNER: (required on all applications)

I am the owner of the property and certify that the information contained herein is accurate. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply. I hereby authorize SISKIYOU COUNTY to enter the property for inspection purposes.

I hereby authorize the contractor listed herein to obtain the permit.

R. EJ 2/8/2022
 Signature Date

Signature of Contractor (required on all applications)

I certify that I possess a valid C-57 contractor's license that is in full force and effect. I certify that I have read this application and the above information is correct. I agree to comply with all Siskiyou County Ordinances and State Laws relating this well construction. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply.

ST 02-08-22
 Contractor Date

Property Owner Property Location
PacifiCorp
 Assessors parcel # 041-060-140
 Location Iron Gate Dam Shooting Range
 Parcel Size 668 acres

WELL CONTRACTOR
 Name J & H Drilling Co., Inc.
 Mailing Address 13124 Firestone Blvd.
 City, State, Zip Code Santa Fe Springs, CA 90670
 Telephone (714) 994-0402
 License # 740854

FEES-Subject to Change

Water Well permit	\$360
Water Well Deepening	\$185
Water Well destruction	\$185
Monitoring Well(s) construction or destruction and Soil bores	First three \$360
	\$75 for each additional bore/MW construction/destruction

For Official Use Only

Property Owner Verification LF Date 2/9/22 Initials LF
 Set back Requirements _____
 Flood _____
 Zoning _____

Received by LF Date 2/14/22
 Fee Received \$ 2235 ck# 9106

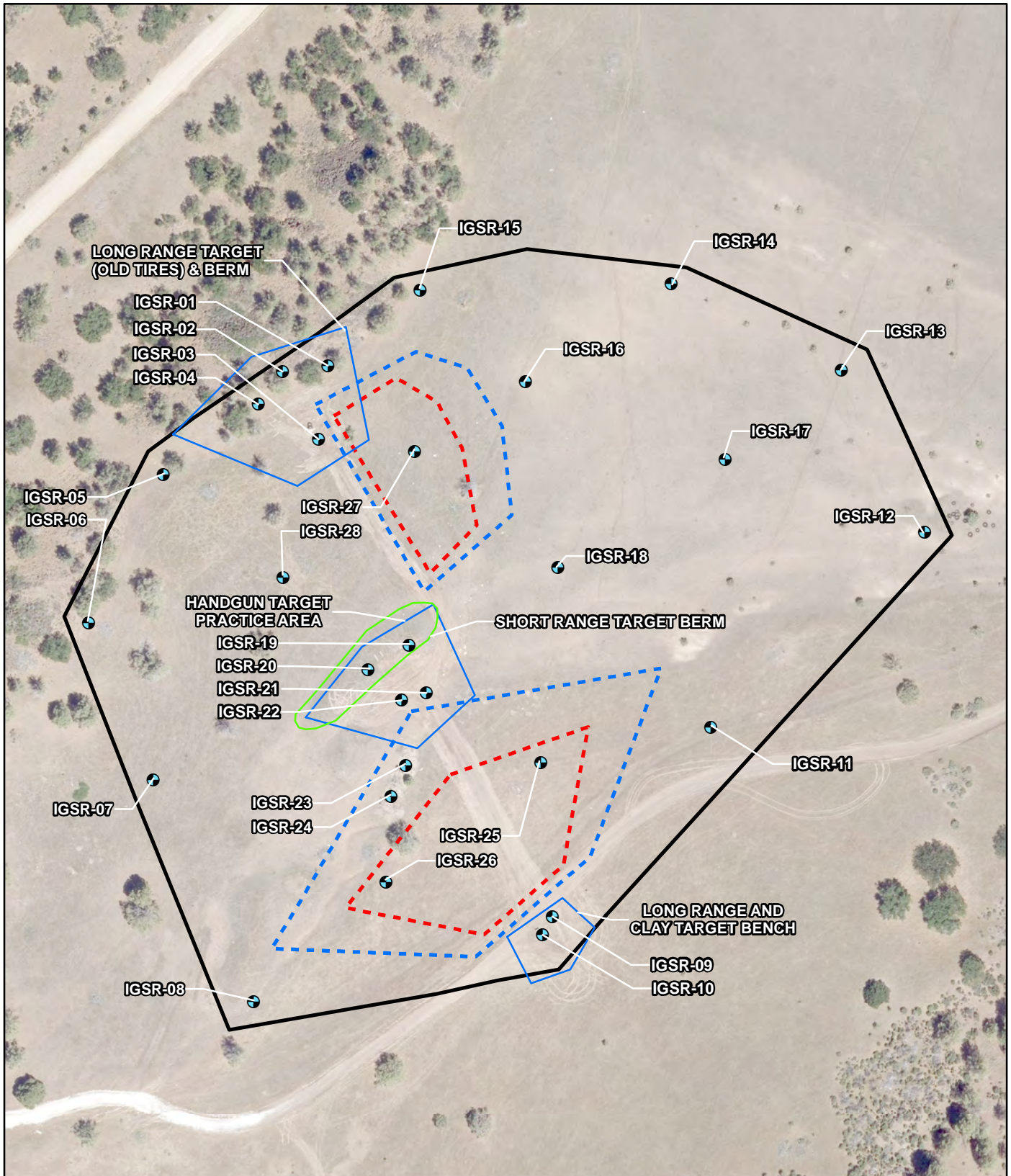
Permission is hereby granted for the above well work in accordance with all State and County laws and standards as provided in Siskiyou County Code, Title 8, Chapter 8 and any conditions as set forth in this permit.

Issued by [Signature] Date 2/15/22

Seal Inspection _____ Date _____
 Seal Depth _____
 Final Inspection by _____ Date _____
 Inspection Notes _____
 Date Well Log Received _____ Log # _____

LOCATION MAP
 (to be completed by department)

See Attached Site map



LEGEND

- Limits of SIWP
- Site Features
- Target Berm
- Clay Target Remnants
- Lead Shot Remnants
- Soil Boring Location

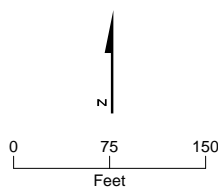


FIGURE 13
Iron Gate Shooting Range
 Siskiyou County Water Well Permit Application

Siskiyou County Community Development-Environmental Health Division

806 South Main Street, Yreka CA 96097
 Telephone: (530) 841-2100 FAX: (530) 841-4076

T 48N R 5W S 25

WATER WELL PERMIT

PERMIT# _____

APPLICANT (Must be licensed contractor or property owner and must be legible)

Name Jacobs - c/o David Poley

Address 1000 Wilshire Blvd., Suite 2100

Mailing Address 1000 Wilshire Blvd., Suite 2100

City, State, Zip Code Los Angeles, CA 90017

Telephone (310) 795-2445

Well Type	Annular Seal Depth
<input type="checkbox"/> Domestic	20 foot minimum
<input type="checkbox"/> Industrial	50 foot minimum
<input type="checkbox"/> Agricultural	20 foot minimum
<input type="checkbox"/> Public	50 foot minimum
<input type="checkbox"/> Monitoring	as approved #.....
<input type="checkbox"/> Deepening	n/a
<input type="checkbox"/> Destruction	n/a
<input checked="" type="checkbox"/> Soil bores	as approved # <u>7</u>
<input type="checkbox"/> Other	as approved

Minimum thickness of annular space seal is 2 inches

A PLOT PLAN MUST be submitted on an 8 1/2 x 11 sheet of paper. It must include all property boundaries, waterways, roads, septic systems and structures, location of the proposed well in relationship to the property boundaries.

- Permit Conditions**
- Well driller must provide a minimum of 24 hours notice prior to installing or placing annular seal.
 - All wells must be drilled under a C-57 license
 - Applicant/well driller is responsible for maintaining all setbacks as approved by on location map below including a minimum of 100 feet from any established on-site sewage disposal location.
 - Owner and well contractor are required to submit a completed well log within 30 days of well completion.
 - This permit does not guarantee issuance of any other development permits or land use requests for this property.
 - This permit expires six months from the date of issuance.

Owner/Contractor Signatures

SIGNATURE OF OWNER: (required on all applications)

I am the owner of the property and certify that the information contained herein is accurate. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply. I hereby authorize SISKIYOU COUNTY to enter the property for inspection purposes.

I hereby authorize the contractor listed herein to obtain the permit.

Signature [Signature] Date 2/8/2022

Signature of Contractor (required on all applications)

I certify that I possess a valid C-57 contractor's license that is in full force and effect. I certify that I have read this application and the above information is correct. I agree to comply with all Siskiyou County Ordinances and State Laws relating this well construction. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply.

Contractor [Signature] Date 02-08-22

Property Location
 Property Owner PacificCorp
 Assessor's parcel # 041-030-200
 Location Copco No. 2 Dam Wood Pile
 Parcel Size 233 acres

WELL CONTRACTOR
 Name J & H Drilling Co., Inc.
 Mailing Address 13124 Firestone Blvd.
 City, State, Zip Code Santa Fe Springs, CA 90670
 Telephone (714) 994-0402
 License # 740854

FEES-Subject to Change

Water Well permit	\$380
Water Well Deepening	\$185
Water Well destruction	\$185
Monitoring Well(s) construction or destruction and Soil bores	First three \$380
	\$75 for each additional bore/MW construction/destruction

For Official Use Only

Property Owner Verification [Signature] Date 2/9/22 Initials LF
 Set back Requirements _____
 Flood _____
 Zoning _____

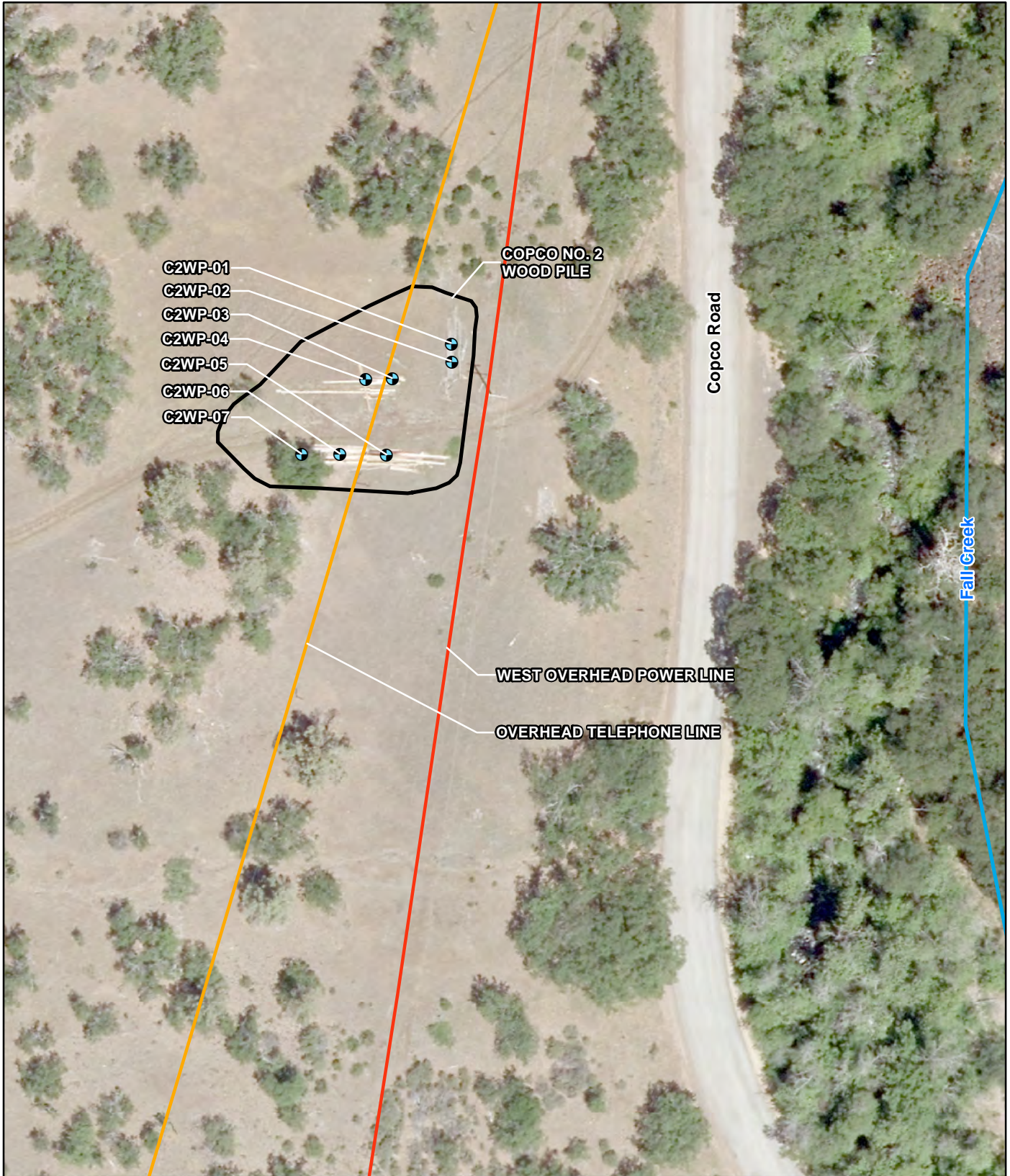
Received by LF Date 2/11/22
 Fee Received \$660 ck # 9106

Permission is hereby granted for the above well work in accordance with all State and County laws and standards as provided in Siskiyou County Code, Title 5, Chapter 8 and any conditions as set forth in this permit.






Issued by [Signature] Date 2/15/22
 Seal Inspection _____ Date _____
 Seal Depth _____
 Final Inspection by _____ Date _____
 Inspection Notes: _____
 Date Well Log Received _____ Log # _____

LOCATION MAP
 (to be completed by department)

SEE Attached Site MAP



LEGEND

-  Limits of SIWP
-  Proposed Soil Boring Location
-  Overhead Power Line
-  Overhead Telephone Line
-  Fall Creek

Note:
Overhead power and telephone lines are depicted on the ground to show the clearance of the proposed direct push drill rig at the proposed soil boring locations.

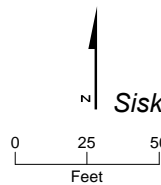


FIGURE 14
Copco No. 2 Wood Pile
Siskiyou County Water Well Permit Application



Transmittal

1000 Wilshire Blvd., Ste. 2100
Los Angeles, CA 90017
United States
T +1.310.795.2445
www.jacobs.com

TO: Siskiyou County Community Development,
Environmental Health Division
806 South Main Street
Yreka, CA 96097

FROM: David Poley
Jacobs

ATTN: Environmental Health Division

DATE: April 27, 2022

RE: Amended Water Well Permit Application for Copco 2 Dam

We are delivering to you:

- Attached
- Documents
- Drawings
- Specifications
- Copies
- Other:

Method of Shipment:

- Delivered to Counter
- Under separate cover via

Quantity	Description
1	Check totaling \$1,200.00
1	Original Water Well Permit W22027 and Application to Amend Water Well Permit WW027
1	Table 1A: Additional Permitting Fees Applicable to Water Well Permit W22027
1	Table 2A: Soil Boring Locations
1	Figure 1A identifying the soil boring locations

Remarks:

With this transmittal, Jacobs requests an amendment to existing Siskiyou Count Water Well Permit W22027. Soil borings authorized under Water Well Permit W22027 (33 total) were advanced and abandoned along with four additional soil borings (C2UT-02N, C2UT-02S, C2UT-02E, and C2UT-02W) in March 2022. Siskiyou County Inspectors oversaw advancement and abandonment of these borings.

Through this transmittal, Jacobs requests authorization to advance 12 additional borings under Siskiyou County Water Well Permit W22027. Also included in this request are the fees for advancement and abandonment of the 4 additional soil borings (C2UT-02N, C2UT-02S, C2UT-02E, and C2UT-02W) in March 2022.

Jacobs Engineering Group Inc.

Please notify us immediately if the message is unclear or incomplete.

NOTICE - This communication may contain confidential and privileged information that is for sole use of the intended recipient. Any viewing, copying or distribution of, or reliance on this message is strictly prohibited. If you have received this message in error, please notify us immediately at the telephone number listed above. At no cost to you, we will arrange for the return of the original message to us via post.

Under the amended permit, Jacobs will oversee J&H Drilling Co., Inc. (J&H Drilling, C-57 License No. 740854) as they hand auger and/or advance the 12 additional direct push technology (DPT) soil borings. Applicable fees for the additional soil borings are summarized in Table 1A; the boring locations are summarized in Table 2A. Figure 1A depicts the borings already advanced or planned to be advanced (16 total).

Jacobs will obtain a DigAlert permit for each soil boring at least 48 hours prior to drilling. A subcontracted third party subcontractor will additionally clear each soil boring for subsurface utilities through use of geophysical survey methods. If a utility is determined to be present within 5 feet of a planned soil boring, then the soil boring will be moved at least 5 feet away from the identified utility, and the new soil boring coordinate will be documented.

J&H Drilling will hand auger the entire borehole diameter to a depth of 5 feet below ground surface prior to drilling, which will commence after Jacobs visually confirms the absence of a utility within each borehole. Upon completion of soil sampling, J&H Drilling will abandon each boring with hydrated bentonite and restore the ground surface to original surface grade.

If you have any questions regarding the service application requests, please contact me at (310) 795-2445 or at david.poley@jacobs.com.

Best Regards,



David Poley/Jacobs

Copy To: PacifiCorp
Project Files

Siskiyou County Community Development-Environmental Health Division

806 South Main Street, Yreka CA 96097
 Telephone: (530) 841-2100 FAX: (530) 841-4076

T 48N R 4W S 31

WATER WELL PERMIT

PERMIT# W222027

APPLICANT (Must be licensed contractor or property owner and must be legible)

Name Jacobs - c/o David Poley

Address 1000 Wilshire Blvd., Suite 2100

Mailing Address 1000 Wilshire Blvd., Suite 2100

City, State, Zip Code Los Angeles, CA 90017

Telephone (310) 795-2445

Well Type	Annular Seal Depth
<input type="checkbox"/> Domestic	20 foot minimum
<input type="checkbox"/> Industrial	50 foot minimum
<input type="checkbox"/> Agricultural	20 foot minimum
<input type="checkbox"/> Public	50 foot minimum
<input type="checkbox"/> Monitoring	as approved #
<input type="checkbox"/> Deepening	n/a
<input type="checkbox"/> Destruction	n/a
<input checked="" type="checkbox"/> Soil bores	as approved # <u>33</u>
<input type="checkbox"/> Other	as approved

Minimum thickness of annular space seal is 2 inches

A PLOT PLAN MUST be submitted on an 8 1/2 x 11 sheet of paper. It must include all property boundaries, waterways, roads, septic systems and structures, location of the proposed well in relationship to the property boundaries.

- Permit Conditions**
- Well driller must provide a minimum of 24 hours notice prior to installing or placing annular seal.
 - All wells must be drilled under a C-57 license
 - Applicant/well driller is responsible for maintaining all setbacks as approved by on location map below including a minimum of 100 feet from any established on-site sewage disposal location.
 - Owner and well contractor are required to submit a completed well log within 30 days of well completion.
 - This permit does not guarantee issuance of any other development permits or land use requests for this property.
 - This permit expires six months from the date of issuance.

Owner/Contractor Signatures

SIGNATURE OF OWNER: (required on all applications)

I am the owner of the property and certify that the information contained herein is accurate. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply. I hereby authorize SISKIYOU COUNTY to enter the property for inspection purposes.

I hereby authorize the contractor listed herein to obtain the permit.
[Signature] 2/8/2022
 Signature Date

Signature of Contractor (required on all applications)

I certify that I possess a valid C-57 contractor's license that is in full force and effect. I certify that I have read this application and the above information is correct. I agree to comply with all Siskiyou County Ordinances and State Laws relating this well construction. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply.

[Signature] 02-08-22
 Contractor Date

Property Location

Property Owner PacifiCorp

Assessors parcel # 004-050-100

Location Copco No. 2 Dam (4 Sites)

Parcel Size 638 acres

WELL CONTRACTOR

Name J & H Drilling Co., Inc.

Mailing Address 13124 Firestone Blvd

City, State, Zip Code Santa Fe Springs, CA 90670

Telephone (714) 994-0402

License # 740854

FEES-Subject to Change

Water Well permit	\$380
Water Well Deepening	\$185
Water Well destruction	\$185
Monitoring Well(s) construction or destruction and Soil bores	First three \$360 \$75 for each additional bore/MW construction/destruction

For Official Use Only

Property Owner Verification	Date	Initials
<u>[Signature]</u>	<u>2/9/22</u>	<u>LF</u>
Set back Requirements		
Flood		
Zoning		

Received by LF Date 2/14/22

Fee Received \$2,610 CK# 9106

Permission is hereby granted for the above well work in accordance with all State and County laws and standards as provided in Siskiyou County Code, Title 5, Chapter 8 and any conditions as set forth in this permit.

Issued by [Signature] Date 2/15/22

Seal Inspection _____ Date _____

Seal Depth _____

Final Inspection by _____ Date _____

Inspection Notes: _____

Date Well Log Received _____ Log # _____

LOCATION MAP
 (to be completed by department)

See Attached Site map.

Siskiyou County Community Development-Environmental Health Division

806 South Main Street, Yreka CA 96097
Telephone: (530) 841-2100 FAX: (530) 841-4076

T 48N **R** 4W **S** 31

WATER WELL PERMIT

PERMIT# W22027

APPLICANT (Must be licensed contractor or property owner and must be legible)

Name Jacobs - c/o David Poley

Address 1000 Wilshire Blvd., Suite 2100

Mailing Address 1000 Wilshire Blvd., Suite 2100

City, State, Zip Code Los Angeles, CA 90017

Telephone (310) 795-2445

Well Type	Annular Seal Depth
<input type="checkbox"/> Domestic	20 foot minimum
<input type="checkbox"/> Industrial.....	50 foot minimum
<input type="checkbox"/> Agricultural.....	20 foot minimum
<input type="checkbox"/> Public.....	50 foot minimum
<input type="checkbox"/> Monitoring.....	as approved #.....
<input type="checkbox"/> Deepening.....	n/a
<input type="checkbox"/> Destruction.....	n/a
<input checked="" type="checkbox"/> Soil bores.....	as approved # <u>15</u>
<input type="checkbox"/> Other.....	as approved

Minimum thickness of annular space seal is 2 inches

A PLOT PLAN MUST be submitted on an 8 1/2 x 11 sheet of paper. It must include all property boundaries, waterways, roads, septic systems and structures, location of the proposed well in relationship to the property boundaries.

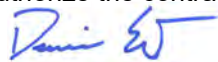
Permit Conditions

- Well driller must provide a minimum of 24 hours notice prior to installing or placing annular seal.
- All wells must be drilled under a C-57 license
- Applicant/well driller is responsible for maintaining all setbacks as approved by on location map below including a minimum of 100 feet from any established on-site sewage disposal location.
- Owner and well contractor are required to submit a completed well log within 30 days of well completion.
- This permit does not guarantee issuance of any other development permits or land use requests for this property.
- This permit expires six months from the date of issuance.

Owner/Contractor Signatures

SIGNATURE OF OWNER: (required on all applications)

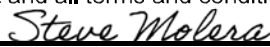
I am the owner of the property and certify that the information contained herein is accurate. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply. I hereby authorize SISKIYOU COUNTY to enter the property for inspection purposes.

I hereby authorize the contractor listed herein to obtain the permit.  April 27, 2022

Signature _____ Date _____

Signature of Contractor (required on all applications)

I certify that I possess a valid C-57 contractor's license that is in full force and effect. I certify that I have read this application and the above information is correct. I agree to comply with all Siskiyou County Ordinances and State Laws relating this well construction. I understand that this application will become a permit upon review and approval by the Environmental Division. I understand that well construction may not begin prior to receiving a permit and all terms and conditions apply.

 04/26/22
Contractor _____ Date _____

Property Location
Property Owner <u>PacifiCorp</u>
Assessors parcel # <u>004-050-100</u>
Location <u>Copco No. 2 Dam</u>
Parcel Size <u>638 acres</u>

WELL CONTRACTOR
Name <u>J & H Drilling Co., Inc.</u>
Mailing Address <u>13124 Firestone Blvd.</u>
City, State, Zip Code <u>Santa Fe Springs, CA 90670</u>
Telephone <u>(714) 994-0402</u>
License # <u>740854</u>

FEES-Subject to Change	
Water Well permit.....	\$360
Water Well Deepening.....	\$185
Water Well destruction.....	\$185
Monitoring Well(s) construction or destruction and Soil bores.....	First three \$360
	\$75 for each additional bore/MW construction/destruction

For Official Use Only		
	Date	Initials
Property Owner Verification _____	_____	_____
Set back Requirements _____	_____	_____
Flood _____	_____	_____
Zoning _____	_____	_____

Received by _____ Date _____

Fee Received _____

Permission is hereby granted for the above well work in accordance with all State and County laws and standards as provided in Siskiyou County Code, Title 5, Chapter 8 and any conditions as set forth in this permit.

Issued by _____ Date _____

Seal Inspection _____ Date _____

Seal Depth _____

Final Inspection by _____ Date _____

Inspection Notes: _____

Date Well Log Received _____ Log # _____

LOCATION MAP (to be completed by department)

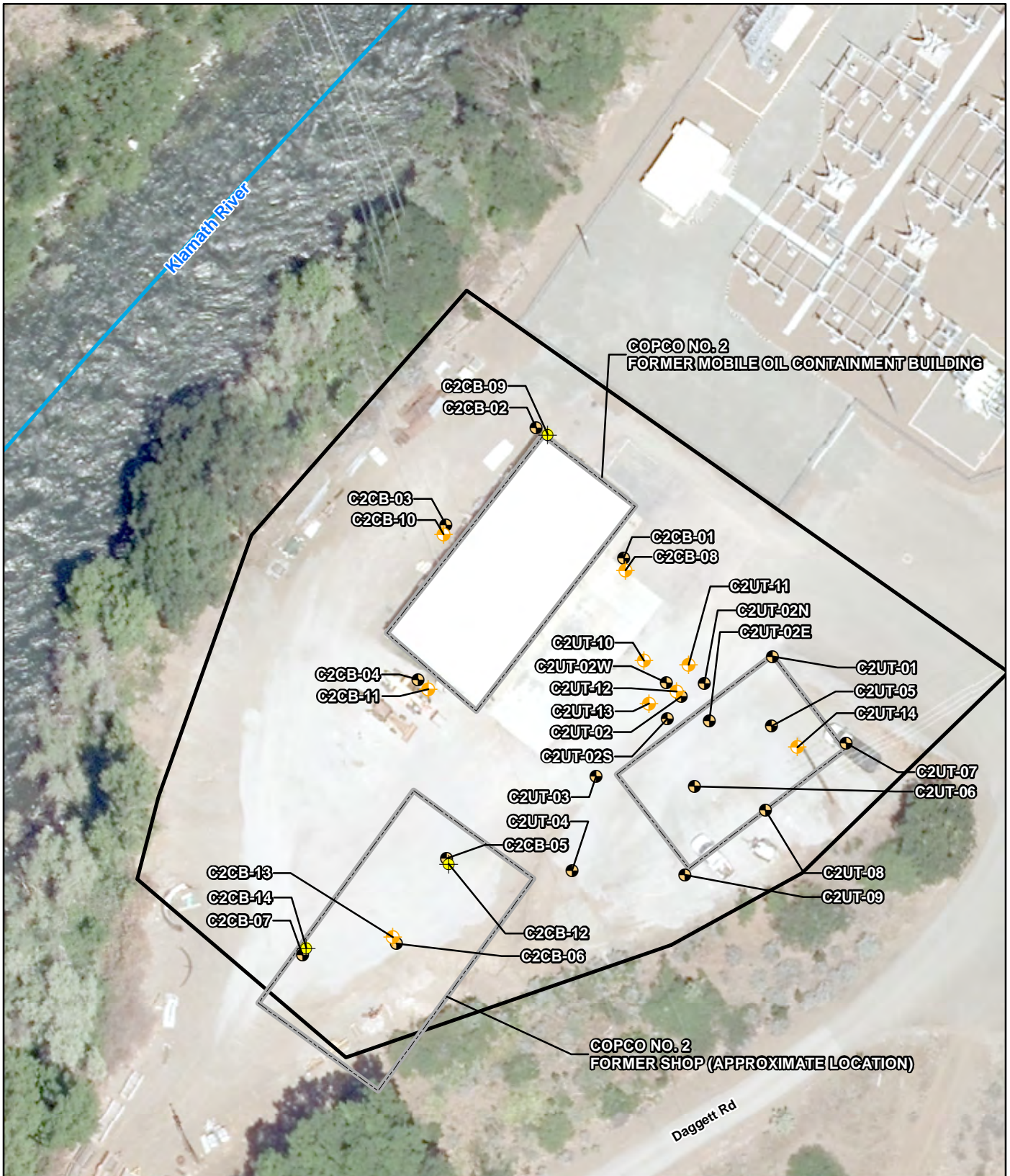
Table 1A: Additional Permitting Fees Applicable to Water Well Permit W22027
Siskiyou County Water Well Permit Application

Second Mobilization: Second Quarter 2022	APN	Existing Permit No.	Parcel Size (acres)	No. Additional Borings	Anticipated Drill Depths (ft bgs)	Fees for Additional Borings
Copco No. 2 Former Mobile Oil Containment Building	004-050-100	W22027	638	7	10 to 20	\$ 525
Copco No. 2 Underground Storage Tanks				9	20	\$ 675

Permits expire 1 year after issuance by Siskiyou County

Table 2A: Soil Boring Locations*Siskiyou County Water Well Permit Application*

Location Description	Boring ID	Soil Boring APN	Northing	Easting	Planned Maximum Drill Depth (feet bgs)
Copco No. 2 Former Mobile Oil Containment Building	C2CB-08	004-050-100	41.974341	-122.359084	20.0
	C2CB-09	004-050-100	41.974566	-122.359400	20.0
	C2CB-10	004-050-100	41.974470	-122.359519	20.0
	C2CB-11	004-050-100	41.974316	-122.359555	20.0
	C2CB-12	004-050-100	41.974139	-122.359516	20.0
	C2CB-13	004-050-100	41.974054	-122.359582	20.0
	C2CB-14	004-050-100	41.973987	-122.359647	20.0
Copco No. 2 Underground Storage Tanks	C2UT-02N	004-050-100	41.974314	-122.359174	20.0
	C2UT-02S	004-050-100	41.974279	-122.359223	20.0
	C2UT-02E	004-050-100	41.974277	-122.359168	20.0
	C2UT-02W	004-050-100	41.974314	-122.359225	20.0
	C2UT-10	004-050-100	41.974336	-122.359255	20.0
	C2UT-11	004-050-100	41.974332	-122.359195	20.0
	C2UT-12	004-050-100	41.974306	-122.359211	20.0
	C2UT-13	004-050-100	41.974294	-122.359248	20.0
C2UT-14	004-050-100	41.974251	-122.359050	20.0	



LEGEND

- Limits of SIWP
- Former Building
- ◆ Proposed Soil Boring to Groundwater Location
- Prior Soil Sample Location
- ⊕ Proposed Deep Soil Boring Location
- Klamath River

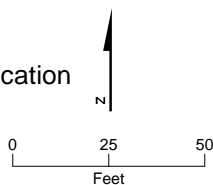


FIGURE 1A
Copco No. 2 Former Mobile Oil Containment Building
and Underground Storage Tanks
Lower Klamath Hydroelectric Project

Appendix B

Boring Logs

Soil Boring Locations

Project Site	Label	X (Decimal Degrees)	Y (Decimal Degrees)	X_(NAD_1983_StatePlane_C		Y_(NAD_1983_StatePlane_C		state	county	apn	apn_acres	township	range	section
				alifornia_I_FIPS_0401_Feet)	alifornia_I_FIPS_0401_Feet)	state	county							
Copco No. 1 Debris Pile/Scrap Yard	C1DP-01	-122.33914535300	41.98349803080	6469447.90299000000	2606112.22115000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-02	-122.33916516300	41.98347058150	6469442.47781000000	2606102.23823000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-03	-122.33912360500	41.98345938830	6469453.76223000000	2606098.11521000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-04	-122.33909832800	41.98304858930	6469460.05585000000	2605948.37535000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-05	-122.33911017600	41.98302473680	6469456.80061000000	2605939.69492000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-06	-122.33907985000	41.98302482440	6469465.04699000000	2605939.69492000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-07	-122.33874532500	41.98269292440	6469555.54188000000	2605818.38414000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-08	-122.33865676800	41.98270432970	6469579.63822000000	2605822.44765000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-09	-122.33876968900	41.98259740970	6469548.78242000000	2605783.60000000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-10	-122.33859063400	41.98271957080	6469597.64252000000	2605827.93268000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-11	-122.33864460100	41.98266105960	6469582.88566000000	2605806.66533000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-12	-122.33851679300	41.98267452770	6469617.65785000000	2605811.43941000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-13	-122.33863721800	41.98255522070	6469584.74418000000	2605768.08524000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-14	-122.33860916500	41.98259923400	6469592.43420000000	2605784.09615000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-15	-122.33862873700	41.98242985370	6469586.87374000000	2605722.38709000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-16	-122.33860883400	41.98239376370	6469592.23490000000	2605709.21339000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 1 Debris Pile/Scrap Yard	C1DP-17	-122.33856585300	41.98239519470	6469603.92424000000	2605709.68975000000	CA	Siskiyou	004-050-380	320.69857583000	48N	4W	29		
Copco No. 2 Burn Pit	C2BP-01	-122.35779527400	41.97135964590	6464358.67047000000	2601708.64373000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-02	-122.35766580800	41.97140155280	6464393.94295000000	2601723.77258000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-03	-122.35762763800	41.97140123420	6464404.32351000000	2601723.61411000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-04	-122.35760454500	41.97133433510	6464410.50427000000	2601699.20767000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-05	-122.35758491300	41.97131417380	6464415.81365000000	2601691.83826000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-06	-122.35767048000	41.97118236660	6464392.34645000000	2601643.89725000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-07	-122.35755086600	41.97114475560	6464424.82114000000	2601630.05746000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-08	-122.35746801900	41.97123555790	6464447.48766000000	2601663.05767000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-09	-122.35737361600	41.97122615620	6464473.14796000000	2601659.52655000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-10	-122.35741872900	41.97122481310	6464460.87697000000	2601659.08711000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-11	-122.35739807500	41.97120359590	6464466.46260000000	2601651.33176000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Burn Pit	C2BP-12	-122.35722461700	41.97111565800	6464513.50625000000	2601619.09119000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Former Mobile Oil Containment Building	C2CB-01	-122.35928222000	41.97443812050	6463958.87493000000	2602832.22312000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Former Mobile Oil Containment Building	C2CB-02	-122.35939970400	41.97456646490	6463927.11679000000	2602879.12821000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Former Mobile Oil Containment Building	C2CB-03	-122.35951896200	41.97447018610	6463894.54074000000	2602844.17323000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Former Mobile Oil Containment Building	C2CB-04	-122.35955521300	41.97431620700	6463884.45185000000	2602788.09722000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Former Mobile Oil Containment Building	C2CB-05	-122.35951628000	41.97413928150	6463894.77532000000	2602723.57471000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Former Mobile Oil Containment Building	C2CB-06	-122.35958224300	41.97405409740	6463876.70908000000	2602692.60365000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Former Mobile Oil Containment Building	C2CB-07	-122.35970735200	41.97404265120	6463842.66820000000	2602688.57181000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Former Mobile Oil Containment Building	C2CB-08	-122.35927777000	41.97443495520	6463960.08050000000	2602831.06459000000				0.00000000000					
Copco No. 2 Former Mobile Oil Containment Building	C2CB-09	-122.35940630200	41.97455940430	6463925.31214000000	2602876.56241000000				0.00000000000					
Copco No. 2 Former Mobile Oil Containment Building	C2CB-10	-122.35952178900	41.97446068600	6463893.75764000000	2602840.71416000000				0.00000000000					
Copco No. 2 Former Mobile Oil Containment Building	C2CB-11	-122.35956342200	41.97431119390	6463882.21184000000	2602786.27939000000				0.00000000000					
Copco No. 2 Former Mobile Oil Containment Building	C2CB-12	-122.35952467200	41.97413964830	6463892.49362000000	2602723.71773000000				0.00000000000					
Copco No. 2 Former Mobile Oil Containment Building	C2CB-13	-122.35958558700	41.97405262680	6463875.79730000000	2602692.07142000000				0.00000000000					
Copco No. 2 Former Mobile Oil Containment Building	C2CB-14	-122.35971251700	41.97404154050	6463841.26195000000	2602688.17278000000				0.00000000000					
Copco No. 2 Transformer Fire	C2TF-01	-122.35788573800	41.97557028520	6464340.33532000000	2603243.27750000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Transformer Fire	C2TF-02	-122.35798412100	41.97551728050	6464313.50135000000	2603224.06964000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Transformer Fire	C2TF-03	-122.35796829300	41.97546639750	6464317.73005000000	2603205.50812000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Transformer Fire	C2TF-04	-122.35794265900	41.97543946030	6464324.66112000000	2603195.66260000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Transformer Fire	C2TF-05	-122.35795616700	41.97540785900	6464320.94062000000	2603184.16075000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Underground Storage Tanks	C2UT-01	-122.35908377400	41.97434086400	6464012.69733000000	2602796.55751000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Underground Storage Tanks	C2UT-02	-122.35919617300	41.97429771600	6463982.06577000000	2602780.95786000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Underground Storage Tanks	C2UT-02E	-122.35916754900	41.97427671830	6463989.81881000000	2602773.27349000000				0.00000000000					
Copco No. 2 Underground Storage Tanks	C2UT-02N	-122.35917404800	41.97431369710	6463988.10666000000	2602786.75738000000				0.00000000000					
Copco No. 2 Underground Storage Tanks	C2UT-02S	-122.35922313700	41.97427863610	6463974.70443000000	2602774.03441000000				0.00000000000					
Copco No. 2 Underground Storage Tanks	C2UT-02W	-122.35922459100	41.97431424410	6463974.36222000000	2602787.01308000000				0.00000000000					
Copco No. 2 Underground Storage Tanks	C2UT-03	-122.35931794600	41.97422129860	6463948.83525000000	2602753.24395000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		
Copco No. 2 Underground Storage Tanks	C2UT-04	-122.35934915300	41.97412783170	6463940.20863000000	2602719.21547000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31		

Soil Boring Locations

Project Site	Label	X (Decimal Degrees)	Y (Decimal Degrees)	X_(NAD_1983_StatePlane_C alifornia_I_FIPS_0401_Feet)	Y_(NAD_1983_StatePlane_C alifornia_I_FIPS_0401_Feet)	state	county	apn	apn_acres	township	range	section
Copco No. 2 Underground Storage Tanks	C2UT-05	-122.35908484800	41.97427168660	6464012.30199000000	2602771.34758000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31
Copco No. 2 Underground Storage Tanks	C2UT-06	-122.35918662300	41.97421153590	6463984.53432000000	2602749.53956000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31
Copco No. 2 Underground Storage Tanks	C2UT-07	-122.35898547400	41.97425494990	6464039.30193000000	2602765.13729000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31
Copco No. 2 Underground Storage Tanks	C2UT-08	-122.35909191000	41.97418812420	6464010.25671000000	2602740.90178000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31
Copco No. 2 Underground Storage Tanks	C2UT-09	-122.35919756700	41.97412259340	6463981.42499000000	2602717.13737000000	CA	Siskiyou	004-050-100	638.14285741000	48N	4W	31
Copco No. 2 Underground Storage Tanks	C2UT-10	-122.35926976900	41.974333538060	6463962.10742000000	2602794.76648000000				0.00000000000			
Copco No. 2 Underground Storage Tanks	C2UT-11	-122.35921038500	41.97434786670	6463978.27566000000	2602799.25072000000				0.00000000000			
Copco No. 2 Underground Storage Tanks	C2UT-12	-122.35921394400	41.97430072130	6463977.23755000000	2602782.07294000000				0.00000000000			
Copco No. 2 Underground Storage Tanks	C2UT-13	-122.35926878600	41.97430426290	6463962.32842000000	2602783.42479000000				0.00000000000			
Copco No. 2 Underground Storage Tanks	C2UT-14	-122.35905606600	41.97429039170	6464020.15733000000	2602778.13242000000				0.00000000000			
Copco No. 2 Wood Pile	C2WP-01	-122.36339974700	41.98215358880	6462850.77019000000	2605648.68697000000	CA	Siskiyou	041-030-200	232.75758164000	48N	5W	25
Copco No. 2 Wood Pile	C2WP-02	-122.36339850200	41.98212945570	6462851.07202000000	2605639.89040000000	CA	Siskiyou	041-030-200	232.75758164000	48N	5W	25
Copco No. 2 Wood Pile	C2WP-03	-122.36350394500	41.98210660380	6462822.36572000000	2605631.68110000000	CA	Siskiyou	041-030-200	232.75758164000	48N	5W	25
Copco No. 2 Wood Pile	C2WP-04	-122.36355143400	41.98210560970	6462809.45104000000	2605631.37238000000	CA	Siskiyou	041-030-200	232.75758164000	48N	5W	25
Copco No. 2 Wood Pile	C2WP-05	-122.36351374400	41.98200538120	6462819.54814000000	2605594.80224000000	CA	Siskiyou	041-030-200	232.75758164000	48N	5W	25
Copco No. 2 Wood Pile	C2WP-06	-122.36359618900	41.98200703890	6462797.13217000000	2605595.49942000000	CA	Siskiyou	041-030-200	232.75758164000	48N	5W	25
Copco No. 2 Wood Pile	C2WP-07	-122.36366430600	41.98200596920	6462778.60826000000	2605595.18642000000	CA	Siskiyou	041-030-200	232.75758164000	48N	5W	25
Copco No. 2 Wood Stave Penstock	C2WS-01	-122.35315312800	41.97754323160	6465630.25013000000	2603957.08123000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-02	-122.35257542500	41.97774202670	6465787.64150000000	2604028.89802000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-03	-122.35219656700	41.97785864050	6465890.83785000000	2604070.98275000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-04	-122.35123243800	41.97796257710	6466153.17222000000	2604107.80929000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-05	-122.35165624600	41.97792333790	6466037.86589000000	2604093.97112000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-06	-122.35055568900	41.97802738850	6466337.29969000000	2604130.69239000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-07	-122.35009881600	41.97802226110	6466461.53244000000	2604128.32700000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-08	-122.34948577600	41.97797124910	6466628.16642000000	2604109.07054000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-09	-122.34925857600	41.97803854550	6466690.04797000000	2604133.34990000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-10	-122.34889077300	41.97790883620	6466789.87889000000	2604085.67981000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-11	-122.34861731700	41.97791352150	6466864.24850000000	2604087.09137000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-12	-122.34899631500	41.97826747050	6466761.69867000000	2604216.49584000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-13	-122.35273486000	41.97762763720	6465744.11713000000	2603987.38407000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-14	-122.35101398600	41.97791477990	6466212.50763000000	2604090.15191000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-15	-122.34993676800	41.97796839490	6466505.52103000000	2604108.51983000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Wood Stave Penstock	C2WS-16	-122.34933417200	41.97790658840	6466669.29896000000	2604085.34102000000	CA	Siskiyou	004-050-010	199.50365003000	48N	4W	30
Copco No. 2 Transformer Fire	COPCO-01	-122.35798178300	41.97547590970	6464314.07566000000	2603208.98975000000	CA	Siskiyou	004-050-100	0.00000000000			
Copco No. 2 Transformer Fire	COPCO-02	-122.35801130700	41.97552043160	6464306.11308000000	2603225.24825000000	CA	Siskiyou	004-050-100	0.00000000000			
Copco No. 2 Transformer Fire	COPCO-03	-122.35806243100	41.97555405700	6464292.26009000000	2603237.55958000000	CA	Siskiyou	004-050-100	0.00000000000			
Copco No. 2 Transformer Fire	COPCO-04	-122.35812995700	41.97550962440	6464273.83033000000	2603221.44150000000	CA	Siskiyou	004-050-100	0.00000000000			
Copco No. 2 Transformer Fire	COPCO-05	-122.35808466900	41.97545560450	6464286.06587000000	2603201.70401000000	CA	Siskiyou	004-050-100	0.00000000000			
Copco No. 2 Transformer Fire	COPCO-06	-122.35796796600	41.97547611650	6464317.83353000000	2603209.04979000000	CA	Siskiyou	004-050-100	0.00000000000			
Copco No. 2 Transformer Fire	COPCO-07	-122.35792191700	41.97556421780	6464330.48737000000	2603241.10649000000	CA	Siskiyou	004-050-100	0.00000000000			
Copco No. 2 Transformer Fire	COPCO-08	-122.35789734900	41.97548352010	6464337.04838000000	2603211.66954000000	CA	Siskiyou	004-050-100	0.00000000000			
Iron Gate Hatchery Burn Pit	IGBP-01	-122.44059563800	41.92846194450	6441761.38447000000	2586177.77416000000	CA	Siskiyou	041-070-110	651.35361046000	47N	5W	16
Iron Gate Hatchery Burn Pit	IGBP-02	-122.44062542800	41.92842914360	6441753.21704000000	2586165.86124000000				0.00000000000			
Iron Gate Shooting Range	IGSR-01	-122.42929459900	41.93497080160	6444848.48618000000	2588534.54828000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-02	-122.42947786800	41.93486348770	6444798.42438000000	2588495.68388000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-03	-122.42943585800	41.93475208180	6444809.65687000000	2588455.02783000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-04	-122.42964226200	41.93484508510	6444753.65759000000	2588489.19668000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-05	-122.43007780300	41.93465343150	6444634.79759000000	2588419.93316000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-06	-122.43031031100	41.93418418260	6444570.68861000000	2588249.23393000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-07	-122.43005042200	41.93371723250	6444640.57374000000	2588078.71463000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-08	-122.42964906700	41.93305541270	6444748.60778000000	2587836.98989000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-09	-122.42845611500	41.93331757160	6445073.70382000000	2587930.93969000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-10	-122.42849450200	41.93326207380	6445063.15905000000	2587910.76555000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-11	-122.42770619100	41.93392757820	6445278.85934000000	2588152.24929000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-12	-122.42705749900	41.93444670100	6445456.30251000000	2588340.57386000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-13	-122.42733783300	41.93495691100	6445380.92591000000	2588526.88329000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9

Soil Boring Locations

Project Site	Label	X (Decimal Degrees)	Y (Decimal Degrees)	X_(NAD_1983_StatePlane_C alifornia_I_FIPS_0401_Feet)	Y_(NAD_1983_StatePlane_C alifornia_I_FIPS_0401_Feet)	state	county	apn	apn_acres	township	range	section
Iron Gate Shooting Range	IGSR-14	-122.42799532100	41.93520132540	6445202.44884000000	2588616.82928000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-15	-122.42901459800	41.93516967820	6444925.03341000000	2588606.65234000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-16	-122.42852444300	41.93498887400	6445058.08897000000	2588540.10861000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-17	-122.42779727800	41.93469479080	6445255.43786000000	2588431.96802000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-18	-122.42831243000	41.93423707320	6445114.44150000000	2588265.84533000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-19	-122.42902956300	41.93409594770	6444919.04524000000	2588215.36920000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-20	-122.42919581600	41.93404823720	6444873.71963000000	2588198.20350000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-21	-122.42898038800	41.93398580080	6444932.23027000000	2588175.16250000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-22	-122.42905611100	41.93395047530	6444911.56147000000	2588162.38963000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-23	-122.42899784600	41.93383157050	6444927.20447000000	2588118.97913000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-24	-122.42905795600	41.93365835610	6444910.53808000000	2588055.93420000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-25	-122.42850588500	41.93377479670	6445060.97516000000	2588097.63383000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-26	-122.42912608800	41.93338625990	6444891.51241000000	2587956.86412000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-27	-122.42903378300	41.93470974860	6444918.99211000000	2588439.06427000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9
Iron Gate Shooting Range	IGSR-28	-122.42956736400	41.93423379150	6444772.94626000000	2588266.32104000000	CA	Siskiyou	041-060-140	668.37437072000	47N	5W	9



PROJECT NUMBER: D3514100	BORING NUMBER: C1DP-03	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 1 Debris Pile/Scrap Yard

COORDINATES : N 41.983459 ft, E -122.339124 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/10/2022 END : 3/10/2022 LOGGER : D.Lubell,A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
5	3.0	-		GW (GW) Dark Reddish Brown (2.5YR 3/4), Dry, Loose, Fine to Coarse, Angular to Subangular, Little Sand, Fine to Coarse Grained, Angular to Subangular (gravel and sand sized volcanic scoria/pumice)	PID = 0.0 (ppm) Volcanic rock PID = 0.0 (ppm) PID = 0.2 (ppm)
	1.5	-		Pulverized volcanic rock, well graded gravel size, dark reddish brown (2.5YR 2.5/4) due to DPT hammer from 1.5-3ft	PID = 0.0 (ppm) PID = 0.0 (ppm) PID = 0.6 (ppm)
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C1DP-06	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 1 Debris Pile/Scrap Yard

COORDINATES : N 41.983025 ft, E -122.33908 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/11/2022 END : 3/11/2022 LOGGER : D.Lubell,A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: Soil name, USCS, color, moisture, density, description	COMMENTS
	1.5	-	•••••	SW (SW) Very Dusky Red (2.5YR 2/2), Dry, Loose, Fine to Coarse Grained, Angular to Subangular, Few Gravel, Fine to Coarse, Angular to Subangular (Volcanic rock)	PID = 0.8 (ppm)
	3.0	-		SW (SW) Very Dark Grayish Brown (10YR 3/2), Dry, Loose, Fine to Medium Grained, Angular to Subangular, Few Gravel, Fine to Coarse, Angular to Subangular, Trace Silt (Volcanic rock/scoria and ash)	Second DPT core advanced to 6ft bgs
5					PID = 0.5 (ppm)
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C1DP-07	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 1 Debris Pile/Scrap Yard
 COORDINATES : N 41.982693 ft, E -122.338745 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/11/2022 END : 3/11/2022 LOGGER : D.Lubell,A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.0	-	SW (SW) Dusky Red (7.5R 3/4), Loose, Fine to Coarse Grained, Angular to Subangular, Trace Gravel, Fine to Coarse, Angular	PID = 0.3 (ppm)
Boring terminated at 2.5 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C1DP-10	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 1 Debris Pile/Scrap Yard

COORDINATES : N 41.98272 ft, E -122.338591 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/11/2022 END : 3/11/2022 LOGGER : D.Lubell,A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	2.5	-	SW (SW) Dusky Red (7.5R 3/2), Loose, Fine to Coarse Grained, Angular, Little Gravel, Fine to Coarse, Angular	PID = 0.6 (ppm)
Boring terminated at 2.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: C1DP-14	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 1 Debris Pile/Scrap Yard
 COORDINATES : N 41.982599 ft, E -122.338609 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/11/2022 END : 3/11/2022 LOGGER : F.Desperrier,M.Bos

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	1.5	-		GW (GW) Very Dark Gray (7.5YR 3/1), Dry, Very Loose to Medium Dense, Angular, Few Sand	Volcanic rock
	3.0	-		GW (GW) Pulverized volcanic rock, well graded gravel size, dark reddish brown (2.5YR 2.5/4) due to DPT hammer from 1.5-3ft	PID = 1.1 (ppm) Second DPT core advanced to 6ft bgs
5				Boring terminated at 6 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C1DP-15	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 1 Debris Pile/Scrap Yard
 COORDINATES : N 41.982419 ft, E -122.338662 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/11/2022 END : 3/11/2022 LOGGER : F.Desperrier,M.Bos

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
5	3.0	-		GW (GW) Dark Reddish Brown (2.5YR 3/4), Dry, Loose, Fine to Coarse, Angular to Subangular, Few Sand, Medium Grained, Angular	PID = 0.0 (ppm)
	3.0	-		GW (GW) Pulverized volcanic rock, well graded gravel size, dark reddish brown (2.5YR 2.5/4) due to DPT hammer from 1.5-3ft	PID = 1.1 (ppm) PID = 0.7 (ppm)
Boring terminated at 6 ft bgs.					


NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-01	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit
COORDINATES : N 41.971391 ft, E -122.357793 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/9/2022 END : 3/9/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	2.5	-		CL (CL) Dark Brown (7.5YR 3/2), Dry to Moist	PID = 0.0 (ppm)
Boring terminated at 2.5 ft bgs.					


NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-02	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit
COORDINATES : N 41.971402 ft, E -122.357666 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/9/2022 END : 3/9/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	2.5	-		CL (CL) Dark Brown, (7.5YR 3/2), Moist	PID = 0.0 (ppm)
Boring terminated at 2.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-03	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit
 COORDINATES : N 41.971401 ft, E -122.357628 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/9/2022 END : 3/9/2022 LOGGER : F.Desperrier, L.Xayachack


DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	2.5	-		CL (CL) Dark Brown (7.5YR 3/2), Dry to Moist	PID = 0.0 (ppm)
Boring terminated at 2.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-04	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit
COORDINATES : N 41.9713345 ft, E -122.3576053 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/10/2022 END : 3/10/2022 LOGGER : F.Desperrier,L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	2.5	-		LEAN CLAY (CL) Dark Brown (7.5YR 3/2) Dry,Moist	PID = 0.0 (ppm)
Boring terminated at 2.5 ft bgs.					


NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/23/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-05	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit
COORDINATES : N 41.971314 ft, E -122.357585 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/10/2022 END : 3/10/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	2.5	-		CL (CL) Dark Brown (7.5YR 3/2), Dry to Moist	PID = 0.0 (ppm)
Boring terminated at 2.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-06	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit
 COORDINATES : N 41.971214 ft, E -122.357701 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/9/2022 END : 3/9/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	2.5	-		CL (CL) Dark Brown (7.5YR 3/2), Dry to Moist	PID = 0.0 (ppm)
Boring terminated at 2.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-07	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit
 COORDINATES : N 41.971197 ft, E -122.35763 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/10/2022 END : 3/10/2022 LOGGER : F.Desperrier, L.Xayachack



DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	2.5	-		CL (CL) Dark Brown (7.5YR 3/2), Dry	PID = 0.0 (ppm)
Boring terminated at 2.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-08	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit
COORDINATES : N 41.971222 ft, E -122.357481 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/10/2022 END : 3/10/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	3.5	-		CL (CL) Dark Brown (7.5YR 3/2), Dry	PID = 0.0 (ppm)
				CL (CL) Dark Brown (7.5YR 3/2), Dry	
Boring terminated at 3.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-09	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit
COORDINATES : N 41.97123 ft, E -122.357398 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/10/2022 END : 3/10/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
			[Hatched Pattern]	CL (CL) Dark Grayish Brown (10YR 4/2), Dry	PID = 0.0 (ppm)
	3.5		[Hatched Pattern]	CL (CL) Dark Brown (7.5YR 3/3), Moist	
Boring terminated at 3.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-10	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit
 COORDINATES : N 41.97121 ft, E -122.357439 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/10/2022 END : 3/10/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
5	1.5	-		CL (CL) Pinkish Gray (7.5YR 7/2), Dry to Moist	PID = 0.0 (ppm)
	1.5	-		CL (CL) Dark Brown (7.5YR 3/2), Dry to Moist	
	3.0	-		CL (CL) Dark Brown (7.5YR 3/2), Dry to Moist	
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-11	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit

COORDINATES : N 41.97119 ft, E -122.357408 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/10/2022 END : 3/10/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				CL (CL) Dark Grayish Brown (10YR 4/2), Dry	PID = 0.0 (ppm)
	3.5	-		CL (CL) Dark Brown (7.5YR 3/2) Moist	
Boring terminated at 3.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22




PROJECT NUMBER: D3514100	BORING NUMBER: C2BP-12	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Burn Pit

COORDINATES : N 41.97114 ft, E -122.357328 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/9/2022 END : 3/9/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	2.5	-		CL (CL) Very Dark Grayish Brown (10YR 3/2), Moist	PID = 2.5 (ppm)
Boring terminated at 2.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-01	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.974438 ft, E -122.359282 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/7/2022 END : 3/7/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	2.0	-		CL (CL) Very Dark Gray (7.5YR 3/1), Moist	PID = 0.0 (ppm)
	0.5	-		SW (SW) Black (10YR 2/1), Medium Dense, Fine to Medium Grained, Subangular, Trace Gravel, Fine, Angular	
5				SW-SC (SW-SC) Moist to Wet, Loose to Medium Dense, Fine to Coarse Grained, Angular to Subangular, Clay, Soft, Few Gravel, Fine, Angular	PID = 0.0 (ppm)
	2.5	-			
10	Boring terminated at 10 ft bgs.				

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-02	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.974566 ft, E -122.3594 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/7/2022 END : 3/7/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
1.0	-	-		GW (GW) Very Dark Brown (10YR 2/2), Dry, Loose, Fine to Coarse Grained, Angular to Subangular, Trace Sand, Fine Grained, Subangular	
4.0	-	-		CL (CL) Dark Reddish Brown (5YR 3/3), Moist	PID = 0.0 (ppm)
5.0	-	-			PID = 0.0 (ppm)
10	Boring terminated at 10 ft bgs.				PID = 0.0 (ppm)

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-03	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.97447 ft, E -122.359519 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/7/2022 END : 3/7/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	1.0	-	[Patterned Box]	GW-GC (GW-GC) Dark Brown (7.5YR 3/2), Moist	PID = 0.0 (ppm)
	2.0	-	[Patterned Box]	CL (CL) Dry	PID = 0.0 (ppm)
	3.0	-	[Patterned Box]	CL (CL) Dark Reddish Brown (5YR 3/3), Moist	PID = 0.0 (ppm)
5					
10				Boring terminated at 10 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-04	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building
 COORDINATES : N 41.974316 ft, E -122.359555 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/7/2022 END : 3/7/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
0.5	-	-		GW (GW) Very Dark Gray (7.5YR 3/1), Dry to Moist at 15 ft, Medium Dense, Fine to Coarse, Angular, Few Sand, Fine to Coarse Grained, Angular CL (CL) Dark Brown (7.5YR 3/2), Moist	PID = 0.0 (ppm)
2.5	-	-			PID = 0.0 (ppm)
3.0	-	-			PID = 0.0 (ppm)
10	Boring terminated at 10 ft bgs.				

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-05	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.974139 ft, E -122.359516 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/7/2022 END : 3/7/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
2.5	-	-		CL (CL) Very Dark Gray (7.5YR 3/1) , Moist, Angular cobble, fine grained	PID = 0.0 (ppm)
3.0	-	-		CL (CL) Dark Brown (7.5YR 3/2), Moist	PID = 0.0 (ppm)
10	Boring terminated at 10 ft bgs.				

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-06	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.974054 ft, E -122.359582 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/7/2022 END : 3/7/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				CL (CL) Very Dark Gray (7.5YR 3/1), Moist, Angular cobble, fine grained	
	1.5	-			PID = 0.0 (ppm)
				ML (ML) Black (2.5Y 2.5/1), Moist	
	3.0	-			PID = 0.0 (ppm)
10				Boring terminated at 10 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-07	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.973987 ft, E -122.359647 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/7/2022 END : 3/7/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				CL (CL) Dark Brown (7.5YR 3/3)	PID = 0.0 (ppm)
	3.0	-			PID = 0.0 (ppm)
				ML (ML) Black (2.5Y 2.5/1), Moist	
	3.0	-			PID = 0.0 (ppm)
10				Boring terminated at 10 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-08	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.974426 ft, E -122.35928 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : 16.0 ft bgs Start : 5/11/2022 END : 5/11/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
4.0	-			GW-GC (GW-GC) Very Dark Gray (7.5YR 3/1), Dry, Loose, Fine to Coarse, Angular, Little Sand, Fine Grained, Subangular, Clay	
				CL (CL) Dark Reddish Brown (2.5YR 3/3), Moist, Very Loose, Angular to Subangular, Clay, Very Soft to Soft	
				SW (SW) Black (10YR 2/1), Medium Dense, Fine to Medium Grained, Subangular, Trace Gravel, Fine, Angular	
5.0	-			CL (CL) Dark Reddish Brown (5YR 3/3)	PID = 0.5 (ppm)
				SW-SC (SW-SC) Moist to Wet, Loose to Medium Dense, Fine to Coarse Grained, Angular to Subangular, Clay, Soft, Few Gravel, Fine, Angular	
10.0	3.0	-		GW-GC (GW-GC) Very Dark Gray (5YR 3/1), Dry to Moist, Loose, Fine Gravel, Little Sand, Fine Grained, Angular to Subangular, Clay, Soft to Very Stiff	PID = 0.5 (ppm)
				CL (CL) Dark Reddish Brown (2.5YR 3/4), Dry	
15.0	3.5	-		CL (CL) Dark Reddish Brown (2.5YR 3/3), Wet at 16 ft	PID = 1 (ppm)
				CL (CL) Dark Olive Brown (2.5Y 3/3), Moist	
20.0	4.0	-		CL (CL) Dark Reddish Brown (2.5YR 3/3), Moist	PID = 1.1 (ppm)
				CL (CL) Dark Reddish Brown (2.5YR 3/3), Wet	
25.0				Boring terminated at 25 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-09	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.97456 ft, E -122.359384 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/10/2022 END : 5/10/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				GW (GW) Very Dark Brown (10YR 2/2), Dry, Loose, Fine to Coarse Grained, Angular to Subangular, Trace Sand, Fine Grained, Subangular	PID = 0.6 (ppm) Advance two DPT cores to collect sufficient sample volume
				CL (CL) Dark Reddish Brown (5YR 3/3), Moist	
4.0	-				
5				CL (CL) Dark Reddish Brown (5YR 3/3), Moist	PID = 0.3 (ppm)
3.0	-				
10				Boring terminated at 10 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-10	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.974461 ft, E -122.359522 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : 23.7 ft bgs Start : 5/10/2022 END : 5/10/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				GW-GC (GW-GC) Dark Brown (7.5YR 3/2), Moist	PID = 0.3 (ppm)
	5.0	-		CL (CL) Dry	
				GW (GW) Black (7.5YR 2/1), Dry, Loose, Fine to Coarse, Subangular	
	5			CL (CL) Very Dark Brown (7.5YR 2/2), Dry	PID = 0.4 (ppm)
				CL (CL) Dark Reddish Brown (5YR 3/2), Moist	
	5.0	-			
	10				PID = 0.3 (ppm)
				CL (CL) Dark Reddish Brown (5YR 3/2), Moist	
	5.0	-			
	15			CL (CL) Dark Reddish Brown (5YR 3/2), Dry to Moist	
				CL (CL) Dark Reddish Brown (5YR 3/3), Moist to Wet	PID = 0.0 (ppm)
	5.0	-			
	20				
				CL (CL) Black (7.5YR 2/1), Wet Boring terminated at 25 ft bgs.	
	5.0	-			
	25				

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-11	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building
 COORDINATES : N 41.974307 ft, E -122.359542 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : 22.3 ft bgs Start : 5/10/2022 END : 5/10/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
0			●●●●●	GW (GW) Dark Brown (7.5YR 3/2), Moist	PID = 0.4 (ppm)
3.3		-	▨▨▨▨▨	CL (CL) Dark Brown (7.5YR 3/2), Moist	
5		-	▨▨▨▨▨	CL (CL) Dark Reddish Brown (2.5YR 3/3), Dry	
5			●●●●●	GW (GW) Very Dark Gray (7.5YR 3/1), Dry to Moist at 15 ft, Medium Dense, Fine to Coarse, Angular, Few Sand, Fine to Coarse Grained, Angular	PID = 0.4 (ppm)
5.0		-	▨▨▨▨▨	CL (CL) Dark Gray (10YR 4/1), Dry to Moist	
10			▨▨▨▨▨		PID = 0.3 (ppm)
15		-	▨▨▨▨▨	CL (CL) Dark Reddish Brown (5YR 3/3), Dry to Moist	PID = 0.3 (ppm)
20			▨▨▨▨▨		PID = 0.2 (ppm)
Boring terminated at 23 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-12	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.974133 ft, E -122.359513 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/11/2022 END : 5/11/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				GW-GC (GW-GC) Dark Brown (7.5YR 3/2), Dry, Loose, Fine to Coarse, Angular, Few Sand, Fine Grained, Subangular	PID = 0.4 (ppm)
	4.0	-		CL (CL) Dark Reddish Brown (2.5YR 3/3), Dry	
	5			CL (CL) Dark Reddish Brown (2.5YR 3/4)	
	5.0	-		CL (CL) Dark Brown (7.5YR 3/2), Moist	PID = 0.4 (ppm)
10				Boring terminated at 10 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-13	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.974061 ft, E -122.359587 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/11/2022 END : 5/11/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
3.0	-	-		GW-GC (GW-GC) Dark Reddish Brown (2.5YR 3/3), Dry, Loose, Coarse, Angular to Subangular, Clay	PID = 0.0 (ppm)
5.0	-	-		ML (ML) Black (2.5Y 2.5/1), Moist	PID = 0.0 (ppm)
10.0	-	-		GW-GC (GW-GC) Very Dark Grayish Brown (10YR 3/2), Dry, Medium Dense, Fine, Angular to Subangular, Clay	PID = 0.2 (ppm)
15.0	-	-		CL (CL) Very Dark Grayish Brown (10YR 3/2), Dry	PID = 0.2 (ppm)
20.0	-	-		GW-GC (GW-GC) Dark Yellowish Brown (10YR 3/6), Dry, Loose to Medium Dense, Fine, Angular to Subangular, Clay, Trace Sand, Medium, Angular to Subangular	PID = 0.2 (ppm)
23.0	-	-		GW-GC (GW-GC) Dark Yellowish Brown (10YR 3/4), Dry, Dense, Fine, Angular to Subangular, Clay, Trace Sand, Medium Grained, Angular to Subangular	PID = 0.4 (ppm)
Boring terminated at 23 ft bgs.					PID = 0.0 (ppm)

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2CB-14	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Former Mobile Oil Containment Building

COORDINATES : N 41.97405 ft, E -122.359702 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/10/2022 END : 5/10/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				GW-GC (GW-GC) Yellowish Brown (10YR 5/4), Moist, Coarse, Angular	
5.0	-	-		CL (CL) Dark Reddish Brown (2.5YR 3/3), Dry to Moist	PID = 0.2 (ppm)
5.0	-	-		ML (ML) Black (2.5Y 2.5/1), Moist	PID = 0.2 (ppm)
10.0	-	-		CL (CL) Dark Reddish Brown (5YR 3/2), Dry to Moist	
15.0	-	-			
20.0	-	-			
Boring terminated at 20 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2TF-01	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Transformer Fire

COORDINATES : N 41.975566 ft, E -122.357914 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 3/9/2022 END : 3/9/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	2.0	-		GW (GW) Dark Yellowish Brown (10YR 4/4), Moist, Loose, Fine to Coarse, Subangular, Little Sand, Fine to Medium Grained, Subangular	PID = 0.4 (ppm) PID = 1.4 (ppm)
Boring terminated at 2 ft bgs.					





PROJECT NUMBER: D3514100	BORING NUMBER: C2TF-02	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Transformer Fire

COORDINATES : N 41.975523 ft, E -122.357967 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/10/2022 END : 3/10/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		Concrete	
	0.5	-		GW-GM (GW-GM) Dark Brown (10YR 3/3), Dry, Loose, Fine to Coarse, Subangular to Subrounded, Trace Sand, Fine to Medium Grained, Subangular to Subrounded, Trace Silt	PID = 0.1 (ppm)
	0.5	-		GW (GW) Dark Grayish Brown (10YR 4/2), Dry, Loose, Fine to Coarse, Subrounded, Trace Sand, Fine Grained, Subrounded, Trace Silt	PID = 0.0 (ppm)
Boring terminated at 2 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: C2TF-03	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Transformer Fire
 COORDINATES : N 41.975475 ft, E -122.357955 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/10/2022 END : 3/10/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		Concrete	
	0.5	-		GW-GM (GW-GM) Very Dark Grayish Brown (10YR 3/2), Dry, Loose, Fine to Coarse, Subangular to Subrounded, Little Sand, Fine Grained, Subangular, Trace Silt	PID = 0.4 (ppm)
	0.5	-		GP (GP) Dark Grayish Brown (10YR 4/2), Dry, Loose, Fine, Subrounded, trace Sand, Fine Grained, Subrounded	
				Boring terminated at 1.5 ft bgs.	PID = 1 (ppm)

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2TF-04	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Transformer Fire

COORDINATES : N 41.975432 ft, E -122.357943 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/9/2022 END : 3/9/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		Concrete	
	0.5	-		GW (GW) Very Dark Grayish Brown (10YR 3/2), Dry, Very Loose to Loose, Fine to Coarse, Subrounded, Little Sand, Fine to Coarse Grained, Subrounded, Little Silt	PID = 0.5 (ppm)
	0.5	-		GW (GW) Very Dark Grayish Brown (10YR 3/2), Dry, Very Loose to Loose, Fine to Coarse, Subrounded, Little Sand, Fine to Coarse Grained, Subrounded, Little Silt,	
	0.5	-		Concrete at 2 ft bgs	
				Boring terminated at 2 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2TF-05	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Transformer Fire

COORDINATES : N 41.975386 ft, E -122.357931 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/9/2022 END : 3/9/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: Soil name, USCS, color, moisture, density, description	COMMENTS
	0.5	-		Concrete	
	0.5	-		GW (GW) Very Dark Grayish Brown (10YR 3/2), Dry, Very Loose to Loose, Fine to Coarse, Subrounded, Little Sand, Fine to Coarse Grained, Subrounded, Little Silt	PID = 0.5 (ppm)
	0.5	-		GW (GW) Dark Grayish Brown (10YR 4/2), Dry, Loose, Fine to Coarse, Subrounded, Trace Sand, Fine Grained, Subrounded, Trace Silt	PID = 0.3 (ppm)
	0.5	-		GW (GW) Dark Grayish Brown (10YR 4/2), Moist, Loose, Fine to Coarse, Subrounded, Trace Sand, Fine to Medium Grained, Subangular, Trace Silt	PID = 0.0 (ppm)
Boring terminated at 2 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-01	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks

COORDINATES : N 41.974341 ft, E -122.359084 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/7/2022 END : 3/7/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
1.5	-	-		GW (GW) Gray (10YR 5/1), Dry, Loose to Medium Dense, Fine to Coarse, Subangular, Little Sand	PID = 0.0 (ppm)
3.0	-	-		CL (CL) Dark Grayish Brown (10YR 4/2), Dry	PID = 0.0 (ppm)
3.0	-	-		CL (CL) Dark Reddish Brown (5YR 3/3), Dry	PID = 0.0 (ppm)
5.0	-	-		CL (CL) Dark Brown (7.5YR 3/3), Dry	PID = 0.0 (ppm)
3.0	-	-		ML (ML) Black (5Y 2.5/1), Moist to Wet at 10.5 ft, Slow Dilatency, Trace Clay	PID = 0.0 (ppm)
10.0	-	-			PID = 0.0 (ppm)
1.5	-	-		GW-GC (GW-GC) Olive Gray (5Y 4/2), Moist, Fine to Coarse, Subangular, Clay, Trace Sand, Fine Grained, Subangular	PID = 0.0 (ppm)
Boring terminated at 12.5 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY (1) GLB: KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 10/7/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-02	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project	LOCATION : Copco No. 2 Underground Storage Tanks
COORDINATES : N 41.9743 ft, E -122.359205 ft	ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling	DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822
WATER LEVEL : --	Start : 3/8/2022 END : 3/8/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	1.5	-		Concrete	
				GW (GW) Gray (10YR 5/1), Dry, Loose, Fine to Coarse, Few Sand, Fine to Medium Grained, Subangular, Trace Silt	PID = 0.0 (ppm)
	2.5	-		CL (CL) Yellowish Brown (10YR 5/6), Dry	PID = 0.0 (ppm)
				GW-GC (GW-GC) Gray (10YR 6/1), Dense, Fine Angular to Subangular, Silt, Trace Sand, Fine to Coarse Grained, Subangular	PID = 0.0 (ppm)
	5	-		CL (CL) Dark Reddish Brown (5YR 3/3), Dry, Medium Stiff from 10.5-10.8 ft, Interbedded Fine to Coarse Gravel (GW), Subangular, Soft, Moist at 11.5ft	PID = 0.0 (ppm)
	2.3	-			PID = 0.0 (ppm)
				CL (CL) Black (7.5YR 2/1), Moist	PID = 0.0 (ppm)
	10	-		LEAN CLAY (CL) Dark Reddish Brown (5YR 3/3), Dry, Medium Stiff	PID = 0.0 (ppm)
	2.2	-			PID = 0.0 (ppm)
				LEAN CLAY (CL) Black (7.5YR 2/1), Moist	PID = 0.0 (ppm)
	15	-		GW-GC (GW-GC) Very Dark Gray (10YR 3/1), Dry, Dense, Fine to Coarse, Subangular, Clay	PID = 0.0 (ppm)
	2.5	-		CL (CL) Dark Gray (10YR 4/1), Moist, Medium to Stiff	PID = 0.0 (ppm)
				CL (CL) Very Dark Grayish Brown (10YR 3/2), Medium to Stiff, Trace Silt	PID = 0.0 (ppm)
				CL (CL) Brownish Yellow (10YR 6/6), Moist	PID = 0.0 (ppm)
	20	-		Boring terminated at 20 ft bgs.	

NEW SOIL BORING LOG: CORONADO LIBRARY (1) GLB: KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 10/7/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-02E	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks
 COORDINATES : N 41.974277 ft, E -122.359168 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				GW (GW) Gray (10YR 5/1), Dry, Dense, Fine to Coarse, Few Sand 6-15%, Subangular	
	3.5	-		CL (CL) Gray (10YR 5/1) Mottled with Dark Reddish Brown (5YR 3/3), Dry, Stiff, Fine to Coarse Gravel, Subangular, Trace Sand, Fine Grained	PID = 0.0 (ppm) PID = 0.0 (ppm)
5				CL (CL) Reddish Brown (5YR 4/3), Dry, Stiff, Few Gravel, Fine to Coarse, Subangular	
	3.5	-			PID = 0.0 (ppm)
10				CL (CL) Reddish Brown (5YR 4/3), Dry, Stiff, Trace Gravel, Fine, Subangular	PID = 0.0 (ppm)
	1.0	-			PID = 0.0 (ppm)
15				CL (CL) Reddish Brown (5YR 4/3), Dry, Stiff, Gravel, Fine, Subangular	PID = 0.0 (ppm)
	3.7	-		CL (CL) Dark Greenish Gray (10Y 4/1), Moist, Medium Stiff	PID = 0.0 (ppm)
				CL (CL) Light Olive Brown (2.5Y 5/6) Mottled with Black (2.5Y 2.5Y/1), Moist, Medium Stiff	
20				Boring terminated at 20 ft bgs.	

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-02N	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks

COORDINATES : N 41.974314 ft, E -122.359174 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				GW (GW) Gray (10YR 6/1), Dry, Medium Dense, Fine to Coarse, Subangular	
	3.7	-		CL (CL) Grayish Brown, Dry, Stiff, Trace Gravel, Fine, Subangular, Trace Sand, Fine Grained	PID = 0.0 (ppm)
					PID = 0.0 (ppm)
5				CL (CL) Reddish Brown (5YR 4/3) Mottled with Gray (10YR 6/1), Dry, Stiff, Trace to Few Gravel, Fine to Coarse, Subangular	PID = 0.0 (ppm)
	2.1	-			
10				CL (CL) Reddish Brown (5YR 4/3) Mottled with Gray (10YR 6/1), Dry, Stiff, Trace Gravel, Subangular	PID = 0.0 (ppm)
	2.1	-			
15				CL (CL) Gray (10YR 5/1), Dry, Stiff	PID = 0.0 (ppm)
	4.0	-			
				CL (CL) Brownish Yellow (10YR 6/6), Moist	PID = 0.0 (ppm)
20				Boring terminated at 20 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-02S	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks

COORDINATES : N 41.974279 ft, E -122.359223 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				GW (GW) Gray (10YR 5/1), Dry, Loose, Fine to Coarse, Few Sand, Fine to Medium Grained, Subangular, Trace Silt	
	4.0	-		CL (CL) Grayish Brown, Dry, Stiff, Trace Gravel, Fine, Subangular, Trace Sand, Fine Grained	
	5				
	2.5	-		CL (CL) Reddish Brown (5YR 4/3), Moist, Stiff	
	10				
	2.3	-		CL (CL) Black (7.5YR 2/1), Moist	PID = 0.0 (ppm)
	15				
	3.0	-		CL (CL) Black (7.5YR 2/1), Moist, Organic Odor	PID = 0.0 (ppm)
				CL (CL) Gray (10YR 5/1), Moist	PID = 0.0 (ppm)
20	Boring terminated at 20 ft bgs.				

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-02W	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks

COORDINATES : N 41.974314 ft, E -122.359225 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : 20.0 ft bgs Start : 3/8/2022 END : 3/8/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
			●●●●●● ●●●●●● ●●●●●●	GW (GW) Gray (10YR 5/1), Dry, Loose, Fine to Coarse, Few Sand, Fine to Medium Grained, Subangular, Trace Silt	
3.8	-	-	▨▨▨▨▨▨ ▨▨▨▨▨▨ ▨▨▨▨▨▨	CL (CL) Brown, Dry, Stiff, Few Gravel, Fine to Coarse, Subangular	PID = 0.0 (ppm)
5			▨▨▨▨▨▨ ▨▨▨▨▨▨ ▨▨▨▨▨▨	CL (CL) Reddish Brown (5YR 4/3), Moist, Stiff	PID = 0.0 (ppm)
2.5	-	-	▨▨▨▨▨▨ ▨▨▨▨▨▨ ▨▨▨▨▨▨	CL (CL) Reddish Brown (5YR 4/3), Moist, Stiff	PID = 0.0 (ppm)
10			▨▨▨▨▨▨ ▨▨▨▨▨▨ ▨▨▨▨▨▨	CL (CL) Reddish Brown (5YR 4/3), Moist, Stiff	PID = 0.0 (ppm)
2.2	-	-	▨▨▨▨▨▨ ▨▨▨▨▨▨ ▨▨▨▨▨▨	CL (CL) Gray (10YR 6/1), Moist, Soft	PID = 0.0 (ppm)
15	2.5	-	▨▨▨▨▨▨ ▨▨▨▨▨▨ ▨▨▨▨▨▨	CL (CL) Black (7.5 YR 2/1), Moist, Organic Odor	PID = 0.0 (ppm)
0.0	-	-	▨▨▨▨▨▨ ▨▨▨▨▨▨ ▨▨▨▨▨▨	GRAVELLY LEAN CLAY (CL) Black (7.5YR 2/1), Wet, Stiff, Gravel	
20	3.0	-	▨▨▨▨▨▨ ▨▨▨▨▨▨ ▨▨▨▨▨▨	LEAN CLAY (CL) Light Olive Brown (2.5Y 5/4) mottled with Light Yellowish Brown (10YR 6/4), Dry, Stiff	
25				Boring terminated at 25 ft bgs.	

NEW SOIL BORING LOG: CORONADO_LIBRARY(1).GLB: KLAMATH7.GPJ: CH2M GEOTECH_12.GDT: 10/7/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-03	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks

COORDINATES : N 41.974221 ft, E -122.359318 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	1.5	-		Concrete	
				GW (GW) Gray (10YR 6/1), Dry, Loose, Fine to Coarse, Angular to Subangular, Little Sand, Fine to Coarse Grained, Angular to Subangular	PID = 0.0 (ppm)
				GW-GC (GW-GC) Dark Grayish Brown (10YR 4/2), Dry, Medium Dense, Fine to Coarse, Subangular to Subrounded, Little Sand, Fine to Medium Grained, Few Clay	PID = 0.0 (ppm)
	3.0	-		SW (SW) Brown (10YR 4/3), Dry, Loose, Fine to Coarse Grained, Subangular, Trace Gravel, Fine, Subangular	PID = 0.0 (ppm)
				CL (CL) Dark Brown (7.5YR 3/3), Dry, Loose, Fine to Coarse, Subangular	PID = 0.0 (ppm)
5				CL (CL) Brown (7.5YR 4/3), Dry, Gravel, Coarse	PID = 0.0 (ppm)
				CL (CL) Brown (7.5YR 4/3), Dry	PID = 0.0 (ppm)
	3.3	-		GW-GC (GW-GC) Gray (6/N), Medium Dense to Dense, Fine to Coarse, Angular to Subangular, Clay	PID = 0.0 (ppm)
					PID = 0.0 (ppm)
10				CL (CL) Yellowish Red (5YR 5/6)	PID = 0.0 (ppm)
					PID = 0.0 (ppm)
	2.0	-			PID = 0.0 (ppm)
					PID = 0.0 (ppm)
					PID = 0.0 (ppm)
15				CL (CL) Dark Reddish Brown (5YR 3/3), Dry	PID = 0.0 (ppm)
					PID = 0.0 (ppm)
	1.0	-		Boring terminated at 16.5 ft bgs.	

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-04	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks
 COORDINATES : N 41.974128 ft, E -122.359349 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/7/2022 END : 3/7/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
			Concrete		PID = 0.0 (ppm)
2.5	-	-	CL (CL) Dark Brown (10YR 3/3), Dry to Moist		PID = 0.0 (ppm)
5.0	-	-	CL (CL) Olive Yellow (2.5Y 6/8)		PID = 0.0 (ppm)
10.0	-	-	CL (CL) Olive Yellow (2.5Y 6/8)		PID = 0.0 (ppm)
15.0	-	-	Boring terminated at 20 ft bgs.		

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-05	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project	LOCATION : Copco No. 2 Underground Storage Tanks
COORDINATES : N 41.974272 ft, E -122.359085 ft	ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling	DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : 19.0 ft bgs Start : 3/7/2022 END : 3/7/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	1.5	-		Concrete	
				GW (GW) Brown (7.5YR 4/2), Dry, Dense, Fine to Coarse, Subangular, Few Sand, Fine to Medium Grained, Subangular	PID = 0.8 (ppm) PID = 0.0 (ppm)
				CL (CL) Very Dark Brown (10YR 2/2), Dry	PID = 0.0 (ppm)
	2.5	-			PID = 0.0 (ppm)
					PID = 0.0 (ppm)
				CL (CL) Dry	PID = 0.0 (ppm)
				CL (CL) Dark Grayish Brown (10YR 4/2), Dry	PID = 0.0 (ppm)
				CL (CL) Brown (10YR 4/3), Moist, Soft to Medium, Trace Silt	PID = 0.0 (ppm)
	3.0	-			PID = 0.0 (ppm)
				CL (CL) Dark Yellowish Brown (10YR 4/4), Moist, Medium to Stiff, Trace Silt	PID = 0.0 (ppm)
				CL (CL) Moist, Medium to Stiff, Trace Silt	PID = 0.0 (ppm)
				CL (CL) Brown (10YR 4/3), Moist, Very Stiff, Trace Silt	PID = 0.0 (ppm)
	2.8	-			PID = 0.0 (ppm)
					PID = 0.0 (ppm)
				CL (CL) Dry, Medium, Trace Silt	PID = 0.0 (ppm)
					PID = 0.0 (ppm)
				CL (CL) Pale Brown (10YR 6/3), Moist to Wet, Stiff, Trace Silt	PID = 0.0 (ppm)
	3.1	-			PID = 0.0 (ppm)
					PID = 0.0 (ppm)
	20			Boring terminated at 20 ft bgs.	

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-06	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks
 COORDINATES : N 41.974212 ft, E -122.359187 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 7822

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
1.5	-	-		GW (GW) Gray (10YR 6/1), Loose, Fine to Coarse, Angular to Subrounded, Trace Sand, Fine to Coarse Grained, Subangular	PID = 0.0 (ppm)
				CL (CL) Dark Yellowish Brown (10YR 3/4), Dry	PID = 0.0 (ppm)
2.0	-	-		CL (CL) Dark Yellowish Brown (10YR 3/4), Dry	PID = 0.0 (ppm)
				CL (CL) Brown (10YR 4/3)	PID = 0.0 (ppm)
5.0	-	-		CL (CL) Brown (10YR 4/3)	PID = 0.0 (ppm)
				CL (CL) Olive Brown (2.5Y 4/3), Moist	PID = 0.0 (ppm)
2.0	-	-		CL (CL) Olive Brown (2.5Y 4/3), Moist	PID = 0.0 (ppm)
				CL (CL) Olive Brown (2.5Y 4/3), Moist	PID = 0.0 (ppm)
10.0	-	-		CL (CL) Dark Brown (10YR 3/3), Moist	PID = 0.0 (ppm)
				CL (CL) Olive (5Y 5/6), Moist	PID = 0.0 (ppm)
3.0	-	-		CL (CL) Olive (5Y 5/6), Moist	PID = 0.0 (ppm)
				CL (CL) Olive (5Y 5/6), Moist	PID = 0.0 (ppm)
15.0	-	-		CL (CL) Olive Yellow (2.5Y 6/8), Moist	PID = 0.0 (ppm)
				CL (CL) Olive Yellow (2.5Y 6/8), Moist	PID = 0.0 (ppm)
5.0	-	-		CL (CL) Olive Yellow (2.5Y 6/8), Moist	PID = 0.0 (ppm)
				CL (CL) Olive Yellow (2.5Y 6/8), Moist	PID = 0.0 (ppm)
20.0	-	-		CL (CL) Olive Yellow (2.5Y 6/8), Moist	PID = 0.0 (ppm)
				CL (CL) Olive Yellow (2.5Y 6/8), Moist	PID = 0.0 (ppm)
Boring terminated at 20 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-08	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project	LOCATION : Copco No. 2 Underground Storage Tanks
COORDINATES : N 41.974188 ft, E -122.359092 ft	ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling	DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/7/2022 END : 3/7/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
1.5	-	-		GW (GW) Gray (2.5Y 5/1), Dry, Medium Dense to Dense, Fine to Coarse, Subangular, Little Sand	PID = 0.0 (ppm)
3.0	-	-		CL (CL) Very Dark Brown (10YR 2/2), Dry	PID = 0.0 (ppm)
5.0	-	-		CL (CL) Dark Reddish Brown (2.5YR 3/4), Dry, Stiff, Trace Silt	PID = 0.0 (ppm)
10.0	-	-		CL (CL) Dark Reddish Brown (2.5YR 3/4), Dry, Stiff, Trace Silt	PID = 0.0 (ppm)
10.0	-	-		CL (CL) Light Reddish Gray (2.5YR 7/1), Dry	PID = 0.0 (ppm)
10.0	-	-		CL (CL) Olive Brown (2.5Y 4/3), Moist	PID = 0.0 (ppm)
10.0	-	-		GW-GC (GW) Gray (5Y 5/1), Dry, Loose, Fine to Coarse, Subangular, Few Sand, Fine to Medium Grained, Subangular, Clay, Trace Silt	PID = 0.0 (ppm)
15.0	-	-		CL (CL) Brown (10YR 4/3), Dry to Moist	PID = 0.0 (ppm)
20.0	-	-		CL (CL) Light Yellowish Brown (10YR 6/4), Dry	PID = 0.0 (ppm)
20.0	-	-		CL (CL) Greenish Gray (10GY 6/1), Dry	PID = 0.0 (ppm)
Boring terminated at 20 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-09	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks

COORDINATES : N 41.974123 ft, E -122.359199 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : D.Lubell, A.Vogt

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
0.5	-	-		CL (CL) Very Dark Grayish Brown (10YR 3/2), Dry, Stiff, Trace Silt	PID = 1.2 (ppm)
					PID = 0.8 (ppm)
3.0	-	-		CL (CL) Dark Reddish Brown (5YR 3/3), Dry	PID = 0.0 (ppm)
					PID = 0.0 (ppm)
					PID = 0.0 (ppm)
					PID = 0.0 (ppm)
3.5	-	-		CL (CL) Dark Reddish Brown (2.5YR 3/3), Dry, Stiff, Trace Silt	PID = 0.0 (ppm)
				CL (CL) Dark Gray (10YR 4/1), Dry	PID = 0.0 (ppm)
				CL (CL) Light Brown (7.5YR 6/4), Dry	PID = 0.0 (ppm)
				CL (CL) Brown (10YR 4/3), Moist	PID = 0.0 (ppm)
				CL (CL) Light Olive Brown (2.5Y 5/6), Moist	PID = 0.0 (ppm)
				CL (CL) Yellowish Brown (10YR 5/6), Moist	PID = 0.0 (ppm)
10	-	-		CL (CL) Brown (10YR 5/3), Dry	PID = 0.0 (ppm)
Boring terminated at 11 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-10	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks
 COORDINATES : N 41.974336 ft, E -122.359255 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT
 WATER LEVEL : 15.6 ft bgs Start : 5/9/2022 END : 5/9/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				GW (GW) Gray (10YR 5/1), Dry, Loose, Fine to Coarse, Few Sand, Fine to Medium Grained, Subangular, Trace Silt	PID = 0.5 (ppm)
	3.0	-		CL (CL) Yellowish Brown (10YR 5/6), Dry	
	5			CL (CL) Gray (10YR 6/1), Dense, Fine, Angular to Subangular, Silt, Trace Sand, Fine to Coarse Grained, Subangular	PID = 1.1 (ppm)
	2.0	-			
	10				PID = 0.0 (ppm)
	5.0	-			
	15			CL (CL) Black (10YR 2/1), Moist	PID = 0.0 (ppm)
	5.0	-			
Boring terminated at 17 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY (1).GLB: KLAMATH7.GPJ: CH2M GEOTECH_12.GDT: 10/7/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-11	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks

COORDINATES : N 41.974332 ft, E -122.359195 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/2/2022 END : 5/9/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
			[Patterned Box]	GW-GC (GW-GC) Gray (10YR 5/1), Dry, Loose, Fine to Coarse, Subangular, Few Sand, Clay, Fine to Medium Grained, Subangular, Trace Silt	PID = 0.7 (ppm)
	5.0	-	[Patterned Box]	CL (CL) Dark Reddish Brown (5YR 3/2), Dry	
	5		[Patterned Box]	CL (CL) Reddish Brown (5YR 4/3), Dry	PID = 0.5 (ppm)
	2.0	-	[Patterned Box]	CL (CL) Dark Reddish Brown (5YR 3/3), Dry, Medium Stiff from 10.5-10.8 ft, Interbedded Fine to Coarse Gravel (GW), Subangular, Soft, Moist at 11.5ft	
10				Boring terminated at 10 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-12	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks
 COORDINATES : N 41.974306 ft, E -122.359211 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : 21.5 ft bgs Start : 5/9/2022 END : 5/9/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
4.0	-	-		GW (GW) Gray (10YR 5/1), Dry, Loose, Fine to Coarse, Few Sand, Fine to Medium Grained, Trace Silt	PID = 0.4 (ppm)
				CL (CL) Yellowish Brown (10YR 5/6), Dry	
5.0	-	-			PID = 0.3 (ppm)
10.0	-	-		CL (CL) Gray (10YR 6/1), Stiff	PID = 0.4 (ppm)
15.0	-	-		CL (CL) Dark Reddish Brown (5YR 3/3), Dry, Medium Stiff from 10.5-10.8 ft, Interbedded Fine to Coarse Gravel (GW), Subangular, soft, moist at 11.5ft	PID = 0.4 (ppm)
				CL (CL) Black (7.5YR 2/1), Moist	
				CL (CL) Moist	
20.0	-	-		CL (CL) Very Dark Gray (10YR 3/1), Dry, Dense, Fine to Coarse, Subangular	PID = 0.3 (ppm)
				5.0	
25.0	-	-		CL (CL) Dark Gray (10YR 4/1), Moist to Wet at 21.5	PID = 0.3 (ppm)
				5.0	
Boring terminated at 25 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-13	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks

COORDINATES : N 41.974294 ft, E -122.359248 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : 23.5 ft bgs Start : 5/10/2022 END : 5/10/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
5.0	-	-		GW-GC (GW-GC) Gray (10YR 5/1), Dry, Loose, Fine to Coarse, Few Sand, Fine to Medium Grained, Subangular, Trace Silt	PID = 0.1 (ppm)
5.0	-	-		CL (CL) Dark Reddish Brown (5YR 3/3), Dry	
3.0	-	-		CL (CL) Dark Reddish Brown (5YR 3/3), Dry	PID = 0.1 (ppm)
3.0	-	-		GW (GW) Dark Reddish Brown (5YR 3/3), Dry, Medium Stiff, Interbedded Gravel (GW)	
3.0	-	-		CL (CL) Dark Reddish Brown (5YR 3/3), Moist	PID = 0.1 (ppm)
5.0	-	-		GW (GW) Moist, Fine to Coarse, Subangular, Trace Sand, Fine Grained, Angular	PID = 0.3 (ppm)
3.3	-	-		CL (CL) Very Dark Gray (10YR 3/1), Dry, Dense, Fine to Coarse, Subangular, Few Clay	
3.3	-	-		CL (CL) Dark Gray (10YR 4/1) Dry to Moist	
5.0	-	-		CL (CL) Bluish Gray (10B 5/1), Moist, Medium to Stiff, Trace Silt	PID = 0.1 (ppm)
5.0	-	-		CL (CL) Brown (10YR 5/3), Moist Boring terminated at 25 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2UT-14	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Underground Storage Tanks
 COORDINATES : N 41.974251 ft, E -122.35905 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : 9.6 ft bgs Start : 5/9/2022 END : 5/9/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				GW-GC (GW-GC) Gray (10YR 5/1), Dry, Loose, Fine to Coarse, Subangular, Clay, Few Sand, Fine to Medium Grained, Subangular, Trace Silt	PID = 0.3 (ppm)
4.0	-			CL (CL) Grayish Brown (10YR 5/2), Dry	
5				CL (CL) Dry	PID = 0.3 (ppm)
2.0	-				
10				CL (CL) Dark Gray (7.5YR 4/1), Dry to Moist	PID = 0.9 (ppm)
				CL (CL) Bluish Gray (10B 5/1), Dry, Shale	
				CL (CL) Dark Brown (10YR 3/3), Moist	
				CL (CL) Dark Gray (10YR 4/1)	
3.3	-				
15				CL (CL) Light Yellowish Brown (10YR 6/4), Dry	PID = 0.4 (ppm)
3.5	-				
20				CL (CL) Light Greenish Gray (10G 8/1), Dry	PID = 0.6 (ppm)
4.0	-				
Boring terminated at 23 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WP-01	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Pile
 COORDINATES : N 41.982154 ft, E -122.3634 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
5	5.0	-		CL (CL) Dark Brown (7.5YR 3/2), Dry to Moist	PID = 0.0 (ppm)
Boring terminated at 5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WP-02	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Pile
 COORDINATES : N 41.982129 ft, E -122.363398 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
5.0	-	-		CL (CL) Dark Brown (7.5YR 3/3), Dry to Moist at 4 ft	
5	1.0	-		CL (CL) Dark Brown (7.5YR 3/3), Moist	
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WP-03	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Pile
 COORDINATES : N 41.982107 ft, E -122.363504 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
5	5.0	-		CL (CL) Dark Brown (7.5YR 3/2), Dry to Moist, Organic matter (hay)	PID = 5 (ppm)
Boring terminated at 5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WP-04	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Pile
 COORDINATES : N 41.982106 ft, E -122.363551 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
5.0	-	-		CL (CL) Dark Brown (7.5YR 3/2), Dry to Moist at 4 ft, Organic matter (hay)	PID = 6 (ppm)
1.0	-	-		CL (CL) Dark Brown (7.5YR 3/2), Moist, Organic matter (hay)	
Boring terminated at 6 ft bgs.					


NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WP-05	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Pile
COORDINATES : N 41.982005 ft, E -122.363514 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	5.0	-		CL (CL) Dark Brown (7.5YR 3/2)	PID = 0.0 (ppm)
5				Boring terminated at 5 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WP-06	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Pile
 COORDINATES : N 41.982007 ft, E -122.363596 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
5	6.0	-		GP (GP) Dark Brown (7.5YR 3/2)	PID = 0.0 (ppm)
Boring terminated at 6 ft bgs.					


NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WP-07	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Pile
COORDINATES : N 41.982006 ft, E -122.363664 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 3/8/2022 END : 3/8/2022 LOGGER : F.Desperrier, L.Xayachack

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	5.0	-		CL (CL) Dark Brown (7.5YR 3/2), Dry to Moist	PID = 0.0 (ppm)
5				Boring terminated at 5 ft bgs.	

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-01	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.977543 ft, E -122.353153 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Geoprobe 6610DT

WATER LEVEL : 0.3 ft bgs Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	1.0	-		GW (GW) Very Dark Gray (10YR 3/1), Wet, Loose, Fine to Coarse, Angular, Trace Clay, Trace Basalt, fine and coarse gravel fragments	PID = 0.0 (ppm)
Boring terminated at 4 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-02	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.977727 ft, E -122.352677 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		CL (CL) Very Dark Gray (10YR 3/1), Moist	PID = 0.1 (ppm)
	1.0	-			PID = 0.5 (ppm)
Boring terminated at 1.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-04	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.977985 ft, E -122.351767 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
2.5	-	-		CL (CL) Light Brownish Gray (10YR 6/2), Moist	PID = 0.4 (ppm)
				CL (CL) Dark Brown (10YR 3/3), Moist	PID = 0.1 (ppm)
				CL (CL) Very Dark Grayish Brown (10YR 3/2), Wet	
5	2.0	-		CL (CL) Very Dark Gray (10YR 3/1), Wet	PID = 0.1 (ppm)
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-05	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.977974 ft, E -122.35134 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Very Dark Grayish Brown (10YR 3/2), Moist	PID = 2.3 (ppm)
	1.0	-			PID = 0.7 (ppm)
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Wet	Refusal at 2 ft
Boring terminated at 2 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-07	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.978042 ft, E -122.349906 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : 0.5 ft bgs Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Yellowish Brown (10YR 3/4), Moist, Medium, Few Gravel, Fine to Coarse, Angular, Trace Silt	
	1.0	-		CL (CL) Very Dark Grayish Brown (10YR 3/2), Wet, Soft to Medium, Few Gravel, Fine to Coarse, Angular, Trace Silt	PID = 0.9 (ppm) PID = 0.8 (ppm)
Boring terminated at 1.5 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-08	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.977972 ft, E -122.349278 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
0.5	-	-		CL (CL) Light Brownish Gray (10YR 6/2), Moist, Stiff to Very Stiff, Trace Silt	PID = 0.5 (ppm)
1.0	-	-			PID = 0.5 (ppm)
1.0	-	-			PID = 0.5 (ppm)
Boring terminated at 2.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-09	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.978036 ft, E -122.349048 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : 0.5 ft bgs Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		ML (ML) Very Dark Brown (10YR 2/2), Moist to Wet	PID = 1.3 (ppm)
	1.0	-		ML (ML) Very Dark Brown (10YR 2/2), Wet	PID = 1.1 (ppm)
Boring terminated at 1.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-10	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.977903 ft, E -122.348842 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : 0.5 ft bgs Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		ML (ML) Very Dark Brown (10YR 2/2), Moist to Wet	PID = 1.5 (ppm)
	1.0	-		ML (ML) Very Dark Brown (10YR 2/2), Wet, Soft, Trace Clay	PID = 1.5 (ppm)
Boring terminated at 1.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-11	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock
 COORDINATES : N 41.977838 ft, E -122.348473 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT
 WATER LEVEL : 0.5 ft bgs Start : 5/11/2022 END : 5/11/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	4.0	-		SM (SM) Very Dark Brown (10YR 2/2), Moist, Medium Dense, Fine Grained, Subangular, Silt, Trace Clay	PID = 1.3 (ppm)
				SM (SM) Dark Reddish Brown (5YR 3/2), Wet, Medium Dense to Dense, Fine Grained, Subangular to Subrounded, Silt, Trace Clay	PID = 0.7 (ppm)
5	2.0	-			PID = 0.5 (ppm)
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-12	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock
 COORDINATES : N 41.978284 ft, E -122.348996 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/11/2022 END : 5/11/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
3.5	-	-	●●●●●	GW (GW) Gray (5YR 5/1), Dry, Loose, Fine to Coarse, Few Sand, Fine to Medium Grained, Angular to Subangular	PID = 0.2 (ppm)
			▨▨▨▨▨	CL (CL) Dark Reddish Brown (5YR 3/3), Dry	PID = 0.7 (ppm)
			●●●●●	SW (SW) Dark Gray (5YR 4/1), Moist, Loose, Fine to Coarse Grained, Angular to Subangular, Few Gravel and Basalt, Fine to Coarse, Angular, Trace Silt	PID = 0.8 (ppm) PID = 1.5 (ppm)
5	2.0	-	●●●●●		PID = 0.4 (ppm)
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-13	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.977559 ft, E -122.35282 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		CL (CL) Very Dark Grayish Brown (10YR 3/2), Moist	PID = 0.4 (ppm)
	1.0	-		CL (CL) Dark Grayish Brown (10YR 4/2) Moist	
	1.5	-			CH (CH) Dark Grayish Brown (10YR 4/2), Moist
				Boring terminated at 3 ft bgs.	PID = 1 (ppm)


NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-14	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock
COORDINATES : N 41.977919 ft, E -122.350943 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (7.5YR 3/3), Moist, Few Gravel, Fine to Coarse, Angular	PID = 0.1 (ppm)
Boring terminated at 0.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-15	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.977921 ft, E -122.349615 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : 2.5 ft bgs Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		CL (CL) Dark Brown (7.5YR 3/2), Moist, Few Gravel, Fine to Coarse, Angular	
	1.0	-		CL (CL) Dark Brown (7.5YR 3/3), Moist	PID = 0.3 (ppm)
	1.0	-		CL (CL) Dark Brown (7.5YR 3/3), Moist, Few Gravel, Fine to Coarse, Angular	PID = 0.3 (ppm)
Boring terminated at 2.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: C2WS-16	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Copco No. 2 Wood Stave Penstock

COORDINATES : N 41.977756 ft, E -122.348687 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/12/2022 END : 5/12/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dusky Red (7.5R 3/2), Moist	PID = 25.1 (ppm)
	0.5	-			PID = 22.2 (ppm)
	0.5	-			
Boring terminated at 1.5 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGBP-01	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Burn Pit
 COORDINATES : N 41.928465 ft, E -122.440598 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : Jacobs and MR Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/2/2022 END : 5/13/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
				GW-GC (GW-GC) Dusky Red (2.5YR 3/2), Moist, Fine to Coarse, Angular	
	4.0	-		CL (CL) Dark Reddish Brown (2.5YR 3/3), Moist, Gravel, Fine to Coarse, Angular	PID = 0.2 (ppm)
					PID = 0.0 (ppm)
					PID = 0.6 (ppm)
5	2.0	-			Advance two DPT soil cores to 6 ft to collect sufficient sample volume
					PID = 0.4 (ppm)
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGBP-02	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Burn Pit
COORDINATES : N 41.9284289 ft, E -122.4406254 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/2/2022 END : 5/2/2022 LOGGER : D.Lubell, J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
				SILT WITH SAND (ML) Reddish Black (2.5YR 2.5/1), Dry, Loose, Poorly Graded Sand, Fine Grained, Burned material/fragments 6-15%	
Boring terminated at 0.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGBP-C1	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Burn Pit

COORDINATES : *pending* ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/2/2022 END : 5/2/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Reddish Brown (2.5YR 3/3), Moist, Gravel, Fine to Coarse, Angular	PID = 0.6 (ppm) 4-point composite sample
Boring terminated at 0.5 ft bgs.					




PROJECT NUMBER: D3514100	BORING NUMBER: IGBP-C2	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Burn Pit

COORDINATES : *pending* ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/2/2022 END : 5/2/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Reddish Brown (2.5YR 3/3), Moist, Gravel, Fine to Coarse, Angular	PID = 0.7 (ppm) 3-point composite sample
Boring terminated at 0.5 ft bgs.					





PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-01	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934953 ft, E -122.429362 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/3/2022 END : 5/3/2022 LOGGER : D.Lubell, J.Velasquez, M.Bos

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Grayish Brown (10YR 4/2), Dry, Soft, Trace Silt	PID = 0.4 (ppm) Three hand auger attempts with refusal at 1ft
	0.5	-			PID = 0.6 (ppm)
Boring terminated at 1 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-02	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934935 ft, E -122.429542 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/3/2022 END : 5/13/2022 LOGGER : J.Velasquez, M.Bos, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS	
	0.5	-		CL (CL) Dark Grayish Brown (10YR 4/2), Dry, Medium Stiff, Trace Silt	PID = 0.6 (ppm)	
	0.5	-			PID = 1 (ppm)	
	0.5	-		CL (CL) Dry, Soft to Medium Stiff, Trace Silt	PID = 0.5 (ppm)	
	0.5	-			Hand auger refusal at 3.5 ft on 5/03/2022 DPT from 3.5 to 6 ft on 5/13/2022	
5	2.5	-			PID = 0.5 (ppm)	
Boring terminated at 6 ft bgs.						

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-03	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934734 ft, E -122.429398 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/3/2022 END : 5/13/2022 LOGGER : J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		CL (CL) Very Dark Grayish Brown (10YR 3/2), Medium to Stiff, Trace Silt, Trace clay pigeon and tire fragments	PID = 0.9 (ppm)
	0.5	-			PID = 0.5 (ppm)
	0.5	-			PID = 1.1 (ppm)
	0.5	-			PID = 2.9 (ppm)
	2.0	-			
				CL (CL) Light Yellowish Brown (10YR 6/4), Dry	
5	3.5	-			PID = 0.6 (ppm)
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-04	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934838 ft, E -122.429639 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/3/2022 END : 5/3/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		CL (CL) Dry, Trace organic material, trace weathered basalt fragments	PID = 0.8 (ppm)
	0.5	-			PID = 0.7 (ppm)
	0.5	-			PID = 0.7 (ppm)
	0.5	-			PID = 1.1 (ppm)
	0.5	-			PID = 1.4 (ppm)
	0.3	-			
Boring terminated at 2.25 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-05	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934626 ft, E -122.430015 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/3/2022 END : 5/3/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		CL (CL) Brown (10YR 4/3), Dry, Trace Silt	PID = 1.4 (ppm)
	0.5	-			PID = 0.1 (ppm)
	0.5	-			PID = 0.4 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-06	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934184 ft, E -122.43031 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/3/2022 END : 5/3/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry, Stiff, Trace Silt	PID = 1.6 (ppm)
	0.5	-			PID = 1.8 (ppm)
	0.5	-			PID = 1.1 (ppm) Initial hand auger refusal at 1.25 ft, Second hand auger to 1.5 ft
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-07	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.933717 ft, E -122.43005 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/3/2022 END : 5/3/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry, Stiff, Trace Silt	PID = 2.5 (ppm)
	0.5	-		CL (CL) Very Dark Grayish Brown (10YR 3/2), Dry to Moist, Stiff to Very Stiff, Trace Silt	PID = 0.9 (ppm)
	0.5	-			PID = 3.1 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-08	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.933059 ft, E -122.429645 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/3/2022 END : 5/3/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry, Medium to Stiff, Trace Silt	PID = 2 (ppm)
	0.5	-			PID = 3.2 (ppm)
	0.5	-		CL (CL) Pinkish Gray (7.5YR 7/2), Dry, Soft to Medium, Trace Silt	PID = 2.1 (ppm)
Boring terminated at 1.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-09	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.933318 ft, E -122.428456 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/6/2022 END : 5/6/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry, Trace organics to 0.5 ft	PID = 0.4 (ppm)
	0.5	-			PID = 0.7 (ppm)
	0.5	-			PID = 0.8 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-10	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range
 COORDINATES : N 41.933262 ft, E -122.428494 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/13/2022 END : 5/13/2022 LOGGER : J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
5	3.5	-		GW-GC (GW-GC) Strong Brown (7.5YR 5/6) Dry, Fine Grained, Subangular to Subrounded, Trace Sand, Fine to Medium Grained, Angular to Subangular	PID = 0.1 (ppm) PID = 0.2 (ppm) PID = 0.2 (ppm)
				CL (CL) Very Dark Brown (10YR 2/2)	
				CL (CL) Brown (7.5YR 4/4)	
5	2.0	-			PID = 0.2 (ppm)
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-11	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.933883 ft, E -122.427827 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/6/2022 END : 5/6/2022 LOGGER : D.Lubell, J.Velasquez, M.Bos

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry	PID = 0.6 (ppm)
	0.5	-			PID = 0.4 (ppm)
	0.5	-			PID = 0.3 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-12	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934465 ft, E -122.426979 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/6/2022 END : 5/6/2022 LOGGER : D.Lubell, J.Velasquez, M.Bos

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Yellowish Brown (10YR 4/4), Dry	PID = 0.7 (ppm)
	0.5	-			PID = 0.5 (ppm)
	0.5	-			PID = 0.8 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-13	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934947 ft, E -122.427316 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/6/2022 END : 5/6/2022 LOGGER : D.Lubell, J.Velasquez, M.Bos

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry, Trace organics to 0.5 ft	PID = 1 (ppm)
	0.5	-			PID = 0.4 (ppm)
	0.5	-			PID = 0.4 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-14	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.935201 ft, E -122.427995 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/5/2022 END : 5/5/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (10YR 3/3) Dry to Moist	PID = 0.4 (ppm)
	0.5	-		CL (CL) Dry to Moist, Trace Silt, Trace organic root system	PID = 1 (ppm)
	1.0	-		CL (CL) Dry to Moist, Trace Silt	PID = 0.5 (ppm)
Boring terminated at 1.5 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-15	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.935178 ft, E -122.428997 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/5/2022 END : 5/5/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Very Dark Grayish Brown (10YR 3/2) Dry to Moist, Trace organics	PID = 1 (ppm) Trace organic
	0.5	-		CL (CL) Dry, Trace organics root system	PID = 0.8 (ppm) Trace organics root system
Boring terminated at 1.5 ft bgs.					




NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-16	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range
COORDINATES : N 41.934908 ft, E -122.428574 ft ELEVATION : Not Surveyed
DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/5/2022 END : 5/5/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry to Moist	PID = 0.4 (ppm)
	0.5	-			PID = 0.8 (ppm)
	0.5	-			PID = 0.4 (ppm)
Boring terminated at 1.5 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-17	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934681 ft, E -122.427776 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/5/2022 END : 5/5/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry to Moist at 0.5 ft, Trace Silt, Trace organics 0-0.5	PID = 0.8 (ppm)
	0.5	-			PID = 1.1 (ppm)
	0.5	-		CL (CL) Light Brownish Gray (10YR 6/2), Moist, Trace Silt	PID = 0.7 (ppm)
Boring terminated at 1.5 ft bgs.					

NEW SOIL BORING LOG: CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-18	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934356 ft, E -122.428442 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/6/2022 END : 5/6/2022 LOGGER : D.Lubell, J.Velasquez, M.Bos

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry, Trace Silt	PID = 1.2 (ppm)
	0.5	-			PID = 1.1 (ppm)
	0.5	-		CL (CL) Dark Yellowish Brown (10YR 4/4), Dry to Moist	PID = 1 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-19	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934121 ft, E -122.429033 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/5/2022 END : 5/5/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
0.5	-	-		CL (CL) Dark Brown (10YR 3/3), Dry, Trace organics, Trace clay pigeons	PID = 0.7 (ppm)
0.5	-	PID = 0.6 (ppm)			
0.5	-	PID = 0.4 (ppm)			
0.5	-	PID = 0.6 (ppm)			
0.5	-	PID = 0.6 (ppm)			
0.5	-	-	CL (CL) Very Dark Grayish Brown (10YR 3/2), Dry to Moist Boring terminated at 2.5 ft bgs.		

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22





PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-20	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934048 ft, E -122.429196 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/13/2022 END : 5/13/2022 LOGGER : J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	2.5	-		CL (CL) Brown (10YR 4/3), Dry	PID = 0.5 (ppm) Advanced two DPT soil borings for sufficient sample volume
				CL (CL) Dark Brown (10YR 3/3), Dry	PID = 0.6 (ppm)
5	2.0	-		CL (CL) Strong Brown (7.5YR 4/6), Dry	PID = 0.6 (ppm)
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-21	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.933981 ft, E -122.428962 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/5/2022 END : 5/5/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Yellowish Brown (10YR 4/4), Dry	PID = 1.1 (ppm)
	0.5	-			PID = 0.7 (ppm)
	0.5	-			PID = 1 (ppm)
Boring terminated at 1.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-22	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.933958 ft, E -122.429061 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/5/2022 END : 5/5/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry	PID = 1 (ppm)
	0.5	-			PID = 0.7 (ppm)
	0.5	-			PID = 0.5 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-23	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.933765 ft, E -122.429043 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/5/2022 END : 5/5/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry	PID = 0.3 (ppm)
	0.5	-			PID = 0.7 (ppm)
	0.5	-		CL (CL) Brown (10YR 4/3) Dry, Few Silt	PID = 0.4 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-24	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.933673 ft, E -122.429101 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/5/2022 END : 5/5/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry	PID = 0.1 (ppm)
	0.5	-			PID = 0.00 (ppm)
	0.5	-			PID = 0.5 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-25	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range
 COORDINATES : N 41.933775 ft, E -122.428506 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/13/2022 END : 5/13/2022 LOGGER : J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
	3.5	-		CL (CL) Very Dark Grayish Brown (10YR 3/2), Dry	PID = 0.2 (ppm) PID = 0.4 (ppm)
				CL (CL) Brown (7.5YR 4/4), Dry	PID = 0.3 (ppm)
5	2.0	-		CL (CL) Dark Grayish Brown (10YR 4/2), Dry	PID = 1.8 (ppm)
Boring terminated at 6 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-26	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.933418 ft, E -122.42912 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/5/2022 END : 5/5/2022 LOGGER : D.Lubell, J.Velasquez

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (7.5YR 3/2), Dry	PID = 0.7 (ppm)
	0.5	-			PID = 7 (ppm)
	0.5	-			PID = 0.2 (ppm)
Boring terminated at 1.5 ft bgs.					



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-27	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range
 COORDINATES : N 41.9347 ft, E -122.429016 ft ELEVATION : Not Surveyed
 DRILLING CONTRACTOR : M R Drilling DRILLING METHOD AND EQUIPMENT : Hand Auger, Geoprobe 6610DT

WATER LEVEL : --- Start : 5/13/2022 END : 5/13/2022 LOGGER : J.Velasquez, C.Torgersen

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	COMMENTS
2.5	-	-		CL (CL) Dark Grayish Brown (10YR 4/2), Dry	PID = 1 (ppm) Advanced two DPT soil borings to collect sufficient sample volume PID = 1.3 (ppm)
5	1.5	-		CL (CL) Light Gray (10YR 7/2), Dry	PID = 2 (ppm)
Boring terminated at 5.5 ft bgs.					

NEW SOIL BORING LOG; CORONADO_LIBRARY.GLB; KLAMATH7.GPJ; CH2M GEOTECH_12.GDT; 9/22/22



PROJECT NUMBER: D3514100	BORING NUMBER: IGSR-28	SHEET 1 OF 1
Borehole Log		

PROJECT : Lower Klamath Hydroelectric Project LOCATION : Iron Gate Shooting Range

COORDINATES : N 41.934322 ft, E -122.429537 ft ELEVATION : Not Surveyed

DRILLING CONTRACTOR : Jacobs DRILLING METHOD AND EQUIPMENT : Hand Auger

WATER LEVEL : --- Start : 5/6/2022 END : 5/6/2022 LOGGER : D.Lubell, J.Velasquez, M.Bos

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL / RECOVERY (ft)	CORE ID	GRAPHIC LOG	SOIL DESCRIPTION: <u>Soil name, USCS, color, moisture, density, description</u>	<u>COMMENTS</u>
	0.5	-		CL (CL) Dark Brown (10YR 3/3), Dry	PID = 1.1 (ppm)
	0.5	-			PID = 0.7 (ppm)
	0.5	-			PID = 0.8 (ppm)
Boring terminated at 1.5 ft bgs.					

Appendix C Waste Manifests

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NOT REQUIRED
 2. Page 1 of 1
 3. Emergency Response Phone: 800 488-0910
 4. Waste Tracking Number: VC100283

5. Generator's Name and Mailing Address: PACIFICORP
 825 NE Multnomah Blvd, Ste 1800
 Portland, OR 97232
 ATTN: Demian Ebert
 Generator's Site Address (if different than mailing address): IRONGATE DAM
 8678 LAKEVIEW ROAD
 HORN BROOK, CA 96044
 Generator's Phone: 503 813-6625

6. Transporter 1 Company Name: ENVIROSERVE, INC. U.S. EPA ID Number: OH0000333336

7. Transporter 2 Company Name: U.S. EPA ID Number:

8. Designated Facility Name and Site Address: WASTE MANagements HILLSBORO LANDFILL
 3205 SE MINTER BRIDGE ROAD
 HILLSBORO, OR 97123
 Facility's Phone: 866 909-4458 U.S. EPA ID Number: NOT REQUIRED

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	No.	Type		
1. NON-HAZARDOUS SOIL AND DEBRIS	991	DM	250	P
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information: WASTE MANAGEMENT PROFILE NO.: 138103OR ENVIROSERVE PROJECT NO.: VC100283

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Officer's Printed/Typed Name: Mark Bos/Jacobs on behalf PacificCorp Signature: [Signature] Month: 07 Day: 20 Year: 22

15. International Shipments: Import to U.S. Export from U.S. Port of entry/exit: Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials: Transporter Signature (for exports only):

Transporter 1 Printed/Typed Name: JEFF MIUTENBERGER Signature: [Signature] Month: 07 Day: 20 Year: 22
 Transporter 2 Printed/Typed Name: Signature: [Signature] Month: Day: Year:

17. Discrepancy: 17a. Discrepancy Indication Space: Quantity Type Residue Partial Rejection Full Rejection
 Manifest Reference Number:

17b. Alternate Facility (or Generator): U.S. EPA ID Number:
 Facility's Phone:

17c. Signature of Alternate Facility (or Generator): Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
 Printed/Typed Name: Michele Lawrence Signature: [Signature] Month: 08 Day: 20 Year: 22

GENERATOR
INTL
TRANSPORTER
DESIGNATED FACILITY



Hillsboro Landfill, Inc
 3205 SE Minter Bridge
 Hillsboro, OR, 97123
 Ph: (503)-640-9427

Original
 Ticket# 1652302

Customer Name ENVIROSERVE INC SUNPRO SERVIC Carrier ENVIRO SERVE
 Ticket Date 08/02/2022 Vehicle# 1998 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver VINCENT
 Hauling Ticket# Check#
 Route Billing # 0004730
 State Waste Code Gen EPA ID
 Manifest VC100283
 Destination Grid
 PO VC100283
 Profile 138103OR (Non-Hazardous Soil/Debris)
 Generator 168-PACIFICORP HORN BROOK 19305 PACIFICORP 19305 DAGGET RD HORN BROOK CA 96044

	Time	Scale	Operator	Inbound	Gross	
In	08/02/2022 10:59:13	Inbound 1	mlawren4		Tare	16880 lb
Out	08/02/2022 11:24:13	Outbound	AMARTI22		Net	15500 lb
					Tons	1380 lb
						0.69

Comments

Consumer Comments? We want to know. Please call.

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Each-	100	3.00	Each				Siskiyou
2 EVF-P-Standard Env	100		%				
3 FUEL-Fuel Surcharg	100		%				

Total Tax
 Total Ticket

Driver's Signature

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NOT REQUIRED
 2. Page 1 of: 1
 3. Emergency Response Phone: 800 488-0910
 4. Waste Tracking Number: VC100283 ← 01

5. Generator's Name and Mailing Address: PACIFICORP
 825 NE Multnomah Blvd, Ste 1800
 Portland, OR 97232
 ATTN: Demian Ebert

Generator's Site Address (if different than mailing address): COPCO 2 POWERHOUSE
 19305 DAGGETT ROAD
 HORN BROOK, CA 96044

Generator's Phone: 503 813-6625

6. Transporter 1 Company Name: ENVIROSERVE, INC.
 U.S. EPA ID Number: OH0000333336

7. Transporter 2 Company Name: _____
 U.S. EPA ID Number: _____

8. Designated Facility Name and Site Address: WASTE MANagements HILLSBORO LANDFILL
 3205 SE MINTER BRIDGE ROAD
 HILLSBORO, OR 97123

Facility's Phone: 866 909-4458

U.S. EPA ID Number: NOT REQUIRED

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	No.	Type		
1. NON-HAZARDOUS SOIL AND DEBRIS	002	DM	1000	P
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information: WASTE MANAGEMENT PROFILE NO.: 138103OR
 ENVIROSERVE PROJECT NO.: VC100283

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offoror's Printed/Typed Name: Mark Bos / Jacobs on behalf of Pacificorp
 Signature: [Signature]
 Month: 07 Day: 20 Year: 22

15. International Shipments: Import to U.S. Export from U.S.
 Part of entry/exit: _____
 Date leaving U.S.: _____

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: JEFF MILTENBERGER
 Signature: [Signature]
 Month: 07 Day: 20 Year: 22

Transporter 2 Printed/Typed Name: _____
 Signature: _____
 Month: _____ Day: _____ Year: _____

17. Discrepancy

17a. Discrepancy Indication Space: Quantity Type Residue Partial Rejection Full Rejection

Manifest Reference Number: _____

17b. Alternate Facility (or Generator): _____
 U.S. EPA ID Number: _____

Facility's Phone: _____

17c. Signature of Alternate Facility (or Generator): _____
 Month: _____ Day: _____ Year: _____

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Michelle Lawrence
 Signature: [Signature]
 Month: 07 Day: 20 Year: 22

GENERATOR
INTL
TRANSPORTER
DESIGNATED FACILITY



Hillsboro Landfill, Inc
 3205 SE Minter Bridge
 Hillsboro, OR, 97123
 Ph: (503)-640-9427

Original
 Ticket# 1652302

Customer Name ENVIROSERVE INC SUNPRO SERVIC Carrier ENVIRO SERVE
 Ticket Date 08/02/2022 Vehicle# 1998 Volume
 Payment Type Credit Account Container
 Manual Ticket# Driver VINCENT
 Hauling Ticket# Check#
 Route Billing # 0004730
 State Waste Code Gen EPA ID
 Manifest VC100283
 Destination Grid
 PO VC100283
 Profile 138103OR (Non-Hazardous Soil/Debris)
 Generator 168-PACIFICORP HORNBROOK 19305 PACIFICORP 19305 DAGGET RD HORNBROOK CA 96044

	Time	Scale	Operator	Inbound	Gross	
In	08/02/2022 10:59:13	Inbound 1	mlawren4		Tare	15500 lb
Out	08/02/2022 11:24:13	Outbound	AMARTI22		Net	1380 lb
					Tons	0.69

Comments

Consumer Comments? We want to know. Please call.

Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1 Special Misc-Each-	100	3.00	Each				Siskiyou
2 EVF-P-Standard Env	100		%				
3 FUEL-Fuel Surcharg	100		%				

Total Tax
 Total Ticket

Driver's Signature

BILL OF LADING MATERIAL MANIFEST		1. Generator ID Number NOT REQUIRED	2. Page 1 of 1	3. Emergency Response Phone 800 488-0910	Document Number VC100283-02
4. Generator's Name and Mailing Address PACIFICORP 825 NE Multnomah Blvd, Ste. 1800 Portland, OR 97232 ATTN: DEMIAN EBERT Klamath Program Manager		Generator's Site Address (if different than mailing address) Copco 2 Powerhouse 19305 Daggett Road Hornbrook, CA 96044			
Generator's Phone 503 813-6625		6. US EPA ID Number OH0 000 333 336		A. Transporter's Phone 800 488-0910	
5. Transporter 1 Company Name EnviroServe, Inc.		7. Transporter 2 Company Name		8. US EPA ID Number	
9. Designated Facility Name and Site Address OIL RE-REFINING 4150 SUTTLE ROAD PORTLAND, OR 97217		10. US EPA ID Number ORD980975692		C. Facility's Phone 503 286-8352	
11. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))			12. Containers	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZARDOUS IDW WATER			No. 001	Type DM	35 (35)
b.					
c.					
d.					
e.					
15. Special Handling Instructions and Additional Information ORRCO PROFILE NO.: ENVIROSERVE PROJECT NO.: VC100283					
16. GENERATOR CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.					
Printed/Typed Name Mark Bob/Jacobs on behalf of Pacific Corp			Signature 		Month Day Year 07 20 22
17. Transporter 1 Acknowledgement of Receipt of Materials			Printed/Typed Name JEFF MILTENBERGER		Signature 
18. Transporter 2 Acknowledgement of Receipt of Materials			Printed/Typed Name		Signature
19. Discrepancy			Manifest Reference Number:		
19a. Discrepancy Indication Space			US EPA ID Number		
<input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection			Facility's Phone:		
19b. Alternate Facility (or Generator)			Signature		Month Day Year
19c. Signature of Alternate Facility (or Generator)			Signature		Month Day Year
20. Facility Owner or Operator: Certification of receipt of materials covered by this manifest except as noted in item 19a					
Printed/Typed Name H. Calica			Signature 		Month Day Year 08 02 22

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

ORIGINAL - RETURN TO GENERATOR



RECEIVING RECORD

Head Office
 4150 N. Suttle Rd.
 Portland, OR 97217
 1-800-367-8894

R 01-22-0802-003

Received From:
 EnviroServe
 7503 NE 101st Street
 Vancouver WA 98662
 EPA#
 Phone: 360-991-3328
 Customer ID# **32760**
 Driver: JEFF

Receiving Location: Plant # 1
 FPI
 4150 N. Suttle Road
 Portland, OR 97217
 Phone: 503-286-8352
 EPA# ORD980975692

Date	Terms	Written By	Sales Rep.	Page
08/02/22	-0-	Calica		1 of 1

Line	Qty.	Unit	Item	%H2O	Manifest #	B/L#	Net Qty
1	1	Brl.	Oil Clean Up Material Generator ID# 32760 EnviroServe PROFILE ATTACHED - COSTCO 0642 CLOVERISK 3E COMPANY CARLSBAD CA 92010		RR1585720		
			Total Brl.				1.
2	2	Each	Barrel Handling Generator ID# 32760 EnviroServe (2) 55GAL DRUMS				
3	1	Each	XRF Analysis Testing Generator ID# 32760 EnviroServe				
			Total Each				3.
4	35	Gal.	Emulsified Oil & Water Generator ID# 32760 EnviroServe PROFILE ATTACHED - PACIFICORP 825 NE MULTNOMAH BLVD PORTLAND OR 97232		VC100283-02		
			Total Gal.				35.

Customer warrants that the waste petroleum products being received do not contain any contaminants including, without limitation, pesticides, chlorinated solvents at total concentrations greater than 1000 PPM, PCB's greater than 2 PPM, or any other material classified as hazardous waste by 40 CFR part 261, Subparts C and D (implementing the Federal Resource Conservation and Recovery Act) or by any other state or local hazardous waste classification program. Should Laboratory tests find this product not in compliance with 40 CFR part 261 customer agrees to pay all disposal costs incurred.

Signed X _____ DATE: 08/02/22

Appendix D

Analytical Laboratory Results

Appendix D1

Laboratory Results

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-01	C1DP-01	C1DP-01	C1DP-02	C1DP-02	C1DP-02	C1DP-02	C1DP-03	C1DP-03	C1DP-03	C1DP-03	C1DP-04	C1DP-04
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
						Depth Interval	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	3 - 3.5	5.5 - 6	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	FD	N	N	N	N	N	N	N	N
CALC																			
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	4.526E-07	7.48E-08
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	1.8033E-06	4.336E-07
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0 U	0 U
SW6010B																			
Boron	7440-42-8	mg/kg	2	16000		2.5 J	2.8 J	2.1 U	2 U	2 U	2.9 J	2.3 U	2 U	2.1 U	2 U	2.3 U	4 U	2.7 U	
SW6020																			
Antimony	7440-36-0	mg/kg	0.67	31		0.032 U	0.061 J	0.048 J	0.05 J	0.05 J	0.079 J	0.065 J	0.031 U	0.033 U	0.031 U	0.036 U	0.03 J	0.033 U	
Arsenic	7440-38-2	mg/kg	19	19		0.19 J	0.22 J	0.37	0.36	0.34	0.39	0.63	0.24	0.33	0.14 J	0.2 J	0.51	0.13 J	
Barium	7440-39-3	mg/kg	630	15000		67 J	55	80	98	97	110	100	72	110	29	66	33	23	
Beryllium	7440-41-7	mg/kg	2.5	16		0.26	0.24	0.31	0.38	0.37	0.43	0.48	0.26	0.42	0.13	0.24	0.12	0.1	
Cadmium	7440-43-9	mg/kg	0.54	71		0.043 J	0.041 U	0.053 J	0.063 J	0.059 J	0.068 J	0.068 J	0.043 J	0.057 J	0.035 U	0.041 U	0.035 J	0.038 U	
Chromium	7440-47-3	mg/kg	200	120000		45 J	32	40	57	56	66	49	38	65	27	37	22	24	
Cobalt	7440-48-4	mg/kg	13	23		19	15	19	24	24	25	22	18	25	16	18	14	15	
Copper	7440-50-8	mg/kg	73	3100		50 J	56	64	55	55	60	55	47	62	71	74	65	73	
Iron	7439-89-6	mg/kg		55000		33000 J	25000	33000	46000	44000	47000	40000	33000	48000	22000	32000	18000	19000	
Lead	7439-92-1	mg/kg	34	80		5.3 J	7	4.9	5.9 J	3.3 J	7.8	3.9	1.4	1.7	0.44	0.83	1.4	0.57	
Manganese	7439-96-5	mg/kg	2100	2100		490 J	400	530	840	810	900	780	520	930	360	520	300	300	
Molybdenum	7439-98-7	mg/kg	2	390		0.15 J	0.12 J	0.16 J	0.23	0.21	0.25	0.22	0.14 J	0.23	0.31	0.65	0.092 U	0.063 U	
Nickel	7440-02-0	mg/kg	110	820		53 J	39	46	57	58	57	50	50	64	63	52	49	59	
Selenium	7782-49-2	mg/kg	0.52	390		1	0.88	1.5	2	1.6	1.9	1.9	1.2	2	0.57	1.3	0.43 J	0.44 J	
Silver	7440-22-4	mg/kg	4.2	390		0.023 J	0.017 J	0.018 J	0.026 J	0.025 J	0.029 J	0.023 J	0.026 J	0.027 J	0.011 J	0.035 J	0.019 J	0.018 J	
Thallium	7440-28-0	mg/kg	2.8	2.8		0.037 J	0.067 J	0.16 J	0.11 J	0.13 J	0.15 J	0.2 J	0.062 J	0.062 J	0.025 U	0.029 U	0.024 U	0.027 U	
Vanadium	7440-62-2	mg/kg	280	390		84 J	65	87	130	120	140	110	92	140	47	93	34	34	
Zinc	7440-66-6	mg/kg	170	23000		25 J	21	28	37	36	39	36	28	41	20	28	23	17	
SW7471A																			
Mercury	7439-97-6	mg/kg	0.24	1		0.0074 U	0.0092 U	0.0081 U	0.008 U	0.0083 U	0.0089 U	0.0085 U	0.0092 U	0.0082 U	0.0078 U	0.0099 U	0.0078 U	0.0075 U	
SW8011																			
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	--	--	--	--	--	--	--	--	--	--	--	--	6.7E-05 UJ	6.7E-05 UJ
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	--	--	--	--	--	--	--	--	--	--	--	--	1E-05 UJ	1E-05 UJ
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	--	--	--	--	--	--	--	--	--	--	--	--	1.2E-05 UJ	1.2E-05 UJ
SW8260B																			
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017	--	--	--	--	--	--	--	--	--	--	--	--	0.00068 U	0.00068 U
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7	--	--	--	--	--	--	--	--	--	--	--	--	0.00035 U	0.00034 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018	--	--	--	--	--	--	--	--	--	--	--	--	0.001 U	0.001 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700		--	--	--	--	--	--	--	--	--	--	--	--	0.0006 U	0.0006 U
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076	--	--	--	--	--	--	--	--	--	--	--	--	0.00029 U	0.00029 U
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2	--	--	--	--	--	--	--	--	--	--	--	--	0.00022 U	0.00022 U
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54	--	--	--	--	--	--	--	--	--	--	--	--	0.0013 U	0.0013 U
1,1-Dichloropropene	563-58-6	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0.00035 U	0.00034 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40		--	--	--	--	--	--	--	--	--	--	--	--	0.0007 U	0.00069 U
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	--	--	--	--	--	--	--	--	--	--	--	--	0.0012 U	0.0011 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	--	--	--	--	--	--	--	--	--	--	--	--	0.00049 U	0.00048 U
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300		--	--	--	--	--	--	--	--	--	--	--	--	0.0014 U	0.0014 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	--	--	--	--	--	--	--	--	--	--	--	--	0.0019 U	0.0018 U
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	--	--	--	--	--	--	--	--	--	--	--	--	0.00023 U	0.00023 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1	--	--	--	--	--	--	--	--	--	--	--	--	0.0015 U	0.0015 U
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007	--	--	--	--	--	--	--	--	--	--	--	--	0.00023 U	0.00023 U
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065	--	--	--	--	--	--	--	--	--	--	--	--	0.00046 U	0.00046 U
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270		--	--	--	--	--	--	--	--	--	--	--	--	0.00094 U	0.00093 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4	--	--	--	--	--	--	--	--	--	--	--	--	0.0013 U	0.0013 U
1,3-Dichloropropane	142-28-9	mg/kg		410		--	--	--	--	--	--	--	--	--	--	--	--	0.00027 U	0.00026 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2	--	--	--	--	--	--	--	--	--	--	--	--	0.0011 U	0.0011 U
2,2-Dichloropropane	594-20-7	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0.00038 U	0.00038 U

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-01	C1DP-01	C1DP-01	C1DP-02	C1DP-02	C1DP-02	C1DP-02	C1DP-03	C1DP-03	C1DP-03	C1DP-03	C1DP-04	C1DP-04
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
Depth Interval							0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	3 - 3.5	5.5 - 6	0 - 0.5	1 - 1.5
Sample Type							N	N	N	N	FD	N	N	N	N	N	N	N	N
2-Butanone	78-93-3	mg/kg	350	27000	6.1	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	0.01 U
2-Chlorotoluene	95-49-8	mg/kg		470		--	--	--	--	--	--	--	--	--	--	--	--	0.0011 U	0.0011 U
2-Hexanone	591-78-6	mg/kg	0.36	200		--	--	--	--	--	--	--	--	--	--	--	--	0.0045 U	0.0045 U
4-Chlorotoluene	106-43-4	mg/kg		440		--	--	--	--	--	--	--	--	--	--	--	--	0.0012 U	0.0011 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36	--	--	--	--	--	--	--	--	--	--	--	--	0.007 U	0.0069 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92	--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	0.045 J
Benzene	71-43-2	mg/kg	24	0.33	0.025	--	--	--	--	--	--	--	--	--	--	--	--	0.00045 U	0.00045 U
Bromobenzene	108-86-1	mg/kg		290		--	--	--	--	--	--	--	--	--	--	--	--	0.0012 U	0.0011 U
Bromochloromethane	74-97-5	mg/kg		150		--	--	--	--	--	--	--	--	--	--	--	--	0.00029 U	0.00029 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016	--	--	--	--	--	--	--	--	--	--	--	--	0.00021 U	0.00021 U
Bromoform	75-25-2	mg/kg		19	0.69	--	--	--	--	--	--	--	--	--	--	--	--	0.00097 U	0.00096 U
Bromomethane	74-83-9	mg/kg		6.8	0.36	--	--	--	--	--	--	--	--	--	--	--	--	0.00024 U	0.00024 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770		--	--	--	--	--	--	--	--	--	--	--	--	0.00023 U	0.00023 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076	--	--	--	--	--	--	--	--	--	--	--	--	0.00035 U	0.00034 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4	--	--	--	--	--	--	--	--	--	--	--	--	0.00029 U	0.00029 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35	--	--	--	--	--	--	--	--	--	--	--	--	0.00031 U	0.00031 U
Chloroethane	75-00-3	mg/kg		14000	1.2	--	--	--	--	--	--	--	--	--	--	--	--	0.00087 U	0.00086 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023	--	--	--	--	--	--	--	--	--	--	--	--	0.00035 U	0.00034 U
Chloromethane	74-87-3	mg/kg		110	11	--	--	--	--	--	--	--	--	--	--	--	--	0.0011 U	0.0011 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19	--	--	--	--	--	--	--	--	--	--	--	--	0.0007 U	0.00069 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0.00023 U	0.00023 U
Dibromomethane	74-95-3	mg/kg		24		--	--	--	--	--	--	--	--	--	--	--	--	0.0002 U	0.00019 U
Dichlorodifluoromethane	75-71-8	mg/kg		87		--	--	--	--	--	--	--	--	--	--	--	--	0.00057 U	0.00056 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12	--	--	--	--	--	--	--	--	--	--	--	--	0.011 U	0.011 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43	--	--	--	--	--	--	--	--	--	--	--	--	0.00048 U	0.00047 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028	--	--	--	--	--	--	--	--	--	--	--	--	0.0007 U	0.00069 U
Isopropylbenzene	98-82-8	mg/kg		1900		--	--	--	--	--	--	--	--	--	--	--	--	0.00053 U	0.00053 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028	--	--	--	--	--	--	--	--	--	--	--	--	0.00035 U	0.00034 U
Naphthalene	91-20-3	mg/kg	1	2	0.042	--	--	--	--	--	--	--	--	--	--	--	--	0.0021 U	0.0021 U
n-Butylbenzene	104-51-8	mg/kg		2400		--	--	--	--	--	--	--	--	--	--	--	--	0.00073 U	0.00072 U
n-Propylbenzene	103-65-1	mg/kg		3800		--	--	--	--	--	--	--	--	--	--	--	--	0.00088 U	0.00087 U
p-Isopropyltoluene	99-87-6	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0.00046 U	0.00046 U
sec-Butylbenzene	135-98-8	mg/kg		2200		--	--	--	--	--	--	--	--	--	--	--	--	0.00078 U	0.00077 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92	--	--	--	--	--	--	--	--	--	--	--	--	0.00086 U	0.00085 U
tert-Butylbenzene	98-06-6	mg/kg		2200		--	--	--	--	--	--	--	--	--	--	--	--	0.00077 U	0.00076 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08	--	--	--	--	--	--	--	--	--	--	--	--	0.00046 U	0.00046 U
Toluene	108-88-3	mg/kg	23	1100	3.2	--	--	--	--	--	--	--	--	--	--	--	--	0.0015 U	0.0015 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65	--	--	--	--	--	--	--	--	--	--	--	--	0.00046 U	0.00046 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0.0007 U	0.00069 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085	--	--	--	--	--	--	--	--	--	--	--	--	0.00035 U	0.00034 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200		--	--	--	--	--	--	--	--	--	--	--	--	0.00035 U	0.00034 U
Vinyl Acetate	108-05-4	mg/kg		910		--	--	--	--	--	--	--	--	--	--	--	--	0.0017 U	0.0017 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015	--	--	--	--	--	--	--	--	--	--	--	--	0.00035 U	0.00034 U
Xylene, o	95-47-6	mg/kg	1.4	650		--	--	--	--	--	--	--	--	--	--	--	--	0.0011 U	0.0011 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550		--	--	--	--	--	--	--	--	--	--	--	--	0.00065 U	0.00064 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1	--	--	--	--	--	--	--	--	--	--	--	--	0.0011 U	0.0011 U
SW8270C																			
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	--	--	--	--	--	--	--	--	--	--	--	--	0.00061 U	0.00061 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1	--	--	--	--	--	--	--	--	--	--	--	--	0.00051 U	0.00051 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4	--	--	--	--	--	--	--	--	--	--	--	--	0.00049 U	0.00049 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2	--	--	--	--	--	--	--	--	--	--	--	--	0.00084 U	0.00085 U
1-Methylnaphthalene	90-12-0	mg/kg		9.9		--	--	--	--	--	--	--	--	--	--	--	--	0.00051 U	0.00051 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9	--	--	--	--	--	--	--	--	--	--	--	--	0.00082 U	0.00083 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04	--	--	--	--	--	--	--	--	--	--	--	--	0.0013 U	0.0013 U

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-01	C1DP-01	C1DP-01	C1DP-02	C1DP-02	C1DP-02	C1DP-02	C1DP-03	C1DP-03	C1DP-03	C1DP-03	C1DP-04	C1DP-04
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
Depth Interval						0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	3 - 3.5	5.5 - 6	0 - 0.5	1 - 1.5	
Sample Type						N	N	N	N	FD	N	N	N	N	N	N	N	N	
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075	--	--	--	--	--	--	--	--	--	--	--	--	0.0028 U	0.0029 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1	--	--	--	--	--	--	--	--	--	--	--	--	0.0061 U	0.0061 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3	--	--	--	--	--	--	--	--	--	--	--	--	0.059 U	0.06 U
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023	--	--	--	--	--	--	--	--	--	--	--	--	0.0043 U	0.0044 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36		--	--	--	--	--	--	--	--	--	--	--	--	0.0015 U	0.0015 U
2-Chloronaphthalene	91-58-7	mg/kg		4100		--	--	--	--	--	--	--	--	--	--	--	--	0.00051 U	0.00051 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012	--	--	--	--	--	--	--	--	--	--	--	--	0.0004 U	0.00041 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88	--	--	--	--	--	--	--	--	--	--	--	--	0.00089 U	0.0009 U
2-Methylphenol	95-48-7	mg/kg	0.67	3200		--	--	--	--	--	--	--	--	--	--	--	--	0.00099 U	0.001 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630		--	--	--	--	--	--	--	--	--	--	--	--	0.0015 U	0.0015 U
2-Nitrophenol	88-75-5	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0.00063 U	0.00063 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69			--	--	--	--	--	--	--	--	--	--	--	--	0.0015 U	0.0015 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025	--	--	--	--	--	--	--	--	--	--	--	--	0.0085 U	0.0086 U
3-Nitroaniline	99-09-2	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	0.01 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1		--	--	--	--	--	--	--	--	--	--	--	--	0.01 U	0.01 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0.00092 U	0.00093 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300		--	--	--	--	--	--	--	--	--	--	--	--	0.0033 U	0.0034 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067	--	--	--	--	--	--	--	--	--	--	--	--	0.014 U	0.014 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0.00064 U	0.00064 U
4-Nitroaniline	100-01-6	mg/kg		27		--	--	--	--	--	--	--	--	--	--	--	--	0.0051 U	0.0051 U
4-Nitrophenol	100-02-7	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	0.017 U	0.018 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12	--	--	--	--	--	--	--	--	--	--	--	--	0.00046 U	0.00047 U
Acenaphthylene	208-96-8	mg/kg	120		6.4	--	--	--	--	--	--	--	--	--	--	--	--	0.00051 U	0.00051 U
Anthracene	120-12-7	mg/kg	6.8	17000	1.9	--	--	--	--	--	--	--	--	--	--	--	--	0.0016 U	0.0016 U
Azobenzene	103-33-3	mg/kg		5.6		--	--	--	--	--	--	--	--	--	--	--	--	0.00051 U	0.00051 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10	--	--	--	--	--	--	--	--	--	--	--	--	0.0011 U	0.0011 U
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7	--	--	--	--	--	--	--	--	--	--	--	--	0.0013 U	0.0013 U
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4	--	--	--	--	--	--	--	--	--	--	--	--	0.001 U	0.001 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27	--	--	--	--	--	--	--	--	--	--	--	--	0.0018 U	0.0018 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8	--	--	--	--	--	--	--	--	--	--	--	--	0.0014 U	0.0014 U
Benzoic Acid	65-85-0	mg/kg	0.01	250000		--	--	--	--	--	--	--	--	--	--	--	--	0.12 U	0.12 U
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300		--	--	--	--	--	--	--	--	--	--	--	--	0.0051 U	0.0051 U
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051	--	--	--	--	--	--	--	--	--	--	--	--	0.00062 U	0.00062 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190		--	--	--	--	--	--	--	--	--	--	--	--	0.0018 U	0.0018 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05	--	--	--	--	--	--	--	--	--	--	--	--	0.00078 U	0.00078 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190	--	--	--	--	--	--	--	--	--	--	--	--	0.032 U	0.024 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290		--	--	--	--	--	--	--	--	--	--	--	--	0.013 J	0.0058 J
Carbazole	86-74-8	mg/kg	79			--	--	--	--	--	--	--	--	--	--	--	--	0.00074 U	0.00074 U
Chrysene	218-01-9	mg/kg	3.1	110	2.2	--	--	--	--	--	--	--	--	--	--	--	--	0.0013 U	0.0013 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29	--	--	--	--	--	--	--	--	--	--	--	--	0.0012 U	0.0012 U
Dibenzofuran	132-64-9	mg/kg	6.1	66		--	--	--	--	--	--	--	--	--	--	--	--	0.0012 J	0.0006 U
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025	--	--	--	--	--	--	--	--	--	--	--	--	0.0022 U	0.0022 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035	--	--	--	--	--	--	--	--	--	--	--	--	0.00051 U	0.00051 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300		--	--	--	--	--	--	--	--	--	--	--	--	0.0081 U	0.006 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630		--	--	--	--	--	--	--	--	--	--	--	--	0.0012 U	0.0012 U
Fluoranthene	206-44-0	mg/kg	10	2400	86	--	--	--	--	--	--	--	--	--	--	--	--	0.0012 U	0.0012 U
Fluorene	86-73-7	mg/kg	3.7	2300	6	--	--	--	--	--	--	--	--	--	--	--	--	0.00051 U	0.00051 U
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008	--	--	--	--	--	--	--	--	--	--	--	--	0.0015 U	0.0015 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028	--	--	--	--	--	--	--	--	--	--	--	--	0.0015 U	0.0015 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8		--	--	--	--	--	--	--	--	--	--	--	--	0.00078 U	0.00078 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019	--	--	--	--	--	--	--	--	--	--	--	--	0.00043 U	0.00044 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16	--	--	--	--	--	--	--	--	--	--	--	--	0.0012 U	0.0012 U
Isophorone	78-59-1	mg/kg		570		--	--	--	--	--	--	--	--	--	--	--	--	0.00085 U	0.00086 U
Naphthalene	91-20-3	mg/kg	1	2	0.042	--	--	--	--	--	--	--	--	--	--	--	--	0.0013 J	0.00051 U

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-01	C1DP-01	C1DP-01	C1DP-02	C1DP-02	C1DP-02	C1DP-02	C1DP-03	C1DP-03	C1DP-03	C1DP-03	C1DP-04	C1DP-04
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
Depth Interval						0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	3 - 3.5	5.5 - 6	0 - 0.5	1 - 1.5	
Sample Type						N	N	N	N	FD	N	N	N	N	N	N	N	N	N
Nitrobenzene	98-95-3	mg/kg	2.2	5.1		--	--	--	--	--	--	--	--	--	--	--	--	0.002 U	0.002 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078		--	--	--	--	--	--	--	--	--	--	--	--	0.0022 U	0.0022 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110		--	--	--	--	--	--	--	--	--	--	--	--	0.00081 U	0.00082 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098	--	--	--	--	--	--	--	--	--	--	--	--	0.0064 U	0.0064 U
Phenanthrene	85-01-8	mg/kg	5.5		11	--	--	--	--	--	--	--	--	--	--	--	--	0.00059 U	0.00059 U
Phenol	108-95-2	mg/kg	0.79	19000	0.16	--	--	--	--	--	--	--	--	--	--	--	--	0.0023 U	0.0023 U
Pyrene	129-00-0	mg/kg	10	1800	45	--	--	--	--	--	--	--	--	--	--	--	--	0.0013 U	0.0013 U
Pyridine	110-86-1	mg/kg		58		--	--	--	--	--	--	--	--	--	--	--	--	0.016 U	0.016 U
SW8290																			
1,2,3,4,6,7,8-HpCDD	35822-46-9	mg/kg	2.9E-05	0.00048		--	--	--	--	--	--	--	--	--	--	--	--	0.00011	2.6E-05
1,2,3,4,6,7,8-HpCDF	67562-39-4	mg/kg	2.9E-05	0.00048		--	--	--	--	--	--	--	--	--	--	--	--	4.4E-06 J	8.9E-07 U
1,2,3,4,7,8,9-HpCDF	55673-89-7	mg/kg	2.9E-05	0.00048		--	--	--	--	--	--	--	--	--	--	--	--	7.4E-07 U	6.5E-08 U
1,2,3,4,7,8-HxCDD	39227-28-6	mg/kg	2.9E-06	4.8E-05		--	--	--	--	--	--	--	--	--	--	--	--	3.9E-07 J	2.3E-07 J
1,2,3,4,7,8-HxCDF	70648-26-9	mg/kg	2.9E-06	4.8E-05		--	--	--	--	--	--	--	--	--	--	--	--	4.2E-07 J	3.8E-08 U
1,2,3,6,7,8-HxCDD	57653-85-7	mg/kg	2.9E-06	4.8E-05		--	--	--	--	--	--	--	--	--	--	--	--	2.1E-06 J	9.8E-07 J
1,2,3,6,7,8-HxCDF	57117-44-9	mg/kg	2.9E-06	4.8E-05		--	--	--	--	--	--	--	--	--	--	--	--	2.5E-07 UJ	1.5E-07 J
1,2,3,7,8,9-HxCDD	19408-74-3	mg/kg	2.9E-06	4.8E-05		--	--	--	--	--	--	--	--	--	--	--	--	1.4E-06 J	4.9E-07 U
1,2,3,7,8,9-HxCDF	72918-21-9	mg/kg	2.9E-06	4.8E-05		--	--	--	--	--	--	--	--	--	--	--	--	4.8E-07 U	4.3E-07 U
1,2,3,7,8-PeCDD	40321-76-4	mg/kg	2.9E-07	4.8E-06		--	--	--	--	--	--	--	--	--	--	--	--	1.2E-07 U	7.5E-08 U
1,2,3,7,8-PeCDF	57117-41-6	mg/kg	9.7E-06	0.00016		--	--	--	--	--	--	--	--	--	--	--	--	7.3E-08 U	6.9E-08 U
2,3,4,6,7,8-HxCDF	60851-34-5	mg/kg	2.9E-06	4.8E-05		--	--	--	--	--	--	--	--	--	--	--	--	8.7E-08 U	3.7E-08 U
2,3,4,7,8-PeCDF	57117-31-4	mg/kg	9.7E-07	1.6E-05		--	--	--	--	--	--	--	--	--	--	--	--	7.4E-08 U	7E-08 U
2,3,7,8-TCDD	1746-01-6	mg/kg	2.9E-07	4.8E-06	0.3	--	--	--	--	--	--	--	--	--	--	--	--	7.4E-08 U	6.8E-08 U
2,3,7,8-TCDF	51207-31-9	mg/kg	2.9E-06	4.8E-05		--	--	--	--	--	--	--	--	--	--	--	--	6.5E-08 U	4E-08 U
OCDD	3268-87-9	mg/kg	0.00097	0.016		--	--	--	--	--	--	--	--	--	--	--	--	0.00073	0.00012
OCDF	39001-02-0	mg/kg	0.00097	0.016		--	--	--	--	--	--	--	--	--	--	--	--	3.1E-05	5.3E-06 J

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-04	C1DP-05	C1DP-05	C1DP-05	C1DP-05	C1DP-06	C1DP-06	C1DP-06	C1DP-06	C1DP-06	C1DP-07	C1DP-07
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 4.5	4.5 - 6	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	N	N	N	FD	N	N	N	N
CALC																		
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	mg/kg					3.6E-09	2.446E-06	1.086E-06	5.2E-09	--	1.29345E-05	8.058E-07	3.084E-07	8E-10	3E-10	7.59E-08	2.34E-08
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	mg/kg					2.69E-08	7.22E-06	3.674E-06	3.8E-08	--	1.48716E-05	1.0495E-06	6.257E-07	2.4E-09	1E-09	2.317E-07	1.006E-07
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0 U	0.000996	0 U	0 U	0 U	0.00017	0 U	0 U	0 U	0 U	0 U	0 U
SW6010B																		
Boron	7440-42-8	mg/kg	2	16000			2.5 U	8.7 U	3.7 U	2.2 U	2.3 U	18 J	2.8 U	3.1 U	2.5 U	2.8 U	2.9 U	2 U
SW6020																		
Antimony	7440-36-0	mg/kg	0.67	31			0.034 U	0.18 J	0.063 J	0.034 U	0.035 J	0.45	0.039 J	0.033 J	0.036 U	0.034 U	0.038 U	0.031 U
Arsenic	7440-38-2	mg/kg	19	19			0.18 J	15	6	0.35	2	20	1	0.85	0.55	0.29	0.26 J	0.14 J
Barium	7440-39-3	mg/kg	630	15000			61	82	27	50	56	78	36	37	60	41	20 J	12
Beryllium	7440-41-7	mg/kg	2.5	16			0.28	0.28	0.12	0.2	0.21	0.12	0.14	0.15	0.24	0.19	0.14	0.12
Cadmium	7440-43-9	mg/kg	0.54	71			0.045 J	0.16 J	0.052 J	0.038 U	0.053 J	0.046 J	0.035 U	0.037 U	0.044 J	0.038 U	0.043 U	0.035 U
Chromium	7440-47-3	mg/kg	200	120000			48	35	19	38	37	31	29	29	47	35	13	11
Cobalt	7440-48-4	mg/kg	13	23			19	17	13	17	17	15	15	15	19	15	12	10
Copper	7440-50-8	mg/kg	73	3100			76	77	60	77	73	180	79	77	77	75	61 J	54
Iron	7439-89-6	mg/kg		55000			31000	30000	17000	26000	26000	23000	21000	21000	31000	24000	11000	9900
Lead	7439-92-1	mg/kg	34	80			0.98	12	3.9	0.87	2.5	11	1.3	1.3	0.97	0.66	0.67	0.41
Manganese	7439-96-5	mg/kg	2100	2100			530	700	310	440	450	400	350	340	530	400	260	220
Molybdenum	7439-98-7	mg/kg	2	390			0.12 U	0.19 U	0.075 U	0.14 U	0.11 U	0.15 U	0.078 U	0.084 U	0.23 U	0.26 U	0.19 U	0.14 U
Nickel	7440-02-0	mg/kg	110	820			58	48	45	46	52	62	52	48	53	41	45	36
Selenium	7782-49-2	mg/kg	0.52	390			1.2	1.3	0.43 J	0.99	0.85	0.63	0.59	0.54	1.1	0.74	0.5 J	0.5
Silver	7440-22-4	mg/kg	4.2	390			0.024 J	0.045 J	0.024 J	0.023 J	0.027 J	0.044 J	0.02 J	0.024 J	0.02 J	0.021 J	0.018 J	0.013 J
Thallium	7440-28-0	mg/kg	2.8	2.8			0.028 U	0.049 J	0.027 U	0.027 U	0.025 U	0.024 U	0.025 U	0.026 U	0.029 U	0.027 U	0.03 U	0.025 U
Vanadium	7440-62-2	mg/kg	280	390			86	73	31	71	67	48	48	48	87	61	36 J	32
Zinc	7440-66-6	mg/kg	170	23000			28	66	25	23	27	100	21	20	28	21	18	15
SW7471A																		
Mercury	7439-97-6	mg/kg	0.24	1			0.0081 U	0.0095 U	0.008 U	0.0097 U	0.0082 U	0.0074 U	0.0074 U	0.0082 U	0.0078 U	0.0082 U	0.0095 U	0.0085 U
SW8011																		
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		6.6E-05 UJ	6.9E-05 UJ	6.8E-05 UJ	6.5E-05 UJ	6.4E-05 UJ	6.7E-05 UJ	6.1E-05 UJ	6E-05 UJ	6.8E-05 UJ	6.4E-05 UJ	8E-05 UJ	7E-05 UJ
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		1E-05 UJ	1E-05 UJ	1E-05 UJ	9.8E-06 UJ	1E-05 J	1E-05 UJ	9.2E-06 UJ	9.1E-06 UJ	1E-05 UJ	9.7E-06 UJ	1.2E-05 UJ	1.1E-05 UJ
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		1.2E-05 UJ	1.3E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.1E-05 UJ	1.1E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.5E-05 UJ	1.3E-05 UJ
SW8260B																		
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017		0.00074 U	0.00065 U	0.00081 U	0.00073 U	--	0.00066 U	0.00066 U	0.00068 U	0.00074 U	0.00073 U	0.00095 UJ	0.00095 U
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7		0.00038 U	0.00033 U	0.00041 U	0.00037 U	--	0.00033 U	0.00034 U	0.00034 U	0.00037 U	0.00037 U	0.00048 U	0.00048 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018		0.0011 U	0.001 U	0.0012 U	0.0011 U	--	0.001 U	0.001 U	0.001 U	0.0011 U	0.0011 U	0.0014 U	0.0015 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700			0.00066 U	0.00058 U	0.00072 U	0.00064 U	--	0.00058 U	0.00058 U	0.0006 U	0.00065 U	0.00064 U	0.00084 U	0.00084 U
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076		0.00032 U	0.00028 U	0.00034 U	0.00031 U	--	0.00028 U	0.00028 U	0.00029 U	0.00031 U	0.00031 U	0.0004 U	0.0004 U
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2		0.00024 U	0.00021 U	0.00026 U	0.00023 U	--	0.00021 U	0.00021 U	0.00022 U	0.00024 U	0.00023 U	0.00031 U	0.00031 U
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54		0.0014 U	0.0012 U	0.0015 U	0.0014 U	--	0.0012 U	0.0012 U	0.0013 U	0.0014 U	0.0014 U	0.0018 U	0.0018 U
1,1-Dichloropropene	563-58-6	mg/kg					0.00038 U	0.00033 U	0.00041 U	0.00037 U	--	0.00033 U	0.00034 U	0.00034 U	0.00037 U	0.00037 U	0.00048 U	0.00048 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40			0.00076 U	0.00067 U	0.00083 U	0.00074 U	--	0.00067 U	0.00067 U	0.00069 U	0.00075 U	0.00074 U	0.00097 UJ	0.00097 U
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		0.0013 U	0.0011 U	0.0014 U	0.0012 U	--	0.0011 U	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0016 U	0.0016 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00053 U	0.00047 U	0.00058 U	0.00052 U	--	0.00047 U	0.00047 U	0.00048 U	0.00052 U	0.00052 U	0.00068 UJ	0.00068 U
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300			0.0015 U	0.0013 U	0.0017 U	0.0015 U	--	0.0013 U	0.0013 U	0.0014 U	0.0015 U	0.0015 U	0.0019 UJ	0.0019 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		0.002 U	0.0018 U	0.0022 U	0.002 U	--	0.0018 U	0.0018 U	0.0018 U	0.002 U	0.002 U	0.0026 U	0.0026 U
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		0.00025 U	0.00022 U	0.00028 U	0.00025 U	--	0.00022 U	0.00022 U	0.00023 U	0.00025 U	0.00025 U	0.00032 U	0.00032 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0016 U	0.0014 U	0.0018 U	0.0016 U	--	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0021 UJ	0.0021 U
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.00025 U	0.00022 U	0.00028 U	0.00025 U	--	0.00022 U	0.00022 U	0.00023 U	0.00025 U	0.00025 U	0.00032 U	0.00032 U
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.0005 U	0.00044 U	0.00055 U	0.00049 U	--	0.00045 U	0.00045 U	0.00046 U	0.0005 U	0.00049 U	0.00064 U	0.00064 U
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.001 U	0.0009 U	0.0011 U	0.001 U	--	0.0009 U	0.00091 U	0.00093 U	0.001 U	0.001 U	0.0013 UJ	0.0013 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0014 U	0.0012 U	0.0015 U	0.0014 U	--	0.0012 U	0.0012 U	0.0013 U	0.0014 U	0.0014 U	0.0018 UJ	0.0018 U
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00029 U	0.00026 U	0.00032 U	0.00028 U	--	0.00026 U	0.00026 U	0.00026 U	0.00029 U	0.00028 U	0.00037 U	0.00037 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0012 U	0.0011 U	0.0013 U	0.0012 U	--	0.0011 U	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0016 UJ	0.0016 U
2,2-Dichloropropane	594-20-7	mg/kg					0.00042 U	0.00037 U	0.00045 U	0.00041 U	--	0.00037 U	0.00037 U	0.00038 U	0.00041 U	0.00041 U	0.00053 U	0.00053 U

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-04	C1DP-05	C1DP-05	C1DP-05	C1DP-05	C1DP-06	C1DP-06	C1DP-06	C1DP-06	C1DP-06	C1DP-07	C1DP-07
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 4.5	4.5 - 6	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	N	N	N	FD	N	N	N	N
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.011 U	0.0099 U	0.012 U	0.011 U	--	0.029 J	0.01 U	0.01 U	0.011 U	0.011 U	0.014 U	0.014 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.0012 U	0.001 U	0.0013 U	0.0011 U	--	0.001 U	0.001 U	0.0011 U	0.0012 U	0.0011 U	0.0015 UJ	0.0015 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0049 U	0.0043 U	0.0054 U	0.0048 U	--	0.0044 U	0.0044 U	0.0045 U	0.0049 U	0.0048 U	0.0063 UJ	0.0063 U
4-Chlorotoluene	106-43-4	mg/kg		440			0.0013 U	0.0011 U	0.0014 U	0.0012 U	--	0.0011 U	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0016 UJ	0.0016 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.0076 U	0.0067 U	0.0083 U	0.0074 U	--	0.0067 U	0.0067 U	0.0069 U	0.0075 U	0.0074 U	0.0097 U	0.0097 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.011 U	0.0096 U	0.015 J	0.011 U	--	0.41 J	0.0097 U	0.027 J	0.011 J	0.011 U	0.014 U	0.014 U
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00049 U	0.00043 U	0.00054 U	0.00048 U	--	0.00044 U	0.00044 U	0.00045 U	0.00049 U	0.00048 U	0.00063 U	0.00063 U
Bromobenzene	108-86-1	mg/kg		290			0.0013 U	0.0011 U	0.0014 U	0.0012 U	--	0.0011 U	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0016 UJ	0.0016 U
Bromochloromethane	74-97-5	mg/kg		150			0.00032 U	0.00028 U	0.00034 U	0.00031 U	--	0.00028 U	0.00028 U	0.00029 U	0.00031 U	0.00031 U	0.0004 U	0.0004 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00023 U	0.0002 U	0.00025 U	0.00022 U	--	0.0002 U	0.0002 U	0.00021 U	0.00022 U	0.00022 U	0.00029 U	0.00029 U
Bromoform	75-25-2	mg/kg		19	0.69		0.0011 U	0.00093 U	0.0012 U	0.001 U	--	0.00094 U	0.00094 U	0.00097 U	0.001 U	0.001 U	0.0014 U	0.0014 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00026 U	0.00023 U	0.00029 U	0.00026 U	--	0.00023 U	0.00024 U	0.00024 U	0.00026 U	0.00026 U	--	0.00034 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00025 U	0.00022 U	0.00028 U	0.00025 U	--	0.00022 U	0.00022 U	0.00023 U	0.00025 U	0.00025 U	0.00032 U	0.00032 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.00038 U	0.00033 U	0.00041 U	0.00037 U	--	0.00033 U	0.00034 U	0.00034 U	0.00037 U	0.00037 U	0.00048 U	0.00048 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.00032 U	0.00028 U	0.00034 U	0.00031 U	--	0.00028 U	0.00028 U	0.00029 U	0.00031 U	0.00031 U	0.0004 UJ	0.0004 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00034 U	0.0003 U	0.00037 U	0.00033 U	--	0.0003 U	0.0003 U	0.00031 U	0.00034 U	0.00033 U	0.00043 U	0.00044 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.00095 U	0.00083 U	0.001 U	0.00092 U	--	0.00084 U	0.00084 U	0.00086 U	0.00094 U	0.00092 U	0.0012 UJ	0.0012 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.00038 U	0.00033 U	0.00041 U	0.00037 U	--	0.00033 U	0.00034 U	0.00034 U	0.00037 U	0.00037 U	0.00048 U	0.00048 U
Chloromethane	74-87-3	mg/kg		110	11		0.0012 U	0.001 U	0.0013 U	0.0011 U	--	0.001 U	0.001 U	0.0011 U	0.0012 U	0.0011 U	0.0015 UJ	0.0015 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.00076 U	0.00067 U	0.00083 U	0.00074 U	--	0.00067 U	0.00067 U	0.00069 U	0.00075 U	0.00074 U	0.00097 U	0.00097 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00025 U	0.00022 U	0.00028 U	0.00025 U	--	0.00022 U	0.00022 U	0.00023 U	0.00025 U	0.00025 U	0.00032 UJ	0.00032 U
Dibromomethane	74-95-3	mg/kg		24			0.00021 U	0.00019 U	0.00023 U	0.00021 U	--	0.00019 U	0.00019 U	0.0002 U	0.00021 U	0.00021 U	0.00027 U	0.00027 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00062 U	0.00054 U	0.00067 U	0.0006 U	--	0.00055 U	0.00055 U	0.00056 UJ	0.00061 UJ	0.0006 U	--	0.00079 UJ
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.012 U	0.011 U	0.014 U	0.012 U	--	0.011 U	0.011 U	0.011 UJ	0.012 UJ	0.012 U	0.016 UJ	0.016 UJ
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00052 U	0.00045 U	0.00056 U	0.0005 U	--	0.00046 U	0.00046 U	0.00047 U	0.00051 U	0.0005 U	0.00066 UJ	0.00066 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.00076 U	0.00067 U	0.00083 U	0.00074 U	--	0.00067 U	0.00067 U	0.00069 U	0.00075 U	0.00074 U	0.00097 UJ	0.00097 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00058 U	0.00051 U	0.00063 U	0.00057 U	--	0.00051 U	0.00052 U	0.00053 U	0.00057 U	0.00057 U	0.00074 UJ	0.00074 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.00038 U	0.00033 U	0.00041 U	0.00037 U	--	0.00033 U	0.00034 U	0.00034 U	0.00037 U	0.00037 U	0.00048 U	0.00048 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0023 U	0.002 U	0.0025 U	0.0022 U	--	0.002 U	0.002 U	0.0021 U	0.0022 U	0.0022 U	0.0029 UJ	0.0029 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.00079 U	0.0007 U	0.00087 U	0.00078 U	--	0.0007 U	0.00071 U	0.00072 U	0.00079 U	0.00078 U	0.001 UJ	0.001 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.00096 U	0.00084 U	0.001 U	0.00094 U	--	0.00085 U	0.00085 U	0.00087 U	0.00095 U	0.00094 U	0.0012 UJ	0.0012 U
p-Isopropyltoluene	99-87-6	mg/kg					0.0005 U	0.00044 U	0.00055 U	0.00049 U	--	0.00045 U	0.00045 U	0.00046 U	0.0005 U	0.00049 U	0.00064 UJ	0.00064 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.00084 U	0.00074 U	0.00092 U	0.00082 U	--	0.00075 U	0.00075 U	0.00077 U	0.00084 U	0.00083 U	0.0011 UJ	0.0011 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.00093 U	0.00082 U	0.001 U	0.00091 U	--	0.00083 U	0.00083 U	0.00085 U	0.00092 U	0.00091 U	0.0012 UJ	0.0012 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00083 U	0.00073 U	0.00091 U	0.00081 U	--	0.00074 U	0.00074 U	0.00076 U	0.00082 U	0.00081 U	0.0011 UJ	0.0011 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.0005 U	0.00044 U	0.00055 U	0.00049 U	--	0.00045 U	0.00045 U	0.00046 U	0.0005 U	0.00049 U	0.00064 UJ	0.00064 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0016 U	0.0014 U	0.0018 U	0.0016 U	--	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0021 UJ	0.0021 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.0005 U	0.00044 U	0.00055 U	0.00049 U	--	0.00045 U	0.00045 U	0.00046 U	0.0005 U	0.00049 U	0.00064 U	0.00064 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.00076 U	0.00067 U	0.00083 U	0.00074 U	--	0.00067 U	0.00067 U	0.00069 U	0.00075 U	0.00074 U	0.00097 UJ	0.00097 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.00038 U	0.00033 U	0.00041 U	0.00037 U	--	0.00033 U	0.00034 U	0.00034 U	0.00037 U	0.00037 U	0.00048 UJ	0.00048 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.00038 U	0.00033 U	0.00041 U	0.00037 U	--	0.00033 U	0.00034 U	0.00034 U	0.00037 U	0.00037 U	0.00048 UJ	0.00048 U
Vinyl Acetate	108-05-4	mg/kg		910			0.0019 U	0.0017 U	0.0021 U	0.0018 U	--	0.0017 U	0.0017 U	0.0017 UJ	0.0019 UJ	0.0018 U	--	0.0024 UJ
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00038 U	0.00033 U	0.00041 U	0.00037 U	--	0.00033 U	0.00034 U	0.00034 U	0.00037 U	0.00037 U	--	0.00048 U
Xylene, o	95-47-6	mg/kg	1.4	650			0.0012 U	0.001 U	0.0013 U	0.0011 U	--	0.001 U	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.0015 UJ	0.0015 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00071 U	0.00062 U	0.00077 U	0.00069 U	--	0.00063 U	0.00063 U	0.00064 U	0.0007 U	0.00069 U	0.0009 UJ	0.0009 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0012 U	0.001 U	0.0013 U	0.0011 U	--	0.001 U	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.0015 UJ	0.0015 U
SW8270C																		
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00063 U	0.00066 U	0.0006 U	0.00061 U	0.00062 U	0.00056 U	0.00061 U	0.00061 U	0.00061 U	0.00063 U	0.00068 U	0.00062 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.00053 U	0.00055 U	0.0005 U	0.00051 U	0.00052 U	0.00047 U	0.00051 U	0.00051 U	0.00051 U	0.00052 U	0.00056 UJ	0.00051 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.00051 U	0.00053 U	0.00048 U	0.00049 U	0.0005 U	0.00045 U	0.00049 U	0.00049 U	0.00049 U	0.0005 U	0.00054 U	0.00049 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.00088 U	0.00091 U	0.00083 U	0.00085 U	0.00086 U	0.00078 U	0.00085 U	0.00084 U	0.00084 U	0.00087 U	0.00094 UJ	0.00085 U
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.00053 U	0.0031 J	0.00064 J	0.00051 U	0.00054 J	0.0037	0.00051 U	0.00086 J	0.00051 U	0.00052 U	0.00056 U	0.00051 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9		0.00086 U	0.00089 U	0.00081 U	0.00083 UJ	0.00084 U	0.00076 U	0.00083 UJ	0.00082 UJ	0.00082 U	0.00085 U	0.00092 U	0.00083 UJ
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04		0.0014 U	0.0014 U	0.0013 U	0.0013 UJ	0.0013 U	0.0012 UJ	0.0013 UJ	0.0013 UJ	0.0013 UJ	0.0014 UJ	0.0015 UJ	0.0013 UJ

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-04	C1DP-05	C1DP-05	C1DP-05	C1DP-05	C1DP-06	C1DP-06	C1DP-06	C1DP-06	C1DP-06	C1DP-07	C1DP-07
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 4.5	4.5 - 6	0 - 0.5	1 - 1.5	1 - 1.5	3 - 4.5	4.5 - 6	0 - 0.5	1 - 1.5	
Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.003 U	0.0031 U	0.0028 U	0.0029 UJ	0.0029 U	0.0026 UJ	0.0029 UJ	0.0028 UJ	0.0028 UJ	0.0029 UJ	0.0032 UJ	0.0029 UJ
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.0063 U	0.0066 U	0.006 U	0.0061 U	0.0062 U	0.0056 U	0.0061 U	0.0061 U	0.0061 U	0.0063 U	0.0068 U	0.0062 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.062 U	0.064 U	0.058 U	0.06 UJ	0.061 U	0.055 U	0.06 UJ	0.06 UJ	0.059 U	0.061 U	0.066 U	0.06 UJ
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.0045 U	0.0047 U	0.0043 U	0.0044 U	0.0045 U	0.004 U	0.0044 U	0.0044 U	0.0044 U	0.0045 U	0.0049 U	0.0044 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0017 U	0.0015 U
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.00053 U	0.00055 U	0.0005 U	0.00051 U	0.00052 U	0.00047 U	0.00051 U	0.00051 U	0.00051 U	0.00052 U	0.00056 U	0.00051 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.00042 U	0.00044 U	0.0004 U	0.00041 U	0.00041 U	0.00038 U	0.00041 U	0.00041 U	0.00041 U	0.00042 U	0.00045 U	0.00041 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.00093 U	0.0041 J	0.001 J	0.0009 UJ	0.00091 U	0.0045 J	0.0009 UJ	0.00095 J	0.00089 UJ	0.00092 UJ	0.00099 UJ	0.00091 UJ
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.001 U	0.0011 U	0.00098 U	0.001 U	0.001 U	0.00092 U	0.001 U	0.001 U	0.00099 U	0.001 U	0.0011 U	0.001 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0017 U	0.0015 U
2-Nitrophenol	88-75-5	mg/kg					0.00066 U	0.00068 U	0.00062 U	0.00063 U	0.00064 U	0.00058 U	0.00063 U	0.00063 U	0.00063 U	0.00065 U	0.0007 U	0.00064 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0017 U	0.0015 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.0089 U	0.0092 U	0.0084 U	0.0086 U	0.0087 U	0.0079 U	0.0086 U	0.0085 U	0.0085 U	0.0088 U	0.0095 U	0.0086 U
3-Nitroaniline	99-09-2	mg/kg					0.011 U	0.011 U	0.01 U	0.01 U	0.01 U	0.0094 U	0.01 U	0.01 U	0.01 U	0.01 U	0.011 U	0.01 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.011 U	0.011 U	0.01 U	0.01 UJ	0.01 U	0.0094 U	0.01 UJ	0.01 UJ	0.01 U	0.01 U	0.011 U	0.01 UJ
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.00096 U	0.001 U	0.00091 U	0.00093 U	0.00094 U	0.00085 U	0.00093 U	0.00093 U	0.00092 U	0.00095 U	0.001 U	0.00094 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0035 U	0.0036 U	0.0033 U	0.0034 UJ	0.0034 U	0.0031 U	0.0034 UJ	0.0034 UJ	0.0033 U	0.0035 U	0.0037 U	0.0034 UJ
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.014 U	0.015 U	0.013 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U	0.014 U	0.014 U	0.015 U	0.014 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.00067 U	0.00069 U	0.00063 U	0.00064 U	0.00065 U	0.00059 U	0.00064 U	0.00064 U	0.00064 U	0.00066 U	0.00071 U	0.00065 U
4-Nitroaniline	100-01-6	mg/kg		27			0.0053 U	0.0055 U	0.005 U	0.0051 U	0.0052 U	0.0047 U	0.0051 U	0.0051 U	0.0051 U	0.0052 U	0.0056 U	0.0051 U
4-Nitrophenol	100-02-7	mg/kg					0.018 U	0.019 U	0.017 U	0.018 UJ	0.018 U	0.016 U	0.018 UJ	0.017 UJ	0.017 U	0.018 U	0.019 U	0.018 UJ
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00049 U	0.0005 U	0.00046 U	0.00047 U	0.00048 U	0.00043 U	0.00047 U	0.00047 U	0.00047 U	0.00048 U	0.00052 U	0.00047 U
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.00053 U	0.00055 U	0.0005 U	0.00051 U	0.00052 U	0.00047 U	0.00051 U	0.00051 U	0.00051 U	0.00052 U	0.00056 U	0.00051 U
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0017 U	0.0033 J	0.0016 U	0.0016 U	0.0017 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0018 U	0.0016 U
Azobenzene	103-33-3	mg/kg		5.6			0.00053 U	0.00055 U	0.0005 U	0.00051 U	0.00052 U	0.00047 U	0.00051 U	0.00051 U	0.00051 U	0.00052 U	0.00056 U	0.00051 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0012 U	0.0032 J	0.0011 U	0.0011 U	0.0011 U	0.0017 J	0.0011 U	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0011 U
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0014 U	0.0014 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0014 U	0.0015 U	0.0013 U
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.0011 U	0.0067	0.001 U	0.001 U	0.001 U	0.00094 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0019 U	0.002 U	0.0018 U	0.0018 U	0.0019 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U	0.0019 U	0.002 U	0.0019 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0015 U	0.0015 U	0.0014 U	0.0014 U	0.0014 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0016 U	0.0014 U
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.13 U	0.13 U	0.12 U	0.13 UJ	--	0.12 UJ	0.13 UJ	0.12 UJ	0.12 UJ	0.12 UJ	--	0.12 UJ
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0053 U	0.0055 U	0.005 U	0.0051 UJ	0.0052 U	0.0047 UJ	0.0051 UJ	0.0051 UJ	0.0051 UJ	0.0052 UJ	0.0056 UJ	0.0051 UJ
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051		0.00064 U	0.00067 U	0.00061 U	0.00062 U	0.00063 U	0.00057 U	0.00062 U	0.00062 U	0.00062 U	0.00064 U	0.00069 U	0.00063 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0019 U	0.002 U	0.0018 U	0.0018 U	0.0019 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U	0.0019 U	0.002 U	0.0019 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.00081 U	0.00084 U	0.00077 U	0.00079 U	0.0008 U	0.00072 U	0.00079 U	0.00078 U	0.00078 U	0.00081 U	0.00087 U	0.00079 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.028 U	0.025 U	0.026 U	0.011 U	0.012 U	0.015 U	0.0076 U	0.016 U	0.016 U	0.0096 U	0.008 U	0.019 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.0056 J	0.0056 U	0.0065 J	0.0076 J	0.0053 U	0.0048 U	0.0052 U	0.0052 U	0.0052 U	0.0053 U	0.0058 U	0.0052 U
Carbazole	86-74-8	mg/kg	79				0.00077 U	0.0027 J	0.00073 U	0.00075 U	0.00076 U	0.0025 J	0.00075 U	0.00074 U	0.00074 U	0.00076 U	0.00082 U	0.00075 U
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0014 U	0.006 J	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0014 U	0.0015 U	0.0013 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0013 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U	0.0011 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0014 U	0.0012 U
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.00062 U	0.0078 J	0.00059 U	0.0006 U	0.00074 J	0.053	0.0037 J	0.006 J	0.0006 U	0.00062 U	0.00067 U	0.00061 U
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.0023 U	0.0024 U	0.0022 U	0.0022 U	0.0094 U	0.0021 U	0.0022 U	0.0022 U	0.0022 U	0.0023 U	0.0025 U	0.0023 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00053 U	0.00055 U	0.0005 U	0.00051 U	0.00052 U	0.00047 U	0.00051 U	0.00051 U	0.00051 U	0.00052 U	0.00056 U	0.00051 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.0071 U	0.0086 U	0.0061 U	0.0028 U	0.0028 U	0.0027 U	0.0028 U	0.0027 U	0.0027 U	0.0028 U	0.0031 U	0.0028 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0013 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U	0.0011 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0014 U	0.0012 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0013 U	0.0076	0.0013 J	0.0012 U	0.0022 J	0.0028 J	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0014 U	0.0012 U
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.00053 U	0.00055 U	0.0005 U	0.00051 U	0.00052 U	0.00047 U	0.00051 U	0.00051 U	0.00051 U	0.00052 U	0.00056 U	0.00051 U
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0017 U	0.0015 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0017 U	0.0015 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.00081 U	0.00084 U	0.00077 U	0.00079 U	0.0008 U	0.00072 U	0.00079 U	0.00078 U	0.00078 U	0.00081 U	0.00087 U	0.00079 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.00045 U	0.00047 U	0.00043 U	0.00044 U	0.00045 U	0.0004 U	0.00044 U	0.00044 U	0.00044 U	0.00045 U	0.00049 U	0.00044 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.0013 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U	0.0011 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0014 U	0.0012 U
Isophorone	78-59-1	mg/kg		570			0.00089 U	0.00092 U	0.00084 U	0.00086 U	0.00087 U	0.00079 U	0.00086 U	0.00085 U	0.00085 U	0.00088 U	0.00095 U	0.00086 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.00053 U	0.011	0.0019 J	0.00051 U	0.0015 J	0.077	0.0058	0.0089	0.00051 U	0.00052 U	0.00056 U	0.00051 U

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-04	C1DP-05	C1DP-05	C1DP-05	C1DP-05	C1DP-06	C1DP-06	C1DP-06	C1DP-06	C1DP-06	C1DP-07	C1DP-07
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
Depth Interval						2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 4.5	4.5 - 6	0 - 0.5	1 - 1.5	
Sample Type						N	N	N	N	N	N	N	N	FD	N	N	N	N
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.0021 U	0.0022 U	0.002 U	0.002 U	0.0021 U	0.0019 U	0.002 U	0.002 U	0.002 U	0.0021 U	0.0023 U	0.0021 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.0023 U	0.0024 U	0.0022 U	0.0022 U	0.0023 U	0.0021 U	0.0022 U	0.0022 U	0.0022 U	0.0023 U	0.0025 U	0.0023 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.00085 U	0.00088 U	0.0008 U	0.00082 U	0.00083 U	0.00075 U	0.00082 U	0.00081 U	0.00081 U	0.00084 U	0.0009 U	0.00082 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		0.0067 U	0.0069 U	0.0063 U	0.0064 UJ	0.0065 U	0.0059 U	0.0064 UJ	0.0064 UJ	0.0064 U	0.0066 U	0.0071 U	0.0065 UJ
Phenanthrene	85-01-8	mg/kg	5.5		11		0.00061 U	0.0092	0.0018 J	0.00059 U	0.0016 J	0.018	0.0016 J	0.0021 J	0.00059 U	0.00061 U	0.00066 U	0.0006 U
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.0024 U	0.0045 J	0.0023 U	0.0023 U	0.0024 U	0.0022 U	0.0024 U	0.0023 U	0.0023 U	0.0024 U	0.0026 U	0.0024 U
Pyrene	129-00-0	mg/kg	10	1800	45		0.0014 U	0.006 J	0.0013 J	0.0013 U	0.0017 J	0.0021 J	0.0013 U	0.0013 U	0.0013 U	0.0014 U	0.0015 U	0.0013 U
Pyridine	110-86-1	mg/kg		58			0.017 U	0.017 U	0.016 U	0.016 U	0.016 U	0.015 U	0.016 U	0.016 U	0.016 U	0.017 U	0.018 U	0.016 U
SW8290																		
1,2,3,4,6,7,8-HpCDD	35822-46-9	mg/kg	2.9E-05	0.00048			2.3E-06 J	0.00035	0.0002	3.2E-06 J	--	0.00013	1.4E-05	1.5E-05	6.6E-07 U	3.4E-07 UJ	1.4E-05	4.3E-06 J
1,2,3,4,6,7,8-HpCDF	67562-39-4	mg/kg	2.9E-05	0.00048			2.3E-07 U	4.3E-05	2.6E-05	5E-07 U	--	6.2E-06	8E-07 U	1.2E-06 J	3.2E-07 UJ	1.6E-07 U	2.8E-06 J	5.9E-07 U
1,2,3,4,7,8,9-HpCDF	55673-89-7	mg/kg	2.9E-05	0.00048			1.2E-07 UJ	3.9E-06 J	2.1E-06 J	1.8E-07 UJ	--	1.3E-06 U	4.7E-08 U	2.2E-07 UJ	3.9E-08 U	1.2E-07 U	1E-07 U	3.7E-07 U
1,2,3,4,7,8-HxCDD	39227-28-6	mg/kg	2.9E-06	4.8E-05			3.7E-08 U	3E-06 J	1E-06 J	5.9E-08 U	--	5E-06 J	6.5E-07 UJ	7.5E-07 J	3.4E-08 U	4.1E-08 U	2E-07 J	2.9E-07 J
1,2,3,4,7,8-HxCDF	70648-26-9	mg/kg	2.9E-06	4.8E-05			4.8E-08 U	1.9E-06 J	8.8E-07 J	6.2E-08 U	--	2.3E-06 J	1.5E-07 J	3.7E-07 UJ	1.2E-07 UJ	3.6E-08 U	6.3E-08 U	1.8E-07 UJ
1,2,3,6,7,8-HxCDD	57653-85-7	mg/kg	2.9E-06	4.8E-05			3.6E-08 U	1.1E-05	5.2E-06	5.7E-08 U	--	1.1E-05	1.2E-06 J	1.5E-06 J	3.3E-08 U	3.9E-08 U	4.2E-07 UJ	2.1E-07 J
1,2,3,6,7,8-HxCDF	57117-44-9	mg/kg	2.9E-06	4.8E-05			4.3E-08 U	1.2E-06 UJ	5E-07 UJ	5.6E-08 U	--	1.4E-06 J	1.3E-07 UJ	2.1E-07 J	2.7E-08 U	3.2E-08 U	1.4E-07 J	1.9E-07 UJ
1,2,3,7,8,9-HxCDD	19408-74-3	mg/kg	2.9E-06	4.8E-05			3.3E-08 U	8.5E-06	2.8E-06 J	5.3E-08 U	--	1.3E-05	1.8E-06 J	1.9E-06 J	3.1E-08 U	3.7E-08 U	2.5E-07 U	4.5E-08 U
1,2,3,7,8,9-HxCDF	72918-21-9	mg/kg	2.9E-06	4.8E-05			4.2E-07 U	4E-07 U	3E-07 U	4E-07 U	--	4.3E-07 U	3.5E-07 U	4.1E-07 U	3.5E-07 UJ	2.2E-07 UJ	5.5E-07 U	4.1E-07 U
1,2,3,7,8-PeCDD	40321-76-4	mg/kg	2.9E-07	4.8E-06			7.9E-08 U	2.7E-07 U	1.3E-07 U	8.4E-08 U	--	6.3E-06	5.8E-07 J	1.2E-07 U	5.1E-08 U	7.3E-08 U	8.8E-08 U	7.5E-08 U
1,2,3,7,8-PeCDF	57117-41-6	mg/kg	9.7E-06	0.00016			5E-08 U	1E-07 U	7.7E-08 U	6.2E-08 U	--	5.7E-07 J	4.8E-08 U	3.8E-08 U	5.6E-08 U	7E-08 U	6.9E-08 U	4.9E-08 U
2,3,4,6,7,8-HxCDF	60851-34-5	mg/kg	2.9E-06	4.8E-05			4.7E-08 U	8.5E-07 J	1.7E-07 U	6E-08 U	--	1.3E-06 UJ	1E-07 UJ	1.3E-07 J	2.9E-08 U	3.5E-08 U	6.1E-08 U	4.8E-08 U
2,3,4,7,8-PeCDF	57117-31-4	mg/kg	9.7E-07	1.6E-05			5.1E-08 U	1.1E-07 U	7.8E-08 U	6.3E-08 U	--	7.2E-07 J	4.9E-08 U	3.9E-08 U	5.7E-08 U	7.1E-08 U	7E-08 U	4.9E-08 U
2,3,7,8-TCDD	1746-01-6	mg/kg	2.9E-07	4.8E-06	0.3		7.9E-08 U	1.1E-07 U	8.4E-08 U	7.6E-08 U	--	3.6E-06	1.1E-07 U	8.5E-08 U	5.8E-08 U	8E-08 U	9.9E-08 U	7.3E-08 U
2,3,7,8-TCDF	51207-31-9	mg/kg	2.9E-06	4.8E-05			4.6E-08 U	6.5E-08 U	4.4E-08 U	3.6E-08 U	--	3.5E-07 U	3.9E-08 U	3.3E-08 U	3.8E-08 U	4.4E-08 U	6.1E-08 U	5E-08 U
OCDD	3268-87-9	mg/kg	0.00097	0.016			1.3E-05	0.0022	0.0012	1.8E-05	--	0.00034	4.6E-05	4.6E-05	8.1E-06 J	3.4E-06 J	8.8E-05	2.3E-05
OCDF	39001-02-0	mg/kg	0.00097	0.016			8E-07 UJ	0.00022	0.00015	2E-06 J	--	1.5E-05	2.2E-06 J	2.9E-06 J	8E-07 U	4.9E-07 UJ	1.1E-05 J	2.3E-06 J

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-07	C1DP-08	C1DP-08	C1DP-08	C1DP-09	C1DP-09	C1DP-09	C1DP-10	C1DP-10	C1DP-10	C1DP-11	C1DP-11	C1DP-11
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
CALC																			
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	mg/kg					8E-10	3.24E-08	2.69E-08	3.5E-09	1.13E-08	1.2544E-06	8E-10	1.97E-08	1.4E-09	1.08E-08	5.4E-09	1.26E-08	2.2E-09
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	mg/kg					2.5E-09	1.908E-07	1.542E-07	2.59E-08	8.14E-08	1.3465E-06	2.3E-09	2.31E-08	4.2E-09	2.23E-08	3.45E-08	2.73E-08	6.6E-09
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
SW6010B																			
Boron	7440-42-8	mg/kg	2	16000			2 U	1.9 U	2 U	2.2 U	2.2 U	3 U	2.6 U	2 U	2.1 U	2.2 U	2 U	2.1 U	2 U
SW6020																			
Antimony	7440-36-0	mg/kg	0.67	31			0.031 U	0.029 U	0.031 U	0.035 U	0.03 U	0.032 U	0.033 U	0.027 U	0.033 U	0.034 U	0.031 U	0.033 U	0.031 U
Arsenic	7440-38-2	mg/kg	19	19			0.12 J	0.24	0.18 J	0.17 J	0.16 J	0.16 J	0.18 J	0.096 J	0.091 J	0.052 J	0.14 J	0.074 J	0.078 J
Barium	7440-39-3	mg/kg	630	15000			8.6	23	19	19	16	16	11	15	15	11	14	10	9.9
Beryllium	7440-41-7	mg/kg	2.5	16			0.072 J	0.12	0.12	0.1	0.13	0.09 J	0.081 J	0.074 J	0.059 J	0.051 J	0.074 J	0.059 J	0.054 J
Cadmium	7440-43-9	mg/kg	0.54	71			0.035 U	0.055 J	0.049 J	0.046 J	0.034 U	0.06 J	0.06 J	0.031 J	0.037 U	0.038 U	0.035 U	0.037 U	0.035 U
Chromium	7440-47-3	mg/kg	200	120000			7.9	17	13	13	10	11	8.2	12	13	12	9.7	7.8	8.3
Cobalt	7440-48-4	mg/kg	13	23			7.7	11	9.9	10	9	8.7	8	9.5	11	10	8.4	8.2	8.1
Copper	7440-50-8	mg/kg	73	3100			54	55	47	49	40	36	39	49	63	60	52	54	56
Iron	7439-89-6	mg/kg		55000			6900	15000	10000	11000	9300	8400	7400	9300	11000	9600	8500	7400	7800
Lead	7439-92-1	mg/kg	34	80			0.29	0.73	0.54	0.72	0.49	0.49	0.42	0.43	0.39	0.34	0.52	0.37	0.36
Manganese	7439-96-5	mg/kg	2100	2100			180	270	230	230	180 J	170	170	210	250	220	200	180	190
Molybdenum	7439-98-7	mg/kg	2	390			0.14 U	0.11 U	0.14 U	0.098 U	0.3 U	0.35 U	0.7 U	0.069 U	0.072 U	0.075 U	0.077 U	0.064 U	0.066 U
Nickel	7440-02-0	mg/kg	110	820			27	38	37	38	30 J	30	30	34	40	36	32	31	32
Selenium	7782-49-2	mg/kg	0.52	390			0.27 J	0.61	0.49 J	0.51 J	0.3 J	0.33 J	0.33 J	0.33 J	0.39 J	0.33 J	0.38 J	0.27 J	0.34 J
Silver	7440-22-4	mg/kg	4.2	390			0.011 J	0.014 J	0.01 J	0.012 J	0.0098 J	0.015 J	0.01 J	0.0078 U	0.013 J	0.0099 U	0.009 U	0.0096 U	0.0091 U
Thallium	7440-28-0	mg/kg	2.8	2.8			0.025 U	0.046 J	0.038 J	0.032 J	0.025 U	0.026 U	0.027 U	0.021 U	0.027 U	0.027 U	0.025 U	0.027 U	0.025 U
Vanadium	7440-62-2	mg/kg	280	390			24	35	30	31	27 J	24	20	23	27	23	22	18	20
Zinc	7440-66-6	mg/kg	170	23000			12	17	14	15	12	13	11	13	15	13	14	13	14
SW7471A																			
Mercury	7439-97-6	mg/kg	0.24	1			0.011 J	0.0084 U	0.0094 U	0.0091 U	0.0076 U	0.0071 U	0.0079 U	0.0077 U	0.0096 U	0.0091 U	0.0082 U	0.0092 U	0.0084 U
SW8011																			
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		6.5E-05 U	6.5E-05 U	6E-05 U	6.4E-05 U	6.6E-05 U	--	6.7E-05 U	6.7E-05 U	6.6E-05 U	6.7E-05 U	5.7E-05 U	6.7E-05 U	6.6E-05 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		9.9E-06 U	9.9E-06 U	9.1E-06 U	9.8E-06 U	9.9E-06 U	--	1E-05 U	1E-05 U	1E-05 U	1E-05 U	8.7E-06 U	1E-05 U	1E-05 U
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		1.2E-05 U	1.2E-05 U	1.1E-05 U	1.2E-05 U	1.2E-05 U	--	1.2E-05 U	1.2E-05 U	1.2E-05 U	1.2E-05 U	1E-05 U	1.2E-05 U	1.2E-05 U
SW8260B																			
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017		0.00075 U	0.00071 U	0.00077 UJ	0.00077 U	0.0005 UJ	0.00038 U	0.0013 U	0.00085 U	0.00077 U	0.00079 U	0.00044 U	0.00062 U	0.00053 U
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7		0.00038 U	0.00036 U	0.00039 UJ	0.00039 U	0.00025 UJ	0.0002 U	0.00067 U	0.00043 U	0.00039 U	0.0004 U	0.00023 U	0.00032 U	0.00027 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018		0.0011 U	0.0011 U	0.0012 UJ	0.0012 U	0.00076 UJ	0.00059 U	0.002 U	0.0013 U	0.0012 U	0.0012 U	0.00068 U	0.00095 U	0.00081 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700			0.00066 U	0.00062 U	0.00068 UJ	0.00068 U	0.00044 UJ	0.00034 U	0.0012 U	0.00075 U	0.00068 U	0.0007 U	0.00039 U	0.00055 U	0.00047 U
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076		0.00032 U	0.0003 U	0.00033 UJ	0.00032 U	0.00021 UJ	0.00016 U	0.00056 U	0.00036 U	0.00033 U	0.00033 U	0.00019 U	0.00026 U	0.00022 U
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2		0.00024 U	0.00023 U	0.00025 UJ	0.00025 U	0.00016 UJ	0.00012 U	0.00043 U	0.00028 U	0.00025 U	0.00025 U	0.00014 U	0.0002 U	0.00017 U
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54		0.0014 U	0.0013 U	0.0014 UJ	0.0014 U	0.00092 UJ	0.00072 U	0.0025 U	0.0016 U	0.0014 U	0.0015 U	0.00083 U	0.0012 U	0.00099 U
1,1-Dichloropropene	563-58-6	mg/kg					0.00038 U	0.00036 U	0.00039 UJ	0.00039 U	0.00025 UJ	0.0002 U	0.00067 U	0.00043 U	0.00039 U	0.0004 U	0.00023 U	0.00032 U	0.00027 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40			0.00076 U	0.00072 U	0.00079 UJ	0.00078 U	0.0005 UJ	0.00039 U	0.0013 U	0.00087 U	0.00078 U	0.0008 U	0.00045 U	0.00063 U	0.00054 U
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		0.0013 U	0.0012 U	0.0013 UJ	0.0013 U	0.00084 UJ	0.00065 U	0.0022 U	0.0014 U	0.0013 U	0.0013 U	0.00075 U	0.0011 U	0.0009 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00053 U	0.0005 U	0.00055 UJ	0.00055 U	0.00035 UJ	0.00027 U	0.00094 U	0.00061 U	0.00055 U	0.00056 U	0.00032 U	0.00044 U	0.00038 U
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300			0.0015 U	0.0014 U	0.0016 UJ	0.0016 U	0.001 UJ	0.00078 U	0.0027 U	0.0017 U	0.0016 U	0.0016 U	0.0009 U	0.0013 U	0.0011 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		0.002 U	0.0019 U	0.0021 UJ	0.0021 U	0.0013 UJ	0.001 U	0.0036 U	0.0023 U	0.0021 U	0.0021 U	0.0012 U	0.0017 U	0.0014 U
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		0.00025 U	0.00024 U	0.00026 UJ	0.00026 U	0.00017 UJ	0.00013 U	0.00045 U	0.00029 U	0.00026 U	0.00027 U	0.00015 U	0.00021 U	0.00018 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0017 U	0.0016 U	0.0017 UJ	0.0017 U	0.0011 UJ	0.00085 U	0.0029 U	0.0019 U	0.0017 U	0.0017 U	0.00098 U	0.0014 U	0.0012 U
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.00025 U	0.00024 U	0.00026 UJ	0.00026 U	0.00017 UJ	0.00013 U	0.00045 U	0.00029 U	0.00026 U	0.00027 U	0.00015 U	0.00021 U	0.00018 U
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.00051 U	0.00048 U	0.00052 UJ	0.00052 U	0.00034 UJ	0.00026 U	0.0009 U	0.00058 U	0.00052 U	0.00054 U	0.0003 U	0.00042 U	0.00036 U
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.001 U	0.00097 U	0.0011 UJ	0.0011 U	0.00068 UJ	0.00053 U	0.0018 U	0.0012 U	0.0011 U	0.0011 U	0.00061 U	0.00085 U	0.00073 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0014 U	0.0013 U	0.0014 UJ	0.0014 U	0.00092 UJ	0.00072 U	0.0025 U	0.0016 U	0.0014 U	0.0015 U	0.00083 U	0.0012 U	0.00099 U
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00029 U	0.00028 U	0.0003 UJ	0.0003 U	0.00019 UJ	0.00015 U	0.00052 U	0.00033 U	0.0003 U	0.00031 U	0.00017 U	0.00024 U	0.00021 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0012 U	0.0012 U	0.0013 UJ	0.0013 U	0.00082 UJ	0.00064 U	0.0022 U	0.0014 U	0.0013 U	0.0013 U	0.00074 U	0.001 U	0.00088 U
2,2-Dichloropropane	594-20-7	mg/kg					0.00042 U	0.0004 U	0.00043 UJ	0.00043 U	0.00028 UJ	0.00022 U	0.00074 U	0.00048 U	0.00043 U	0.00044 U	0.00025 U	0.00035 U	0.0003 U

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-07	C1DP-08	C1DP-08	C1DP-08	C1DP-09	C1DP-09	C1DP-09	C1DP-10	C1DP-10	C1DP-10	C1DP-11	C1DP-11	C1DP-11
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.011 U	0.011 U	0.012 UJ	0.012 U	0.0075 UJ	0.0058 U	0.02 U	0.013 U	0.012 U	0.012 U	0.0067 U	0.0094 U	0.008 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.0012 U	0.0011 U	0.0012 UJ	0.0012 U	0.00078 UJ	0.00061 U	0.0021 U	0.0013 U	0.0012 U	0.0012 U	0.0007 U	0.00098 U	0.00084 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.005 U	0.0047 U	0.0051 UJ	0.0051 U	0.0033 UJ	0.0025 U	0.0088 U	0.0056 U	0.0051 U	0.0052 U	0.0029 U	0.0041 U	0.0035 U
4-Chlorotoluene	106-43-4	mg/kg		440			0.0013 U	0.0012 U	0.0013 UJ	0.0013 U	0.00084 UJ	0.00065 U	0.0022 U	0.0014 U	0.0013 U	0.0013 U	0.00075 U	0.0011 U	0.0009 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.0076 U	0.0072 U	0.0079 UJ	0.0078 U	0.005 UJ	0.0039 U	0.013 U	0.0087 U	0.0078 U	0.008 U	0.0045 U	0.0063 U	0.0054 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.011 U	0.01 U	0.011 J	0.011 U	0.0073 UJ	0.0056 U	0.019 U	0.056 J	0.06 J	0.027 J	0.0065 U	0.0091 U	0.0078 U
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.0005 U	0.00047 U	0.00051 UJ	0.00051 U	0.00033 UJ	0.00025 U	0.00088 U	0.00056 U	0.00051 U	0.00052 U	0.00029 U	0.00041 U	0.00035 U
Bromobenzene	108-86-1	mg/kg		290			0.0013 U	0.0012 U	0.0013 UJ	0.0013 U	0.00084 UJ	0.00065 U	0.0022 U	0.0014 U	0.0013 U	0.0013 U	0.00075 U	0.0011 U	0.0009 U
Bromochloromethane	74-97-5	mg/kg		150			0.00032 U	0.0003 U	0.00033 UJ	0.00032 U	0.00021 UJ	0.00016 U	0.00056 U	0.00036 U	0.00033 U	0.00033 U	0.00019 U	0.00026 U	0.00022 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00023 U	0.00022 U	0.00024 UJ	0.00023 U	0.00015 UJ	0.00012 U	0.0004 U	0.00026 U	0.00023 U	0.00024 U	0.00014 U	0.00019 U	0.00016 U
Bromoform	75-25-2	mg/kg		19	0.69		0.0011 U	0.001 U	0.0011 UJ	0.0011 U	0.00071 UJ	0.00055 U	0.0019 U	0.0012 U	0.0011 U	0.0011 U	0.00063 U	0.00088 U	0.00075 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00027 U	0.00025 U	0.00028 UJ	0.00027 U	0.00018 UJ	0.00014 U	0.00047 U	0.0003 U	0.00027 U	0.00028 U	0.00016 U	0.00022 U	0.00019 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00025 U	0.00024 U	0.00026 UJ	0.00026 U	0.00017 UJ	0.00013 U	0.00045 U	0.00029 U	0.00026 U	0.00027 U	0.00015 U	0.00021 U	0.00018 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.00038 U	0.00036 U	0.00039 UJ	0.00039 U	0.00025 UJ	0.0002 U	0.00067 U	0.00043 U	0.00039 U	0.0004 U	0.00023 U	0.00032 U	0.00027 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.00032 U	0.0003 U	0.00033 UJ	0.00032 U	0.00021 UJ	0.00016 U	0.00056 U	0.00036 U	0.00033 U	0.00033 U	0.00019 U	0.00026 U	0.00022 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00034 U	0.00032 U	0.00035 UJ	0.00035 U	0.00023 UJ	0.00018 U	0.00061 U	0.00039 U	0.00035 U	0.00036 U	0.0002 U	0.00028 U	0.00024 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.00095 U	0.0009 U	0.00098 UJ	0.00097 U	0.00063 UJ	0.00049 U	0.0017 U	0.0011 U	0.00098 U	0.001 U	0.00056 U	0.00079 U	0.00067 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.00038 U	0.00036 U	0.00039 UJ	0.00039 U	0.00025 UJ	0.0002 U	0.00067 U	0.00043 U	0.00039 U	0.0004 U	0.00023 U	0.00032 U	0.00027 U
Chloromethane	74-87-3	mg/kg		110	11		0.0012 U	0.0011 U	0.0012 UJ	0.0012 U	0.00078 UJ	0.00061 U	0.0021 U	0.0013 U	0.0012 U	0.0012 U	0.0007 U	0.00098 U	0.00084 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.00076 U	0.00072 U	0.00079 UJ	0.00078 U	0.0005 UJ	0.00039 U	0.0013 U	0.00087 U	0.00078 U	0.0008 U	0.00045 U	0.00063 U	0.00054 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00025 U	0.00024 U	0.00026 UJ	0.00026 U	0.00017 UJ	0.00013 U	0.00045 U	0.00029 U	0.00026 U	0.00027 U	0.00015 U	0.00021 U	0.00018 U
Dibromomethane	74-95-3	mg/kg		24			0.00022 U	0.0002 U	0.00022 UJ	0.00022 U	0.00014 UJ	0.00011 U	0.00038 U	0.00025 U	0.00022 U	0.00023 U	0.00013 U	0.00018 U	0.00015 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00062 UJ	0.00059 UJ	0.00064 UJ	0.00064 UJ	0.00041 UJ	0.00032 UJ	0.0011 UJ	0.00071 UJ	0.00064 U	0.00066 U	0.00037 U	0.00052 U	0.00044 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.013 UJ	0.012 UJ	0.013 UJ	0.013 UJ	0.0083 UJ	0.0065 UJ	0.022 UJ	0.014 UJ	0.013 U	0.013 U	0.0074 U	0.01 U	0.0089 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00052 U	0.00049 U	0.00054 UJ	0.00053 U	0.00034 UJ	0.00027 U	0.00092 U	0.00059 U	0.00053 U	0.00055 U	0.00031 U	0.00043 U	0.00037 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.00076 U	0.00072 U	0.00079 UJ	0.00078 U	0.0005 UJ	0.00039 U	0.0013 U	0.00087 U	0.00078 U	0.0008 U	0.00045 U	0.00063 U	0.00054 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00059 U	0.00055 U	0.0006 UJ	0.0006 U	0.00039 UJ	0.0003 U	0.001 U	0.00067 U	0.0006 U	0.00062 U	0.00035 U	0.00048 U	0.00041 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.00038 U	0.00036 U	0.00039 UJ	0.00039 U	0.00025 UJ	0.0002 U	0.00067 U	0.00043 U	0.00039 U	0.0004 U	0.00023 U	0.00032 U	0.00027 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0023 U	0.0022 U	0.0024 UJ	0.0023 U	0.0015 UJ	0.0012 U	0.004 U	0.0026 U	0.0023 U	0.0024 U	0.0014 U	0.0019 U	0.0016 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.0008 U	0.00076 U	0.00083 UJ	0.00082 U	0.00053 UJ	0.00041 U	0.0014 U	0.00091 U	0.00082 U	0.00084 U	0.00047 U	0.00066 U	0.00057 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.00097 U	0.00091 U	0.001 UJ	0.00099 U	0.00064 UJ	0.0005 U	0.0017 U	0.0011 U	0.00099 U	0.001 U	0.00057 U	0.0008 U	0.00068 U
p-Isopropyltoluene	99-87-6	mg/kg					0.00051 U	0.00048 U	0.00052 UJ	0.00052 U	0.00034 UJ	0.00026 U	0.0009 U	0.00058 U	0.00052 U	0.00054 U	0.0003 U	0.00042 U	0.00036 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.00085 U	0.0008 U	0.00088 UJ	0.00087 U	0.00056 UJ	0.00044 U	0.0015 U	0.00097 U	0.00087 U	0.0009 U	0.0005 U	0.00071 U	0.0006 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.00094 U	0.00089 U	0.00097 UJ	0.00096 U	0.00062 UJ	0.00048 U	0.0017 U	0.0011 U	0.00096 U	0.00099 U	0.00056 U	0.00078 U	0.00066 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00084 U	0.00079 U	0.00086 UJ	0.00086 U	0.00055 UJ	0.00043 U	0.0015 U	0.00096 U	0.00086 U	0.00088 U	0.0005 U	0.00069 U	0.00059 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00051 U	0.00048 U	0.00052 UJ	0.00052 U	0.00034 UJ	0.00026 U	0.0009 U	0.00058 U	0.00052 U	0.00054 U	0.0003 U	0.00042 U	0.00036 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0017 U	0.0016 U	0.0017 UJ	0.0017 U	0.0011 UJ	0.00085 U	0.0029 U	0.0019 U	0.0017 U	0.0017 U	0.00098 U	0.0014 U	0.0012 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00051 U	0.00048 U	0.00052 UJ	0.00052 U	0.00034 UJ	0.00026 U	0.0009 U	0.00058 U	0.00052 U	0.00054 U	0.0003 U	0.00042 U	0.00036 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.00076 U	0.00072 U	0.00079 UJ	0.00078 U	0.0005 UJ	0.00039 U	0.0013 U	0.00087 U	0.00078 U	0.0008 U	0.00045 U	0.00063 U	0.00054 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.00038 U	0.00036 U	0.00039 UJ	0.00039 U	0.00025 UJ	0.0002 U	0.00067 U	0.00043 U	0.00039 U	0.0004 U	0.00023 U	0.00032 U	0.00027 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.00038 U	0.00036 U	0.00039 UJ	0.00039 U	0.00025 UJ	0.0002 U	0.00067 U	0.00043 U	0.00039 U	0.0004 U	0.00023 U	0.00032 U	0.00027 U
Vinyl Acetate	108-05-4	mg/kg		910			0.0019 UJ	0.0018 UJ	0.002 UJ	0.0019 UJ	0.0013 UJ	0.00098 UJ	0.0034 UJ	0.0022 UJ	0.002 U	0.002 U	0.0011 U	0.0016 U	0.0013 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00038 U	0.00036 U	0.00039 UJ	0.00039 U	0.00025 UJ	0.0002 U	0.00067 U	0.00043 U	0.00039 U	0.0004 U	0.00023 U	0.00032 U	0.00027 U
Xylene, o	95-47-6	mg/kg	1.4	650			0.0012 U	0.0011 U	0.0012 UJ	0.0012 U	0.00077 UJ	0.0006 U	0.0021 U	0.0013 U	0.0012 U	0.0012 U	0.00069 U	0.00097 U	0.00083 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00071 U	0.00067 U	0.00073 UJ	0.00073 U	0.00047 UJ	0.00037 U	0.0013 U	0.00081 U	0.00073 U	0.00075 U	0.00042 U	0.00059 U	0.0005 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0012 U	0.0011 U	0.0012 UJ	0.0012 U	0.00077 UJ	0.0006 U	0.0021 U	0.0013 U	0.0012 U	0.0012 U	0.00069 U	0.00097 U	0.00083 U
SW8270C																			
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00058 U	0.00062 U	0.00062 U	0.00062 U	0.00059 U	0.00062 U	0.00062 U	0.00063 U	0.00065 U	0.00066 U	0.00059 U	0.00059 U	0.00062 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.00049 U	0.00051 U	0.00051 U	0.00052 U	0.00049 U	0.00052 U	0.00052 U	0.00052 U	0.00054 U	0.00055 U	0.00049 U	0.00049 U	0.00052 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.00047 U	0.00049 U	0.00049 U	0.00049 U	0.00047 U	0.0005 U	0.0005 U	0.0005 U	0.00052 U	0.00052 U	0.00047 U	0.00047 U	0.00049 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.00081 U	0.00085 U	0.00085 U	0.00086 U	0.00082 U	0.00086 U	0.00086 U	0.00087 U	0.0009 U	0.00091 U	0.00081 U	0.00	

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-07	C1DP-08	C1DP-08	C1DP-08	C1DP-09	C1DP-09	C1DP-09	C1DP-10	C1DP-10	C1DP-10	C1DP-11	C1DP-11	C1DP-11	
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.0027 UJ	0.0029 UJ	0.0029 UJ	0.0029 UJ	0.0028 UJ	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.003 U	0.0031 U	0.0027 U	0.0028 U	0.0029 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.0058 U	0.0062 U	0.0062 U	0.0062 U	0.0059 U	0.0062 U	0.0062 U	0.0063 U	0.0065 U	0.0066 U	0.0059 U	0.0059 U	0.0062 U	
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.057 U	0.06 U	0.06 U	0.06 U	0.057 U	0.06 U	0.06 U	0.061 U	0.063 U	0.064 U	0.057 U	0.058 U	0.06 U	
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.0042 U	0.0044 U	0.0044 U	0.0044 U	0.0042 U	0.0044 U	0.0044 U	0.0045 U	0.0046 U	0.0047 U	0.0042 U	0.0042 U	0.0044 U	
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0015 U	
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.00049 U	0.00051 U	0.00051 U	0.00052 U	0.00049 U	0.00052 U	0.00052 U	0.00052 U	0.00054 U	0.00055 U	0.00049 U	0.00049 U	0.00052 U	
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.00039 U	0.00041 U	0.00041 U	0.00041 U	0.00039 U	0.00041 U	0.00041 U	0.00042 U	0.00043 U	0.00044 U	0.00039 U	0.00039 U	0.00041 U	
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.00086 UJ	0.0009 UJ	0.00091 UJ	0.00091 UJ	0.00086 UJ	0.00091 U	0.00091 U	0.00092 U	0.00095 U	0.00096 U	0.00086 U	0.00087 U	0.00091 U	
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.00095 U	0.001 U	0.001 U	0.001 U	0.00096 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.0011 U	0.00096 U	0.00096 U	0.001 U	
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0015 U	
2-Nitrophenol	88-75-5	mg/kg					0.0006 U	0.00064 U	0.00064 U	0.00064 U	0.00061 U	0.00064 U	0.00064 U	0.00065 U	0.00067 U	0.00068 U	0.00061 U	0.00061 U	0.00064 U	
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0015 U	
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.0082 U	0.0086 U	0.0086 U	0.0087 U	0.0083 U	0.0087 U	0.0087 U	0.0088 U	0.0091 U	0.0092 U	0.0082 U	0.0083 U	0.0087 U	
3-Nitroaniline	99-09-2	mg/kg					0.0097 U	0.01 U	0.01 U	0.01 U	0.0098 U	0.01 U	0.01 U	0.01 U	0.011 U	0.011 U	0.0098 U	0.0098 U	0.01 U	
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.0097 U	0.01 U	0.01 U	0.01 U	0.0098 U	0.01 U	0.01 U	0.01 U	0.011 U	0.011 U	0.0098 U	0.0098 U	0.01 U	
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.00088 U	0.00093 U	0.00094 U	0.00094 U	0.00089 U	0.00094 U	0.00094 U	0.00095 U	0.00098 U	0.00099 U	0.00089 U	0.0009 U	0.00094 U	
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0032 U	0.0034 U	0.0034 U	0.0034 U	0.0044 J	0.0034 U	0.0034 U	0.0034 U	0.0036 U	0.0036 U	0.0032 U	0.0032 U	0.0034 U	
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.013 U	0.014 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U	0.014 U	0.014 U	0.015 U	0.013 U	0.013 U	0.014 U	
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.00061 U	0.00065 U	0.00065 U	0.00065 U	0.00062 U	0.00065 U	0.00065 U	0.00066 U	0.00068 U	0.00069 U	0.00062 U	0.00062 U	0.00065 U	
4-Nitroaniline	100-01-6	mg/kg		27			0.0049 U	0.0051 U	0.0051 U	0.0052 U	0.0049 U	0.0052 U	0.0052 U	0.0052 U	0.0054 U	0.0055 U	0.0049 U	0.0049 U	0.0052 U	
4-Nitrophenol	100-02-7	mg/kg					0.017 U	0.018 U	0.018 U	0.018 U	0.017 U	0.018 U	0.018 U	0.018 U	0.019 U	0.019 U	0.017 U	0.017 U	0.018 U	
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00045 U	0.00047 U	0.00047 U	0.00047 U	0.00045 U	0.00047 U	0.00048 U	0.00048 U	0.0005 U	0.0005 U	0.00045 U	0.00045 U	0.00047 U	
Acenaphthylene	208-96-8	mg/kg	120	6.4			0.00049 U	0.00051 U	0.00051 U	0.00052 U	0.00049 U	0.00052 U	0.00052 U	0.00052 U	0.00054 U	0.00055 U	0.00049 U	0.00049 U	0.00052 U	
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0016 U	0.0016 U	0.0016 U	
Azobenzene	103-33-3	mg/kg		5.6			0.00049 U	0.00051 U	0.00051 U	0.00052 U	0.00049 U	0.00052 U	0.00052 U	0.00052 U	0.00054 U	0.00055 U	0.00049 U	0.00049 U	0.00052 U	
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U	
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0013 U	0.0013 U	0.0013 U	
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.00097 U	0.001 U	0.001 U	0.001 U	0.00098 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.0011 U	0.00098 U	0.00098 U	0.001 U	
Benzo(g,h,i)perylene	191-24-2	mg/kg	25	27			0.0018 U	0.0018 U	0.0019 U	0.0019 U	0.0018 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.002 U	0.0018 U	0.0018 U	0.0019 U	
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0014 U	0.0014 U	0.0014 U	
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.13 UJ	0.13 UJ	0.13 UJ	0.12 UJ	--	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.12 U	0.13 U	
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0049 UJ	0.0051 UJ	0.0051 UJ	0.0052 UJ	0.0049 UJ	0.0052 UJ	0.0052 UJ	0.0052 UJ	0.0054 UJ	0.0055 UJ	0.0049 UJ	0.0049 UJ	0.0052 UJ	
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051		0.00059 U	0.00063 U	0.00063 U	0.00063 U	0.0006 U	0.00063 U	0.00063 U	0.00064 U	0.00066 U	0.00067 U	0.0006 U	0.0006 U	0.00063 U	
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0018 U	0.0018 U	0.0019 U	0.0019 U	0.0018 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.002 U	0.0018 U	0.0018 U	0.0019 U	
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.00075 U	0.00079 U	0.00079 U	0.00079 U	0.00076 U	0.00079 U	0.0008 U	0.0008 U	0.00083 U	0.00084 U	0.00075 U	0.00076 U	0.00079 U	
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.012 U	0.01 U	0.019 U	0.014 U	0.012 U	0.031 U	0.0073 U	0.0074 U	0.016 U	0.013 U	0.0069 U	0.0083 U	0.014 U	
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.005 U	0.0052 U	0.0053 U	0.0053 U	0.005 U	0.0053 U	0.0053 U	0.0053 U	0.012 U	0.0056 U	0.005 U	0.0052 U	0.0053 U	
Carbazole	86-74-8	mg/kg	79				0.00071 U	0.00075 U	0.00075 U	0.00075 U	0.00072 U	0.00075 U	0.00075 U	0.00076 U	0.00079 U	0.0008 U	0.00071 U	0.00072 U	0.00075 U	
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0013 U	0.0013 U	0.0013 U	
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U	
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.00057 U	0.00061 U	0.00061 U	0.00061 U	0.00058 U	0.00061 U	0.00061 U	0.00062 U	0.00064 U	0.00065 U	0.00058 U	0.00058 U	0.00061 U	
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.0021 U	0.0023 U	0.0023 U	0.0023 U	0.0022 U	0.0023 U	0.0023 U	0.0023 U	0.0024 U	0.0024 U	0.0021 U	0.0022 U	0.0023 U	
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00049 U	0.00051 U	0.00051 U	0.00052 U	0.00049 U	0.00052 U	0.00052 U	0.00052 U	0.00054 U	0.00055 U	0.00049 U	0.00049 U	0.00052 U	
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.0026 U	0.0028 U	0.0028 U	0.0028 U	0.0027 U	0.0028 U	0.0028 U	0.0028 U	0.0029 U	0.003 U	0.0026 U	0.0027 U	0.0028 U	
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U	
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0012 U	0.0012 U	
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.00049 U	0.00051 U	0.00051 U	0.00052 U	0.00049 U	0.00052 U	0.00052 U	0.00052 U	0.00054 U	0.00055 U	0.00049 U	0.00049 U	0.00052 U	
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0015 U	
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0015 U	
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.00075 U	0.00079 U	0.00079 U	0.00079 U	0.00076 U	0.00079 U	0.0008 U	0.0008 U	0.00083 U	0.00084 U	0.00075 U	0.00076 U	0.00079 U	
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.00042 U	0.00044 U	0.00044 U	0.00044 U	0.00042 U	0.00044 U	0.00044 U	0.00045 U	0.00046 U	0.00047 U	0.00042 U	0.00042 U	0.00044 U	
Indeno(1,2,3-cd																				

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-07	C1DP-08	C1DP-08	C1DP-08	C1DP-09	C1DP-09	C1DP-09	C1DP-10	C1DP-10	C1DP-10	C1DP-11	C1DP-11	C1DP-11
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.0019 U	0.0021 U	0.0021 U	0.0021 U	0.002 U	0.0021 U	0.0021 U	0.0021 U	0.0022 U	0.0022 U	0.002 U	0.002 U	0.0021 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.0021 U	0.0023 U	0.0023 U	0.0023 U	0.0022 U	0.0023 U	0.0023 U	0.0023 U	0.0024 U	0.0024 U	0.0021 U	0.0022 U	0.0023 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.00078 U	0.00082 U	0.00082 U	0.00082 U	0.00079 U	0.00083 U	0.00083 U	0.00083 U	0.00086 U	0.00087 U	0.00078 U	0.00079 U	0.00082 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		0.0061 U	0.0065 U	0.0065 U	0.0065 U	0.0062 U	0.0065 U	0.0065 U	0.0066 U	0.0068 U	0.0069 U	0.0062 U	0.0062 U	0.0065 U
Phenanthrene	85-01-8	mg/kg	5.5		11		0.00056 U	0.0006 U	0.0006 U	0.0006 U	0.00057 U	0.0006 U	0.0006 U	0.00061 U	0.00063 U	0.00063 U	0.00057 U	0.00057 U	0.0006 U
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.0022 U	0.0024 U	0.0024 U	0.0024 U	0.0023 U	0.0024 U	0.0024 U	0.0024 U	0.0025 U	0.0025 U	0.0022 U	0.0023 U	0.0024 U
Pyrene	129-00-0	mg/kg	10	1800	45		0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0013 U	0.0013 U	0.0013 U
Pyridine	110-86-1	mg/kg		58			0.015 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.017 U	0.017 U	0.015 U	0.016 U	0.016 U
SW8290																			
1,2,3,4,6,7,8-HpCDD	35822-46-9	mg/kg	2.9E-05	0.00048			1.2E-06 U	1.1E-05	9E-06	2.2E-06 J	6.8E-06	5.4E-06	1E-06 UJ	1.9E-06 U	1.4E-06 U	1.2E-06 U	2.6E-06 J	1.7E-06 UJ	1.8E-06 U
1,2,3,4,6,7,8-HpCDF	67562-39-4	mg/kg	2.9E-05	0.00048			4E-07 U	6.4E-07 U	3.9E-07 U	3.4E-07 U	1.1E-06 U	8.9E-07 U	3E-07 UJ	5.9E-07 U	3.4E-07 U	3.2E-07 U	1E-06 U	6E-07 U	5.4E-07 U
1,2,3,4,7,8,9-HpCDF	55673-89-7	mg/kg	2.9E-05	0.00048			1.9E-07 U	8.1E-08 U	6.3E-08 U	2E-07 UJ	6E-08 U	3.3E-07 U	2.3E-07 U	3.7E-07 U	2.4E-07 U	2.3E-07 U	2.1E-07 U	2.4E-07 U	1.7E-07 U
1,2,3,4,7,8-HxCDD	39227-28-6	mg/kg	2.9E-06	4.8E-05			4.3E-08 U	2.4E-07 J	2.1E-07 J	4.9E-08 U	6.1E-08 U	2.4E-07 J	3.8E-08 U	2.2E-07 UJ	2.5E-07 UJ	2E-07 J	1.6E-07 UJ	2.1E-07 J	4.7E-08 U
1,2,3,4,7,8-HxCDF	70648-26-9	mg/kg	2.9E-06	4.8E-05			4.6E-08 U	5.3E-08 U	3.9E-08 U	4.8E-08 U	5.4E-08 U	1.6E-07 J	3.6E-08 U	2.4E-07 U	1.6E-07 U	4.1E-08 U	1.9E-07 UJ	4E-08 U	1.9E-07 UJ
1,2,3,6,7,8-HxCDD	57653-85-7	mg/kg	2.9E-06	4.8E-05			4.1E-08 U	4.1E-07 J	3E-07 J	4.7E-08 U	5.8E-08 U	2.8E-07 J	3.7E-08 U	2.1E-07 UJ	3.4E-08 U	6.3E-08 U	4.5E-08 U	3.6E-08 U	4.5E-08 U
1,2,3,6,7,8-HxCDF	57117-44-9	mg/kg	2.9E-06	4.8E-05			4.2E-08 U	4.7E-08 U	3.5E-08 U	4.3E-08 U	4.9E-08 U	1.5E-07 J	3.2E-08 U	1.7E-07 U	1.3E-07 U	1.3E-07 U	3.7E-08 U	1.2E-07 UJ	1.2E-07 UJ
1,2,3,7,8,9-HxCDD	19408-74-3	mg/kg	2.9E-06	4.8E-05			3.8E-08 U	4.3E-08 U	5.4E-08 U	4.4E-08 U	5.4E-08 U	3.2E-08 U	3.4E-08 U	5.9E-08 U	3.2E-08 U	5.9E-08 U	1.7E-07 U	3.3E-08 U	4.2E-08 U
1,2,3,7,8,9-HxCDF	72918-21-9	mg/kg	2.9E-06	4.8E-05			3.4E-07 U	4.2E-07 U	4E-07 UJ	3.8E-07 U	3.7E-07 U	4.3E-07 U	3.6E-08 U	6.3E-07 U	4.6E-07 U	3.8E-07 U	3.4E-07 U	4.1E-07 UJ	3.1E-07 U
1,2,3,7,8-PeCDD	40321-76-4	mg/kg	2.9E-07	4.8E-06			1E-07 U	8.8E-08 U	7.6E-08 U	7E-08 U	6.2E-08 U	6.5E-08 U	6.1E-08 U	1.1E-07 U	8.1E-08 U	9.5E-08 U	7.8E-08 U	8.2E-08 U	1E-07 U
1,2,3,7,8-PeCDF	57117-41-6	mg/kg	9.7E-06	0.00016			5.3E-08 U	6.6E-08 U	6.1E-08 U	5.1E-08 U	5.7E-08 U	4.4E-08 U	4.6E-08 U	7.7E-08 U	6.5E-08 U	7.8E-08 U	6.4E-08 U	6.3E-08 U	7.2E-08 U
2,3,4,6,7,8-HxCDF	60851-34-5	mg/kg	2.9E-06	4.8E-05			4.5E-08 U	5.1E-08 U	3.8E-08 U	4.7E-08 U	5.3E-08 U	9.7E-08 UJ	3.5E-08 U	1.8E-07 J	6.5E-08 UJ	4E-08 U	4E-08 U	3.9E-08 U	4.1E-08 U
2,3,4,7,8-PeCDF	57117-31-4	mg/kg	9.7E-07	1.6E-05			5.4E-08 U	6.7E-08 U	6.2E-08 U	5.2E-08 U	5.8E-08 U	4.4E-08 U	4.7E-08 U	7.8E-08 U	6.6E-08 U	7.9E-08 U	6.5E-08 U	6.4E-08 U	7.3E-08 U
2,3,7,8-TCDD	1746-01-6	mg/kg	2.9E-07	4.8E-06	0.3		8.5E-08 U	8.1E-08 U	7.7E-08 U	7.2E-08 U	9.4E-08 U	1.2E-06	7.1E-08 U	1.6E-07 U	1.6E-07 U	1.6E-07 U	1.2E-07 U	1.3E-07 U	1.4E-07 U
2,3,7,8-TCDF	51207-31-9	mg/kg	2.9E-06	4.8E-05			3.8E-08 U	5E-08 U	5.5E-08 U	4.7E-08 U	3.5E-08 U	3.9E-08 U	3.2E-08 U	7.1E-08 U	6.2E-08 U	7.8E-08 U	6.3E-08 U	6E-08 U	4.9E-08 U
OCDD	3268-87-9	mg/kg	0.00097	0.016			8.2E-06 J	5E-05	4.2E-05	1.3E-05	4.2E-05	2.9E-05	7.8E-06 J	1.7E-05	1.4E-05	7.8E-06 J	2.6E-05	2.1E-05	2.2E-05
OCDF	39001-02-0	mg/kg	0.00097	0.016			1.3E-06 UJ	2.8E-06 J	2E-06 J	1.2E-06 UJ	2.8E-06 J	2.6E-06 J	8.8E-07 U	2.1E-06 U	1.1E-06 UJ	1.2E-06 U	2.2E-06 J	1.4E-06 U	1.5E-06 U

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-12	C1DP-12	C1DP-12	C1DP-12	C1DP-13	C1DP-13	C1DP-13	C1DP-13	C1DP-14	C1DP-14	C1DP-14	C1DP-15	C1DP-15
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	0 - 0.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 6	0 - 0.5	1 - 1.5	3 - 6	0 - 0.5	1 - 1.5
						Sample Type	N	FD	N	N	N	N	FD	N	N	N	N	N	N
CALC																			
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	mg/kg					2.27E-08	9.5E-08	1.36E-08	1.15E-08	9E-10	7E-10	3.01E-08	1.5E-09	3.274E-07	7.25E-08	1.9E-09	--	--
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	mg/kg					9.09E-08	9.59E-08	4.41E-08	2.34E-08	2.7E-09	2.1E-09	1.97E-08	4.5E-09	7.738E-07	2.485E-07	5.7E-09	--	--
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0 U	0.00016	0 U	0 U	0 U	0 U	0 U	0 U	0.013227	0.018863	0 U	0 U	0 U
SW6010B																			
Boron	7440-42-8	mg/kg	2	16000			1.9 U	2.3 U	2.3 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	4.2 U	2.9 U	2.1 U	3.3 U	3.3 U
SW6020																			
Antimony	7440-36-0	mg/kg	0.67	31			0.029 U	0.036 U	0.032 U	0.033 U	0.032 U	0.035 U	0.033 U	0.032 U	0.11 J	0.077 J	0.032 U	0.078 J	0.057 J
Arsenic	7440-38-2	mg/kg	19	19			0.34	0.35	0.28	0.21 J	0.24	0.29	0.16 J	0.31	0.97	0.87	0.43	0.93	0.81
Barium	7440-39-3	mg/kg	630	15000			25 J	31 J	17	7.2	69	90 J	48 J	42	240	170	42	110	130
Beryllium	7440-41-7	mg/kg	2.5	16			0.11	0.16	0.1	0.069 J	0.29	0.4	0.22	0.21	0.2	0.14	0.42	0.47	
Cadmium	7440-43-9	mg/kg	0.54	71			0.056 J	0.072 J	0.05 J	0.038 U	0.05 J	0.06 J	0.037 U	0.061 J	0.19 J	0.19 J	0.28 J	0.1 J	0.089 J
Chromium	7440-47-3	mg/kg	200	120000			13 J	18 J	11	7	34	40 J	24 J	30	36	33	27	40	52
Cobalt	7440-48-4	mg/kg	13	23			9.6	11	9.2	7.3	19	20 J	14 J	17	21	18	13	21	24
Copper	7440-50-8	mg/kg	73	3100			40	44	39	42	48	55 J	39 J	62	73	61	54	62	70
Iron	7439-89-6	mg/kg		55000			15000	17000	10000	6800	34000	40000 J	26000 J	30000	30000	27000	19000	34000	40000
Lead	7439-92-1	mg/kg	34	80			0.92	1	0.53	0.19 J	1.1	1.3	0.78	0.86	110	130	4.4	3.5	3.2
Manganese	7439-96-5	mg/kg	2100	2100			240	280	200	140	540	770 J	400 J	470	540	500	310	760	880
Molybdenum	7439-98-7	mg/kg	2	390			0.56 U	0.67 U	2.5	1.6	0.18 U	0.21 U	0.11 U	0.21 U	0.19 U	0.18 U	0.35 U	0.13 U	0.13 U
Nickel	7440-02-0	mg/kg	110	820			30	33	32	27	48	44	36	45	56	45	39	51	55
Selenium	7782-49-2	mg/kg	0.52	390			0.57	0.62	0.35 J	0.26 J	1.2	1.7	0.81	1.1	1.8	2	2.5	1.8	1.9
Silver	7440-22-4	mg/kg	4.2	390			0.0085 U	0.01 J	0.011 J	0.0098 U	0.022 J	0.029 J	0.017 J	0.021 J	0.04 J	0.036 J	0.035 J	0.03 J	0.026 J
Thallium	7440-28-0	mg/kg	2.8	2.8			0.028 J	0.04 J	0.026 U	0.027 U	0.027 J	0.028 U	0.026 U	0.068 J	0.68	0.52	0.74	0.16 J	0.072 J
Vanadium	7440-62-2	mg/kg	280	390			34	38	25	18	93	120 J	67 J	70	77	73	51	66	75
Zinc	7440-66-6	mg/kg	170	23000			16	16	12	9.7	29	34 J	22 J	27	120	120	20	33	39
SW7471A																			
Mercury	7439-97-6	mg/kg	0.24	1			0.0087 U	0.0077 U	0.0091 U	0.0093 U	0.0072 U	0.008 U	0.009 U	0.0084 U	0.0091 U	0.0084 U	0.0091 U	0.012 J	0.011 J
SW8011																			
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		6.5E-05 U	6.7E-05 U	7.1E-05 U	7.6E-05 U	0.00043 U	6.9E-05 U	6.7E-05 U	7.1E-05 UJ	6.3E-05 UJ	6.8E-05 UJ	6.5E-05 UJ	6.7E-05 UJ	7.1E-05 UJ
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		9.8E-06 U	1E-05 U	1.1E-05 U	1.2E-05 U	6.5E-05 U	1E-05 U	1E-05 U	1.1E-05 UJ	9.6E-06 UJ	1E-05 UJ	9.8E-06 UJ	1E-05 UJ	1.1E-05 UJ
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		1.2E-05 U	1.2E-05 U	1.3E-05 U	1.4E-05 U	7.8E-05 U	1.3E-05 U	1.2E-05 U	1.3E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.3E-05 UJ
SW8260B																			
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017		0.00085 UJ	0.00082 U	0.00071 U	0.00097 U	0.00081 U	0.0011 U	0.0009 U	0.00084 U	0.00074 U	0.00082 U	0.00075 U	0.0007 U	0.00072 U
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7		0.00043 UJ	0.00042 U	0.00036 U	0.00049 U	0.00041 U	0.00054 U	0.00046 U	0.00043 U	0.00037 U	0.00042 U	0.00038 U	0.00036 U	0.00037 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018		0.0013 UJ	0.0013 U	0.0011 U	0.0015 U	0.0012 U	0.0016 U	0.0014 U	0.0013 U	0.0011 U	0.0013 U	0.0011 U	0.0011 U	0.0011 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700			0.00075 UJ	0.00073 U	0.00063 U	0.00086 U	0.00071 U	0.00093 U	0.00079 U	0.00074 U	0.00065 U	0.00072 U	0.00066 U	0.00062 U	0.00064 U
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076		0.00036 UJ	0.00035 U	0.0003 U	0.00041 U	0.00034 U	0.00045 U	0.00038 U	0.00036 U	0.00031 U	0.00035 U	0.00032 U	0.0003 U	0.00031 U
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2		0.00027 UJ	0.00027 U	0.00023 U	0.00031 U	0.00026 U	0.00034 U	0.00029 U	0.00027 U	0.00024 U	0.00026 U	0.00024 U	0.00022 U	0.00023 U
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54		0.0016 UJ	0.0015 U	0.0013 U	0.0018 U	0.0015 U	0.002 U	0.0017 U	0.0016 U	0.0014 U	0.0015 U	0.0014 U	0.0013 U	0.0014 U
1,1-Dichloropropene	563-58-6	mg/kg					0.00043 UJ	0.00042 U	0.00036 U	0.00049 U	0.00041 U	0.00054 U	0.00046 U	0.00043 U	0.00037 U	0.00042 U	0.00038 U	0.00036 U	0.00037 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40			0.00086 UJ	0.00084 U	0.00072 U	0.00099 U	0.00082 U	0.0011 U	0.00091 U	0.00085 U	0.00075 U	0.00084 U	0.00076 U	0.00071 U	0.00074 U
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		0.0014 UJ	0.0014 U	0.0012 U	0.0016 U	0.0014 U	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0012 U	0.0012 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00061 UJ	0.00059 U	0.00051 U	0.00069 U	0.00057 U	0.00075 U	0.00064 U	0.0006 U	0.00052 U	0.00058 U	0.00053 U	0.0005 U	0.00052 U
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300			0.0017 UJ	0.0017 U	0.0014 U	0.002 U	0.0016 U	0.0021 U	0.0018 U	0.0017 U	0.0015 U	0.0017 U	0.0015 U	0.0014 U	0.0015 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		0.0023 UJ	0.0022 U	0.0019 U	0.0026 U	0.0022 U	0.0029 U	0.0024 U	0.0023 U	0.002 U	0.0022 U	0.002 U	0.0019 U	0.002 U
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		0.00029 UJ	0.00028 U	0.00024 U	0.00033 U	0.00027 U	0.00036 U	0.0003 U	0.00028 U	0.00025 U	0.00028 U	0.00025 U	0.00024 U	0.00025 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0019 UJ	0.0018 U	0.0016 U	0.0021 U	0.0018 U	0.0023 U	0.002 U	0.0018 U	0.0016 U	0.0018 U	0.0016 U	0.0015 U	0.0016 U
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.00029 UJ	0.00028 U	0.00024 U	0.00033 U	0.00027 U	0.00036 U	0.0003 U	0.00028 U	0.00025 U	0.00028 U	0.00025 U	0.00024 U	0.00025 U
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.00058 UJ	0.00056 U	0.00048 U	0.00066 U	0.00055 U	0.00072 U	0.00061 U	0.00057 U	0.0005 U	0.00056 U	0.00051 U	0.00047 U	0.00049 U
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.0012 UJ	0.0011 U	0.00098 U	0.0013 U	0.0011 U	0.0014 U	0.0012 U	0.0012 U	0.001 U	0.0011 U	0.001 U	0.00096 U	0.00099 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0016 UJ	0.0015 U	0.0013 U	0.0018 U	0.0015 U	0.002 U	0.0017 U	0.0016 U	0.0014 U	0.0015 U	0.0014 U	0.0013 U	0.0014 U
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00033 UJ	0.00032 U	0.00028 U	0.00038 U	0.00031 U	0.00041 U	0.00035 U	0.00033 U	0.00029 U	0.00032 U	0.00029 U	0.00027 U	0.00028 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0014 UJ	0.0014 U	0.0012 U	0.0016 U	0.0013 U	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0012 U	0.0012 U	0.0012 U
2,2-Dichloropropane	594-20-7	mg/kg					0.00048 UJ	0.00046 U	0.0004 U	0.00054 U	0.00045 U	0.00059 U	0.0005 U	0.00047 U	0.00041 U	0.00046 U	0.00042 U	0.00039 U	0.00041 U

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-12	C1DP-12	C1DP-12	C1DP-12	C1DP-13	C1DP-13	C1DP-13	C1DP-13	C1DP-14	C1DP-14	C1DP-14	C1DP-15	C1DP-15
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	0 - 0.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 6	0 - 0.5	1 - 1.5	3 - 6	0 - 0.5	1 - 1.5
						Sample Type	N	FD	N	N	N	N	FD	N	N	N	N	N	N
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.013 UJ	0.012 U	0.011 U	0.015 U	0.012 U	0.016 U	0.014 U	0.013 U	0.011 U	0.012 U	0.011 U	0.011 U	0.011 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.0013 UJ	0.0013 U	0.0011 U	0.0015 U	0.0013 U	0.0017 U	0.0014 U	0.0013 U	0.0012 U	0.0013 U	0.0012 U	0.0011 U	0.0011 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0056 UJ	0.0054 U	0.0047 U	0.0064 U	0.0053 U	0.007 U	0.0059 U	0.0055 U	0.0049 U	0.0054 U	0.0049 U	0.0046 U	0.0048 U
4-Chlorotoluene	106-43-4	mg/kg		440			0.0014 UJ	0.0014 U	0.0012 U	0.0016 U	0.0014 U	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0012 U	0.0012 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.0086 UJ	0.0084 U	0.0072 U	0.0099 U	0.0082 U	0.011 U	0.0091 U	0.0085 U	0.0075 U	0.0084 U	0.0076 U	0.0071 U	0.0074 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.012 UJ	0.012 U	0.01 U	0.014 U	0.012 U	0.015 U	0.013 U	0.012 U	0.011 U	0.012 U	0.032 J	0.01 U	0.011 U
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00056 UJ	0.00054 U	0.00047 U	0.00064 U	0.00053 U	0.0007 U	0.00059 U	0.00055 U	0.00049 U	0.00054 U	0.00049 U	0.00046 U	0.00048 U
Bromobenzene	108-86-1	mg/kg		290			0.0014 UJ	0.0014 U	0.0012 U	0.0016 U	0.0014 U	0.0018 U	0.0015 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U	0.0012 U	0.0012 U
Bromochloromethane	74-97-5	mg/kg		150			0.00036 UJ	0.00035 U	0.0003 U	0.00041 U	0.00034 U	0.00045 U	0.00038 U	0.00036 U	0.00031 U	0.00035 U	0.00032 U	0.0003 U	0.00031 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00026 UJ	0.00025 U	0.00022 U	0.0003 U	0.00025 U	0.00032 U	0.00027 U	0.00026 U	0.00022 U	0.00025 U	0.00023 U	0.00021 U	0.00022 U
Bromoform	75-25-2	mg/kg		19	0.69		0.0012 UJ	0.0012 U	0.001 U	0.0014 U	0.0011 U	0.0015 U	0.0013 U	0.0012 U	0.001 U	0.0012 U	0.0011 U	0.00099 U	0.001 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.0003 UJ	0.00029 U	0.00025 U	0.00035 U	0.00029 U	0.00038 U	0.00032 U	0.0003 U	0.00026 U	0.00029 U	0.00027 U	0.00025 U	0.00026 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00029 UJ	0.00028 U	0.00024 U	0.00033 U	0.00027 U	0.00036 U	0.0003 U	0.00028 U	0.00025 U	0.00028 U	0.00025 U	0.00024 U	0.00025 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.00043 UJ	0.00042 U	0.00036 U	0.00049 U	0.00041 U	0.00054 U	0.00046 U	0.00043 U	0.00037 U	0.00042 U	0.00038 U	0.00036 U	0.00037 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.00036 UJ	0.00035 U	0.0003 U	0.00041 U	0.00034 U	0.00045 U	0.00038 U	0.00036 U	0.00031 U	0.00035 U	0.00032 U	0.0003 U	0.00031 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00039 UJ	0.00038 U	0.00033 U	0.00045 U	0.00037 U	0.00048 U	0.00041 U	0.00038 U	0.00034 U	0.00038 U	0.00034 U	0.00032 U	0.00033 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.0011 UJ	0.001 U	0.00091 U	0.0012 U	0.001 U	0.0013 U	0.0011 U	0.0011 U	0.00094 U	0.001 U	0.00095 U	0.00089 U	0.00092 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.00043 UJ	0.00042 U	0.00036 U	0.00049 U	0.00041 U	0.00054 U	0.00046 U	0.00043 U	0.00037 U	0.00042 U	0.00038 U	0.00036 U	0.00037 U
Chloromethane	74-87-3	mg/kg		110	11		0.0013 UJ	0.0013 U	0.0011 U	0.0015 U	0.0013 U	0.0017 U	0.0014 U	0.0013 U	0.0012 U	0.0013 U	0.0012 U	0.0011 U	0.0011 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.00086 UJ	0.00084 U	0.00072 U	0.00099 U	0.00082 U	0.0011 U	0.00091 U	0.00085 U	0.00075 U	0.00084 U	0.00076 U	0.00071 U	0.00074 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00029 UJ	0.00028 U	0.00024 U	0.00033 U	0.00027 U	0.00036 U	0.0003 U	0.00028 U	0.00025 U	0.00028 U	0.00025 U	0.00024 U	0.00025 U
Dibromomethane	74-95-3	mg/kg		24			0.00024 UJ	0.00024 U	0.00021 U	0.00028 U	0.00023 U	0.0003 U	0.00026 U	0.00024 U	0.00021 U	0.00024 U	0.00022 U	0.0002 U	0.00021 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00071 UJ	0.00068 U	0.00059 U	0.00081 U	0.00067 U	0.00088 U	0.00074 U	0.0007 U	0.00061 U	0.00068 U	0.00062 U	0.00058 U	0.0006 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.014 UJ	0.014 U	0.012 U	0.016 U	0.014 U	0.018 U	0.015 U	0.014 U	0.012 U	0.014 U	0.013 U	0.012 U	0.012 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00059 UJ	0.00057 U	0.00049 U	0.00068 U	0.00056 U	0.00073 U	0.00062 U	0.00058 U	0.00051 U	0.00057 U	0.00052 U	0.00049 U	0.0005 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.00086 UJ	0.00084 U	0.00072 U	0.00099 U	0.00082 U	0.0011 U	0.00091 U	0.00085 U	0.00075 U	0.00084 U	0.00076 U	0.00071 U	0.00074 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00066 UJ	0.00064 U	0.00056 U	0.00076 U	0.00063 U	0.00082 U	0.0007 U	0.00065 U	0.00057 U	0.00064 U	0.00058 U	0.00054 U	0.00056 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.00043 UJ	0.00042 U	0.00036 U	0.00049 U	0.00041 U	0.00054 U	0.00046 U	0.00043 U	0.00037 U	0.00042 U	0.00038 U	0.00036 U	0.00037 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0026 UJ	0.0025 U	0.0022 U	0.003 U	0.0025 U	0.0032 U	0.0027 U	0.0026 U	0.0022 U	0.0025 U	0.0023 U	0.0021 U	0.0022 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.00091 UJ	0.00088 U	0.00076 U	0.001 U	0.00086 U	0.0011 U	0.00096 U	0.00089 U	0.00079 U	0.00088 U	0.0008 U	0.00075 U	0.00077 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.0011 UJ	0.0011 U	0.00092 U	0.0013 U	0.001 U	0.0014 U	0.0012 U	0.0011 U	0.00095 U	0.0011 U	0.00096 U	0.0009 U	0.00093 U
p-Isopropyltoluene	99-87-6	mg/kg					0.00058 UJ	0.00056 U	0.00048 U	0.00066 U	0.00055 U	0.00072 U	0.00061 U	0.00057 U	0.0005 U	0.00056 U	0.00051 U	0.00047 U	0.00049 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.00097 UJ	0.00094 U	0.00081 U	0.0011 U	0.00091 U	0.0012 U	0.001 U	0.00095 U	0.00084 U	0.00093 U	0.00085 U	0.00079 U	0.00082 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.0011 UJ	0.001 U	0.00089 U	0.0012 U	0.001 U	0.0013 U	0.0011 U	0.0011 U	0.00092 U	0.001 U	0.00094 U	0.00088 U	0.00091 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00095 UJ	0.00092 U	0.0008 U	0.0011 U	0.0009 U	0.0012 U	0.001 U	0.00094 U	0.00082 U	0.00092 U	0.00084 U	0.00078 U	0.00081 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00058 UJ	0.00056 U	0.00048 U	0.00066 U	0.00055 U	0.00072 U	0.00061 U	0.00057 U	0.0005 U	0.00056 U	0.00051 U	0.00047 U	0.00049 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0019 UJ	0.0018 U	0.0016 U	0.0021 U	0.0018 U	0.0023 U	0.002 U	0.0018 U	0.0016 U	0.0018 U	0.0016 U	0.0015 U	0.0016 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00058 UJ	0.00056 U	0.00048 U	0.00066 U	0.00055 U	0.00072 U	0.00061 U	0.00057 U	0.0005 U	0.00056 U	0.00051 U	0.00047 U	0.00049 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.00086 UJ	0.00084 U	0.00072 U	0.00099 U	0.00082 U	0.0011 U	0.00091 U	0.00085 U	0.00075 U	0.00084 U	0.00076 U	0.00071 U	0.00074 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.00043 UJ	0.00042 U	0.00036 U	0.00049 U	0.00041 U	0.00054 U	0.00046 U	0.00043 U	0.00037 U	0.00042 U	0.00038 U	0.00036 U	0.00037 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.00043 UJ	0.00042 U	0.00036 U	0.00049 U	0.00041 U	0.00054 U	0.00046 U	0.00043 U	0.00037 U	0.00042 U	0.00038 U	0.00036 U	0.00037 U
Vinyl Acetate	108-05-4	mg/kg		910			0.0022 UJ	0.0021 U	0.0018 U	0.0025 U	0.002 U	0.0027 U	0.0023 U	0.0021 U	0.0019 U	0.0021 U	0.0019 U	0.0018 U	0.0018 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00043 UJ	0.00042 U	0.00036 U	0.00049 U	0.00041 U	0.00054 U	0.00046 U	0.00043 U	0.00037 U	0.00042 U	0.00038 U	0.00036 U	0.00037 U
Xylene, o	95-47-6	mg/kg	1.4	650			0.0013 UJ	0.0013 U	0.0011 U	0.0015 U	0.0013 U	0.0016 U	0.0014 U	0.0013 U	0.0011 U	0.0013 U	0.0012 U	0.0011 U	0.0011 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00081 UJ	0.00078 U	0.00068 U	0.00092 U	0.00076 U	0.001 U	0.00085 U	0.0008 U	0.0007 U	0.00078 U	0.00071 U	0.00066 U	0.00069 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0013 UJ	0.0013 U	0.0011 U	0.0015 U	0.0013 U	0.0016 U	0.0014 U	0.0013 U	0.0011 U	0.0013 U	0.0012 U	0.0011 U	0.0011 U
SW8270C																			
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00063 UJ	0.00061 U	0.00063 U	0.00066 U	0.00059 U	0.00068 U	0.00059 U	0.00064 U	0.0029 U	0.0031 U	0.00061 U	0.00063 U	0.00066 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.00053 UJ	0.00051 U	0.00053 U	0.00055 U	0.00049 U	0.00056 U	0.00049 U	0.00053 U	0.0024 U	0.0026 U	0.00051 U	0.00053 U	0.00055 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.00051 UJ	0.00049 U	0.0005 U	0.00053 U	0.00047 U	0.00054 U	0.00047 U	0.00051 U	0.0023 U	0.0025 U	0.00049 U	0.00051 U	0.00053 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.00088 UJ	0.00084 U	0.00087 U	0.00091 U	0.00081 U	0.00094 U	0.00081 U	0.00089 U	0.004 U	0.0043 U	0.00084 U	0.00087 U	0.00092 U
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.00053 UJ	0.00051 U	0.00053 U	0.00055 U	0.00049 U	0.00056 U	0.00049 U	0.00053 U					

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-12	C1DP-12	C1DP-12	C1DP-12	C1DP-13	C1DP-13	C1DP-13	C1DP-13	C1DP-14	C1DP-14	C1DP-14	C1DP-15	C1DP-15
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
Depth Interval	0 - 0.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 6	0 - 0.5	1 - 1.5	1 - 1.5	3 - 6	0 - 0.5	1 - 1.5	3 - 6	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5
Sample Type	N	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.003 U	0.0028 U	0.0029 U	0.0031 U	0.0027 U	0.0032 U	0.0027 U	0.003 U	0.013 U	0.015 U	0.0028 U	0.003 U	0.0031 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.0063 U	0.0061 U	0.0063 U	0.0066 U	0.0059 U	0.0068 U	0.0059 U	0.0064 U	0.029 U	0.031 U	0.0061 U	0.0063 U	0.0066 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.062 U	0.06 U	0.062 U	0.064 U	0.057 U	0.066 U	0.057 U	0.062 U	0.28 U	0.3 U	0.06 U	0.062 U	0.065 U
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.0045 U	0.0044 U	0.0045 U	0.0047 U	0.0042 U	0.0048 U	0.0042 U	0.0046 U	0.021 U	0.022 U	0.0044 U	0.0045 U	0.0048 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.0016 U	0.0015 U	0.0016 U	0.0017 U	0.0015 U	0.0017 U	0.0015 U	0.0016 U	0.0072 U	0.0078 U	0.0015 U	0.0016 U	0.0017 U
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.00053 U	0.00051 U	0.00053 U	0.00055 U	0.00049 U	0.00056 U	0.00049 U	0.00053 U	0.0024 U	0.0026 U	0.00051 U	0.00053 U	0.00055 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.00042 U	0.00041 U	0.00042 U	0.00044 U	0.00039 U	0.00045 U	0.00039 U	0.00043 U	0.0019 U	0.0021 U	0.00041 U	0.00042 U	0.00044 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.00093 U	0.0009 U	0.00093 U	0.00097 U	0.00086 U	0.00099 U	0.00086 U	0.00094 U	0.011 J	0.0046 U	0.0009 U	0.00093 U	0.00097 U
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.001 U	0.001 U	0.001 U	0.0011 U	0.00096 U	0.0011 U	0.00096 U	0.001 U	0.0047 U	0.0051 U	0.001 U	0.001 U	0.0011 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.0016 U	0.0015 U	0.0016 U	0.0017 U	0.0015 U	0.0017 U	0.0015 U	0.0016 U	0.0072 U	0.0078 U	0.0015 U	0.0016 U	0.0017 U
2-Nitrophenol	88-75-5	mg/kg					0.00065 U	0.00063 U	0.00065 U	0.00068 U	0.00061 U	0.0007 U	0.00061 U	0.00066 U	0.003 U	0.0032 U	0.00063 U	0.00065 U	0.00069 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0016 U	0.0015 U	0.0016 U	0.0017 U	0.0015 U	0.0017 U	0.0015 U	0.0016 U	0.0072 U	0.0078 U	0.0015 U	0.0016 U	0.0017 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.0089 U	0.0085 U	0.0088 U	0.0093 U	0.0082 U	0.0095 U	0.0082 U	0.009 U	0.04 U	0.044 U	0.0085 U	0.0089 U	0.0093 U
3-Nitroaniline	99-09-2	mg/kg					0.011 U	0.01 U	0.011 U	0.011 U	0.0098 U	0.011 U	0.0098 U	0.011 U	0.048 U	0.052 U	0.01 U	0.011 U	0.011 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.011 U	0.01 U	0.011 U	0.011 U	0.0098 U	0.011 U	0.0098 U	0.011 U	0.048 U	0.052 U	0.01 U	0.011 U	0.011 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.00096 U	0.00093 U	0.00096 U	0.001 U	0.00089 U	0.001 U	0.00089 U	0.00097 U	0.0043 U	0.0047 U	0.00093 U	0.00096 U	0.001 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0035 U	0.0034 U	0.0035 U	0.0036 U	0.0032 U	0.0037 U	0.0032 U	0.0035 U	0.016 U	0.017 U	0.0034 U	0.0035 U	0.0037 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.014 U	0.014 U	0.014 U	0.015 U	0.013 U	0.015 U	0.013 U	0.014 U	0.064 U	0.07 U	0.014 U	0.014 U	0.015 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.00067 U	0.00064 U	0.00066 U	0.00069 U	0.00062 U	0.00071 U	0.00062 U	0.00067 U	0.003 U	0.0033 U	0.00064 U	0.00066 U	0.0007 U
4-Nitroaniline	100-01-6	mg/kg		27			0.0053 U	0.0051 U	0.0053 U	0.0055 U	0.0049 U	0.0056 U	0.0049 U	0.0053 U	0.024 U	0.026 U	0.0051 U	0.0053 U	0.0055 U
4-Nitrophenol	100-02-7	mg/kg					0.018 U	0.017 U	0.018 U	0.019 U	0.017 U	0.019 U	0.017 U	0.018 U	0.082 U	0.089 U	0.018 U	0.018 U	0.019 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00049 U	0.00047 U	0.00048 U	0.00051 U	0.00045 U	0.00052 U	0.00045 U	0.00049 U	0.0022 U	0.0024 U	0.00047 U	0.00048 U	0.00051 U
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.00053 U	0.00051 U	0.00053 U	0.00055 U	0.00049 U	0.00056 U	0.00049 U	0.00053 U	0.0064 J	0.0026 U	0.00051 U	0.00053 U	0.00055 U
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0017 U	0.0016 U	0.0017 U	0.0018 U	0.0016 U	0.0018 U	0.0016 U	0.0017 U	0.011 J	0.013 J	0.0016 U	0.0017 U	0.0018 U
Azobenzene	103-33-3	mg/kg		5.6			0.00053 U	0.00051 U	0.00053 U	0.00055 U	0.00049 U	0.00056 U	0.00049 U	0.00053 U	0.0024 U	0.0026 U	0.00051 U	0.00053 U	0.00055 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0012 U	0.0016 J	0.0012 U	0.0012 U	0.0011 U	0.0012 U	0.0011 U	0.0012 U	0.026	0.038	0.0011 U	0.0012 U	0.0012 U
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0014 U	0.0013 U	0.0014 U	0.0014 U	0.0013 U	0.0015 U	0.0013 U	0.0014 U	0.008 J	0.011 J	0.0013 U	0.0014 U	0.0014 U
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.0011 U	0.001 U	0.0011 U	0.0011 U	0.00098 U	0.0011 U	0.00098 U	0.0011 U	0.026	0.039	0.001 U	0.0011 U	0.0011 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0019 U	0.0018 U	0.0019 U	0.002 U	0.0018 U	0.002 U	0.0018 U	0.0019 U	0.0086 U	0.0093 U	0.0018 U	0.0019 U	0.002 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0015 U	0.0014 U	0.0015 U	0.0015 U	0.0014 U	0.0016 U	0.0014 U	0.0015 U	0.0067 U	0.012 J	0.0014 U	0.0015 U	0.0015 U
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.13 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.12 U	0.13 U	0.58 U	0.63 U	0.12 U	0.13 U	0.13 U
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0053 UJ	0.0051 UJ	0.0053 UJ	0.0055 UJ	0.0049 UJ	0.0056 UJ	0.0049 UJ	0.0053 UJ	0.024 UJ	0.026 UJ	0.0051 UJ	0.0053 U	0.0055 U
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051		0.00064 U	0.00062 U	0.00064 U	0.00067 U	0.0006 U	0.00069 U	0.0006 U	0.00065 U	0.0029 U	0.0032 U	0.00062 U	0.00064 U	0.00067 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0019 U	0.0018 U	0.0019 U	0.002 U	0.0018 U	0.002 U	0.0018 U	0.0019 U	0.0086 U	0.0093 U	0.0018 U	0.0019 U	0.002 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.00081 U	0.00078 U	0.00081 U	0.00085 U	0.00075 U	0.00087 U	0.00075 U	0.00082 U	0.0037 U	0.004 U	0.00078 U	0.00081 U	0.00085 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.0075 U	0.0072 U	0.01 U	0.018 U	0.015 U	0.008 U	0.035 U	0.014 U	0.15 U	0.037 U	0.012 U	0.01 U	0.017 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.0054 U	0.0054 U	0.0054 U	0.0056 U	0.005 U	0.0058 U	0.0058 U	0.011 U	0.024 U	0.026 U	0.0079 U	0.0054 U	0.0056 U
Carbazole	86-74-8	mg/kg	79				0.00077 U	0.00074 U	0.00077 U	0.0008 U	0.00071 U	0.00082 U	0.00072 U	0.00078 U	0.01 J	0.011 J	0.00074 U	0.00077 U	0.00081 U
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0014 U	0.0013 U	0.0014 U	0.0014 U	0.0013 U	0.0015 U	0.0013 U	0.0014 U	0.027 J	0.043	0.0013 U	0.0014 U	0.0014 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0013 U	0.0012 U	0.0013 U	0.0013 U	0.0012 U	0.0014 U	0.0012 U	0.0013 U	0.0057 U	0.0062 U	0.0012 U	0.0013 U	0.0013 U
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.00062 U	0.0006 U	0.00062 U	0.00065 U	0.00058 U	0.00067 U	0.00058 U	0.00063 U	0.016 J	0.0066 J	0.0006 U	0.00062 U	0.00065 U
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.0023 U	0.0022 U	0.0023 U	0.0024 U	0.0021 U	0.0025 U	0.0022 U	0.0023 U	0.011 U	0.011 U	0.0022 U	0.0071 U	0.0095 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00053 U	0.00051 U	0.00053 U	0.00055 U	0.00049 U	0.00056 U	0.00049 U	0.00053 U	0.0024 U	0.0026 U	0.00051 U	0.00053 U	0.00055 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.0029 U	0.0027 U	0.0039 U	0.003 U	0.0026 U	0.003 U	0.0026 U	0.0029 U	0.013 U	0.014 U	0.0027 U	0.0028 U	0.003 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0013 U	0.0012 U	0.0013 U	0.0013 U	0.0012 U	0.0014 U	0.0012 U	0.0013 U	0.0057 U	0.0062 U	0.0012 U	0.0013 U	0.0013 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0018 J	0.0035 J	0.0013 U	0.0013 U	0.0012 U	0.0014 U	0.0012 U	0.0013 U	0.059	0.12	0.0012 U	0.0013 U	0.0013 U
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.00053 U	0.00051 U	0.00053 U	0.00055 U	0.00049 U	0.00056 U	0.00049 U	0.00053 U	0.0024 U	0.0026 U	0.00051 U	0.00053 U	0.00055 U
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0016 U	0.0015 U	0.0016 U	0.0017 U	0.0015 U	0.0017 U	0.0015 U	0.0016 U	0.0072 U	0.0078 U	0.0015 U	0.0016 U	0.0017 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0016 U	0.0015 U	0.0016 U	0.0017 U	0.0015 U	0.0017 U	0.0015 U	0.0016 U	0.0072 U	0.0078 U	0.0015 U	0.0016 U	0.0017 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.00081 U	0.00078 U	0.00081 U	0.00085 U	0.00075 U	0.00087 U	0.00075 U	0.00082 U	0.0037 U	0.004 U	0.00078 U	0.00081 U	0.00085 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.00045 U	0.00044 U	0.00045 U	0.00047 U	0.00042 U	0.00048 U	0.00042 U	0.00046 U	0.0021 U	0.0022 U	0.00044 U	0.00045 U	0.00048 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.0013 U	0.0012 U	0.0013 U	0.0013 U	0.0012 U	0.0014 U	0.0012 U	0.0013 U	0.0057 U	0.0062 U	0.0012 U	0.0013 U	0.0013 U
Isoph																			

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

						Location	C1DP-12	C1DP-12	C1DP-12	C1DP-12	C1DP-13	C1DP-13	C1DP-13	C1DP-13	C1DP-14	C1DP-14	C1DP-14	C1DP-15	C1DP-15	
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	0 - 0.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	3 - 6	0 - 0.5	1 - 1.5	3 - 6	0 - 0.5	1 - 1.5	
						Sample Type	N	FD	N	N	N	N	FD	N	N	N	N	N	N	
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater															
Nitrobenzene	98-95-3	mg/kg	2.2	5.1		0.0021 U	0.002 U	0.0021 U	0.0022 U	0.002 U	0.0023 U	0.002 U	0.0021 U	0.0095 U	0.01 U	0.002 U	0.0021 U	0.0022 U		
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078		0.0023 U	0.0022 U	0.0023 U	0.0024 U	0.0021 U	0.0025 U	0.0022 U	0.0023 U	0.011 U	0.011 U	0.0022 U	0.0023 U	0.0024 U		
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110		0.00084 U	0.00081 U	0.00084 U	0.00088 U	0.00078 U	0.0009 U	0.00078 U	0.00085 U	0.0038 U	0.0042 U	0.00081 U	0.00084 U	0.00089 U		
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098	0.0067 U	0.0064 U	0.0066 U	0.0069 U	0.0062 U	0.0071 U	0.0062 U	0.0067 U	0.03 U	0.033 U	0.0064 U	0.0066 U	0.025 J		
Phenanthrene	85-01-8	mg/kg	5.5		11	0.00061 U	0.00078 J	0.00061 U	0.00064 U	0.00057 U	0.00065 U	0.00057 U	0.00062 U	0.058	0.047	0.00059 U	0.00061 U	0.00064 U		
Phenol	108-95-2	mg/kg	0.79	19000	0.16	0.0024 U	0.0023 U	0.0024 U	0.0025 U	0.0022 U	0.0026 U	0.0023 U	0.0025 U	0.011 U	0.012 U	0.0023 U	0.0035 J	0.0025 U		
Pyrene	129-00-0	mg/kg	10	1800	45	0.0014 U	0.002 J	0.0014 U	0.0014 U	0.0013 U	0.0015 U	0.0013 U	0.0014 U	0.031	0.077	0.0013 U	0.0014 U	0.0014 U		
Pyridine	110-86-1	mg/kg		58		0.017 U	0.016 U	0.017 U	0.017 U	0.015 U	0.018 U	0.015 U	0.017 U	0.075 U	0.082 U	0.016 U	0.017 U	0.017 U		
SW8290																				
1,2,3,4,6,7,8-HpCDD	35822-46-9	mg/kg	2.9E-05	0.00048		3.3E-06 J	2.1E-06 J	1.7E-06 U	6.1E-07 UJ	1.6E-06 U	1.1E-06 UJ	1.8E-06 U	2.1E-06 U	3.1E-05	1.5E-05	2.2E-06 U	--	--		
1,2,3,4,6,7,8-HpCDF	67562-39-4	mg/kg	2.9E-05	0.00048		1E-06 U	7.1E-07 U	6.2E-07 U	3.1E-07 U	3.2E-07 U	2.5E-07 U	3.7E-07 U	2.6E-07 UJ	4.7E-06 J	2.7E-06 J	4.5E-07 U	--	--		
1,2,3,4,7,8,9-HpCDF	55673-89-7	mg/kg	2.9E-05	0.00048		3.2E-07 U	3.1E-07 J	2.5E-07 U	2.1E-07 U	1.2E-07 UJ	1.4E-07 U	2.6E-07 U	2E-07 UJ	7.7E-07 U	5.4E-07 U	1.8E-07 UJ	--	--		
1,2,3,4,7,8-HxCDD	39227-28-6	mg/kg	2.9E-06	4.8E-05		2.7E-07 J	5.3E-08 U	2E-07 J	2.2E-07 J	1.6E-07 UJ	5.2E-08 U	4.9E-08 U	5E-08 U	4.9E-07 J	4E-07 J	7.1E-08 U	--	--		
1,2,3,4,7,8-HxCDF	70648-26-9	mg/kg	2.9E-06	4.8E-05		2.4E-07 U	3.3E-07 J	2.4E-07 UJ	1.1E-07 U	7.2E-08 UJ	7.7E-08 UJ	1.3E-07 U	1.2E-07 U	1.6E-06 J	8.4E-07 U	1.1E-07 UJ	--	--		
1,2,3,6,7,8-HxCDD	57653-85-7	mg/kg	2.9E-06	4.8E-05		1.9E-07 J	5E-08 U	1.9E-07 J	4.3E-08 U	1.2E-07 UJ	5E-08 U	4.7E-08 U	4.8E-08 U	1.1E-06 J	6.1E-07 UJ	6.8E-08 U	--	--		
1,2,3,6,7,8-HxCDF	57117-44-9	mg/kg	2.9E-06	4.8E-05		1E-07 UJ	2.4E-07 J	9.5E-08 UJ	1.1E-07 UJ	1.1E-07 U	3.6E-08 U	1.6E-07 U	1E-07 UJ	4.8E-07 U	3E-07 U	2E-07 U	--	--		
1,2,3,7,8,9-HxCDD	19408-74-3	mg/kg	2.9E-06	4.8E-05		4.8E-08 U	4.7E-08 U	3.6E-08 U	4E-08 U	4.3E-08 U	4.6E-08 U	4.4E-08 U	4.4E-08 U	9.9E-07 U	5.6E-07 U	6.3E-08 U	--	--		
1,2,3,7,8,9-HxCDF	72918-21-9	mg/kg	2.9E-06	4.8E-05		3.9E-07 U	2E-07 UJ	3E-07 UJ	3.5E-07 UJ	3.7E-07 U	4E-07 U	4.9E-07 U	4.9E-07 U	4E-07 U	3.3E-07 U	4.6E-07 U	--	--		
1,2,3,7,8-PeCDD	40321-76-4	mg/kg	2.9E-07	4.8E-06		8.8E-08 U	8.5E-08 U	8.6E-08 U	1.2E-07 U	9.4E-08 U	1.1E-07 U	7.6E-08 U	1E-07 U	1.5E-07 U	1.3E-07 U	1.2E-07 U	--	--		
1,2,3,7,8-PeCDF	57117-41-6	mg/kg	9.7E-06	0.00016		7.1E-08 U	3.1E-07 J	5.8E-08 U	6.8E-08 U	5.9E-08 U	6.4E-08 U	1.8E-07 J	7.9E-08 U	8.2E-08 U	2.1E-07 UJ	7.5E-08 U	--	--		
2,3,4,6,7,8-HxCDF	60851-34-5	mg/kg	2.9E-06	4.8E-05		5.2E-08 U	3.5E-08 U	4.5E-08 U	4.3E-08 U	3.6E-08 U	3.9E-08 U	1.1E-07 J	4.7E-08 U	3.2E-07 J	1.6E-07 UJ	4.6E-08 U	--	--		
2,3,4,7,8-PeCDF	57117-31-4	mg/kg	9.7E-07	1.6E-05		7.2E-08 U	6.1E-08 U	5.9E-08 U	6.9E-08 U	6E-08 U	6.4E-08 U	6.3E-08 U	8E-08 U	8.3E-08 U	1.9E-07 UJ	7.6E-08 U	--	--		
2,3,7,8-TCDD	1746-01-6	mg/kg	2.9E-07	4.8E-06	0.3	1.2E-07 U	1.1E-07 U	1.1E-07 U	1.8E-07 U	1.2E-07 U	1.9E-07 U	1.3E-07 U	1.6E-07 U	1.4E-07 U	1.5E-07 U	1.6E-07 U	--	--		
2,3,7,8-TCDF	51207-31-9	mg/kg	2.9E-06	4.8E-05		6.9E-08 U	5E-08 U	6.4E-08 U	7.5E-08 U	5.5E-08 U	8.2E-08 U	6.1E-08 U	6.1E-08 U	9.3E-08 U	8.6E-08 U	7.5E-08 U	--	--		
OCDD	3268-87-9	mg/kg	0.00097	0.016		3.6E-05	1.6E-05	1.7E-05	4.7E-06 J	8.9E-06 J	7E-06 J	1.1E-05	1.5E-05	0.00021	0.0001	1.9E-05	--	--		
OCDF	39001-02-0	mg/kg	0.00097	0.016		3.5E-06 J	2.3E-06 J	1.6E-06 U	6.3E-07 U	7.8E-07 U	5.2E-07 UJ	9.4E-07 U	7.2E-07 U	9.3E-06 J	5.1E-06 J	9.2E-07 U	--	--		

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

						Location	C1DP-15	C1DP-16	C1DP-16	C1DP-16	C1DP-17	C1DP-17	C1DP-17	C1DP-17
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	3 - 6	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	FD	N
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater									
CALC														
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	mg/kg				--	--	--	--	--	--	--	--	--
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	mg/kg				--	--	--	--	--	--	--	--	--
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U
SW6010B														
Boron	7440-42-8	mg/kg	2	16000		2.9 U	2.9 U	2.2 U	2.6 U	2.4 U	2.4 U	2.8 U	3 U	
SW6020														
Antimony	7440-36-0	mg/kg	0.67	31		0.085 J	0.054 J	0.033 U	0.037 J	0.045 J	0.044 J	0.052 J	0.048 J	
Arsenic	7440-38-2	mg/kg	19	19		1.3	1.1	0.42	0.48	0.54	0.62	0.57	0.65	
Barium	7440-39-3	mg/kg	630	15000		170	73	43	45 J	80	92	82	110	
Beryllium	7440-41-7	mg/kg	2.5	16		0.49	0.22	0.17	0.16	0.25	0.32	0.28	0.33	
Cadmium	7440-43-9	mg/kg	0.54	71		0.095 J	0.091 J	0.056 J	0.059 J	0.066 J	0.068 J	0.063 J	0.075 J	
Chromium	7440-47-3	mg/kg	200	120000		48	31	27	24 J	31	44	37	50	
Cobalt	7440-48-4	mg/kg	13	23		27	18	15	14	16	20	18	21	
Copper	7440-50-8	mg/kg	73	3100		69	66	66	62 J	67	77	68	73	
Iron	7439-89-6	mg/kg		55000		42000	26000	21000	18000	27000	33000	29000	35000	
Lead	7439-92-1	mg/kg	34	80		3.9	2.8	1.3	1.5	2.2	2.3	2.2	2.4	
Manganese	7439-96-5	mg/kg	2100	2100		980	450	360	320	480	570	480	650	
Molybdenum	7439-98-7	mg/kg	2	390		0.21 U	0.15 U	0.17 U	0.15 U	0.11 U	0.14 U	0.16 U	0.15 U	
Nickel	7440-02-0	mg/kg	110	820		63	54	51	39 J	41	56	47	51	
Selenium	7782-49-2	mg/kg	0.52	390		2.2	0.97	0.84	0.79	1.3	1.3	1.3	1.6	
Silver	7440-22-4	mg/kg	4.2	390		0.031 J	0.03 J	0.019 J	0.026 J	0.027 J	0.034 J	0.029 J	0.035 J	
Thallium	7440-28-0	mg/kg	2.8	2.8		0.085 J	0.099 J	0.035 J	0.05 J	0.071 J	0.068 J	0.064 J	0.053 J	
Vanadium	7440-62-2	mg/kg	280	390		73	59	47	42 J	55	70	63	78	
Zinc	7440-66-6	mg/kg	170	23000		38	53	26	24 J	27	33	29	34	
SW7471A														
Mercury	7439-97-6	mg/kg	0.24	1		0.013 J	0.016 J	0.008 U	0.0079 U	0.0094 J	0.009 U	0.0075 U	0.0085 U	
SW8011														
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	7.4E-05 UJ	6.6E-05 UJ	6.6E-05 UJ	6.9E-05 UJ	6.8E-05 UJ	6.7E-05 UJ	6.5E-05 UJ	6.7E-05 UJ	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	1.1E-05 UJ	1E-05 UJ	1E-05 UJ	1.1E-05 UJ	1E-05 UJ	1E-05 UJ	9.9E-06 UJ	1E-05 UJ	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	1.4E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.3E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	
SW8260B														
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017	0.00079 U	0.00069 UJ	0.0007 U	0.00073 UJ	0.00085 U	0.00068 U	0.00066 U	0.0071 U	
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7	0.0004 U	0.00035 UJ	0.00035 U	0.00037 U	0.00043 U	0.00035 U	0.00034 U	0.0065 U	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018	0.0012 U	0.001 UJ	0.0011 U	0.0011 U	0.0013 U	0.001 U	0.001 U	0.011 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700		0.0007 U	0.0006 UJ	0.00061 U	0.00064 U	0.00075 U	0.0006 U	0.00058 U	0.022 U	
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076	0.00034 U	0.00029 UJ	0.00029 U	0.00031 U	0.00036 U	0.00029 U	0.00028 U	0.01 U	
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2	0.00025 U	0.00022 UJ	0.00022 U	0.00023 U	0.00027 U	0.00022 U	0.00021 U	0.013 U	
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54	0.0015 U	0.0013 UJ	0.0013 U	0.0014 U	0.0016 U	0.0013 U	0.0012 U	0.017 U	
1,1-Dichloropropene	563-58-6	mg/kg				0.0004 U	0.00035 UJ	0.00035 U	0.00037 U	0.00043 U	0.00035 U	0.00034 U	0.0075 U	
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40		0.0008 U	0.0007 UJ	0.00071 U	0.00074 UJ	0.00086 U	0.00069 U	0.00067 U	0.02 U	
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	0.0013 U	0.0012 UJ	0.0012 U	0.0012 U	0.0014 U	0.0012 U	0.0011 U	0.016 U	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	0.00056 U	0.00049 UJ	0.0005 U	0.00052 UJ	0.0006 U	0.00048 U	0.00047 U	0.022 U	
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300		0.0016 U	0.0014 UJ	0.0014 U	0.0015 UJ	0.0017 U	0.0014 U	0.0013 U	0.019 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	0.0021 U	0.0019 UJ	0.0019 U	0.002 U	0.0023 U	0.0018 U	0.0018 U	0.021 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	0.00027 U	0.00023 UJ	0.00024 U	0.00025 U	0.00029 U	0.00023 U	0.00022 U	0.0054 U	
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1	0.0017 U	0.0015 UJ	0.0015 U	0.0016 UJ	0.0019 U	0.0015 U	0.0015 U	0.012 U	
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007	0.00027 U	0.00023 UJ	0.00024 U	0.00025 U	0.00029 U	0.00023 U	0.00022 U	0.0078 U	
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065	0.00054 U	0.00047 UJ	0.00047 U	0.00049 U	0.00058 U	0.00046 U	0.00045 U	0.0093 U	
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270		0.0011 U	0.00094 UJ	0.00096 U	0.001 UJ	0.0012 U	0.00094 U	0.00091 U	0.011 U	
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4	0.0015 U	0.0013 UJ	0.0013 U	0.0014 UJ	0.0016 U	0.0013 U	0.0012 U	0.019 U	
1,3-Dichloropropane	142-28-9	mg/kg		410		0.00031 U	0.00027 UJ	0.00027 U	0.00028 U	0.00033 U	0.00027 U	0.00026 U	0.0079 U	
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2	0.0013 U	0.0011 UJ	0.0012 U	0.0012 UJ	0.0014 U	0.0011 U	0.0011 U	0.015 U	
2,2-Dichloropropane	594-20-7	mg/kg				0.00044 U	0.00038 UJ	0.00039 U	0.00041 U	0.00047 U	0.00038 U	0.00037 U	0.017 U	

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-15	C1DP-16	C1DP-16	C1DP-16	C1DP-17	C1DP-17	C1DP-17	C1DP-17
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	3 - 6	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	FD	N
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.012 U	0.01 UJ	0.01 U	0.011 U	0.013 U	0.01 U	0.01 U	0.12 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.0012 U	0.0011 UJ	0.0011 U	0.0011 UJ	0.0013 U	0.0011 U	0.001 U	0.012 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0052 U	0.0045 UJ	0.0046 U	0.0048 UJ	0.0056 U	0.0045 U	0.0044 U	0.041 U
4-Chlorotoluene	106-43-4	mg/kg		440			0.0013 U	0.0012 UJ	0.0012 U	0.0012 UJ	0.0014 U	0.0012 U	0.0011 U	0.014 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.008 U	0.007 UJ	0.0071 U	0.0074 U	0.0086 U	0.0069 U	0.0067 U	0.027 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.012 U	0.01 UJ	0.01 U	0.011 U	0.012 U	0.01 U	0.0097 U	0.25 U
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00052 U	0.00045 UJ	0.00046 U	0.00048 U	0.00056 U	0.00045 U	0.00044 U	0.0054 U
Bromobenzene	108-86-1	mg/kg		290			0.0013 U	0.0012 UJ	0.0012 U	0.0012 UJ	0.0014 U	0.0012 U	0.0011 U	0.0059 U
Bromochloromethane	74-97-5	mg/kg		150			0.00034 U	0.00029 UJ	0.00029 U	0.00031 U	0.00036 U	0.00029 U	0.00028 U	0.0088 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00024 U	0.00021 UJ	0.00021 U	0.00022 U	0.00026 U	0.00021 U	0.0002 U	0.0078 U
Bromoform	75-25-2	mg/kg		19	0.69		0.0011 U	0.00098 UJ	0.00099 U	0.001 U	0.0012 U	0.00097 U	0.00094 U	0.0064 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00028 U	0.00024 UJ	0.00025 U	0.00026 U	0.0003 U	0.00024 U	0.00024 U	0.019 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00027 U	0.00023 UJ	0.00024 U	0.00025 U	0.00029 U	0.00023 U	0.00022 U	0.017 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.0004 U	0.00035 UJ	0.00035 U	0.00037 U	0.00043 U	0.00035 U	0.00034 U	0.0062 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.00034 U	0.00029 UJ	0.00029 U	0.00031 UJ	0.00036 U	0.00029 U	0.00028 U	0.0068 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00036 U	0.00031 UJ	0.00032 U	0.00033 U	0.00039 U	0.00031 U	0.0003 U	0.0069 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.001 U	0.00087 UJ	0.00088 U	0.00092 U	0.0011 U	0.00087 U	0.00084 U	0.014 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.0004 U	0.00035 UJ	0.00035 U	0.00037 U	0.00043 U	0.00035 U	0.00034 U	0.0059 U
Chloromethane	74-87-3	mg/kg		110	11		0.0012 U	0.0011 UJ	0.0011 U	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.014 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.0008 U	0.0007 UJ	0.00071 U	0.00074 U	0.00086 U	0.00069 U	0.00067 U	0.018 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00027 U	0.00023 UJ	0.00024 U	0.00025 UJ	0.00029 U	0.00023 U	0.00022 U	0.0057 U
Dibromomethane	74-95-3	mg/kg		24			0.00023 U	0.0002 UJ	0.0002 U	0.00021 U	0.00024 U	0.0002 U	0.00019 U	0.01 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00066 U	0.00057 UJ	0.00058 U	0.0006 U	0.00071 U	0.00057 U	0.00055 U	0.065 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.013 U	0.012 UJ	0.012 U	--	0.014 U	0.011 U	0.011 U	0.091 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00055 U	0.00048 UJ	0.00048 U	0.00048 U	0.00059 U	0.00047 U	0.00046 U	0.013 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0008 U	0.0007 UJ	0.00071 U	0.00074 UJ	0.00086 U	0.00069 U	0.00067 U	0.034 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00062 U	0.00054 UJ	0.00054 U	0.00057 UJ	0.00066 U	0.00053 U	0.00052 U	0.012 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.0004 U	0.00035 UJ	0.00035 U	0.00037 U	0.00043 U	0.00035 U	0.00034 U	0.0085 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0024 U	0.0021 UJ	0.0021 U	0.0022 UJ	0.0026 U	0.0021 U	0.002 U	0.017 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.00084 U	0.00073 UJ	0.00074 U	0.00077 UJ	0.00091 U	0.00073 U	0.00071 U	0.011 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.001 U	0.00088 UJ	0.0009 U	0.00093 UJ	0.0011 U	0.00088 U	0.00085 U	0.0098 U
p-Isopropyltoluene	99-87-6	mg/kg					0.00054 U	0.00047 UJ	0.00047 U	0.00049 UJ	0.00058 U	0.00046 U	0.00045 U	0.014 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.0009 U	0.00078 UJ	0.00079 U	0.00082 UJ	0.00096 U	0.00077 U	0.00075 U	0.012 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.00099 U	0.00086 UJ	0.00087 U	0.00091 UJ	0.0011 U	0.00085 U	0.00083 U	0.0086 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00088 U	0.00077 UJ	0.00078 U	0.00081 UJ	0.00095 U	0.00076 U	0.00074 U	0.011 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00054 U	0.00047 UJ	0.00047 U	0.00049 UJ	0.00058 U	0.00046 U	0.00045 U	0.0075 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0017 U	0.0015 UJ	0.0015 U	0.0016 UJ	0.0019 U	0.0015 U	0.0015 U	0.019 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00054 U	0.00047 UJ	0.00047 U	0.00049 U	0.00058 U	0.00046 U	0.00045 U	0.021 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.0008 U	0.0007 UJ	0.00071 U	0.00074 UJ	0.00086 U	0.00069 U	0.00067 U	0.0099 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.0004 U	0.00035 UJ	0.00035 U	0.00037 UJ	0.00043 U	0.00035 U	0.00034 U	0.0054 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.0004 U	0.00035 UJ	0.00035 U	0.00037 U	0.00043 U	0.00035 U	0.00034 U	0.016 U
Vinyl Acetate	108-05-4	mg/kg		910			0.002 U	0.0017 UJ	0.0018 U	--	0.0022 UJ	0.0017 U	0.0017 U	0.065 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.0004 U	0.00035 UJ	0.00035 U	0.00037 U	0.00043 U	0.00035 U	0.00034 U	0.026 U
Xylene, o	95-47-6	mg/kg	1.4	650			0.0012 U	0.0011 UJ	0.0011 U	0.0011 UJ	0.0013 U	0.0011 U	0.001 U	0.0071 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00075 U	0.00065 UJ	0.00066 U	0.00069 UJ	0.00081 U	0.00065 U	0.00063 U	0.01 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0012 U	0.0011 UJ	0.0011 U	0.0011 UJ	0.0013 U	0.0011 U	0.001 U	0.01 U
SW8270C														
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00064 U	0.0006 U	0.00063 U	0.00057 U	0.0032 U	0.0032 U	0.003 U	0.0032 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.00053 U	0.0005 U	0.00052 U	0.00048 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.00051 U	0.00048 U	0.0005 U	0.00046 U	0.0025 U	0.0026 U	0.0024 U	0.0025 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.00089 U	0.00082 U	0.00087 U	0.00079 U	0.0044 U	0.0045 U	0.0041 U	0.0044 U
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.00053 U	0.0005 U	0.00052 U	0.00048 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9		0.00086 U	0.0008 U	0.00085 U	0.00077 U	0.0043 U	0.0044 U	0.004 U	0.0043 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04		0.0014 U	0.0013 U	0.0014 U	0.0012 U	0.0069 U	0.007 U	0.0064 U	0.0069 U

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-15	C1DP-16	C1DP-16	C1DP-16	C1DP-17	C1DP-17	C1DP-17	C1DP-17
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	3 - 6	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	FD	N
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.003 U	0.0028 U	0.0029 U	0.0027 U	0.015 U	0.015 U	0.014 U	0.015 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.0064 U	0.006 U	0.0063 U	0.0057 U	0.032 U	0.032 U	0.03 U	0.032 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.062 U	0.058 U	0.061 U	0.056 U	0.31 U	0.31 U	0.29 U	0.31 U
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.0046 U	0.0043 U	0.0045 U	0.0041 U	0.023 U	0.023 U	0.021 U	0.023 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.0016 U	0.0015 U	0.0016 U	0.0014 U	0.0079 U	0.0081 U	0.0074 U	0.008 U
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.00053 U	0.0005 U	0.00052 U	0.00048 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.00043 U	0.0004 U	0.00042 U	0.00038 U	0.0021 U	0.0021 U	0.002 U	0.0021 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.00094 U	0.00087 U	0.00092 U	0.00084 U	0.0047 U	0.0047 U	0.0043 U	0.0047 U
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.001 U	0.00097 U	0.001 U	0.00094 U	0.0052 U	0.0053 U	0.0048 U	0.0052 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.0016 U	0.0015 U	0.0016 U	0.0014 U	0.0079 U	0.0081 U	0.0074 U	0.008 U
2-Nitrophenol	88-75-5	mg/kg					0.00066 U	0.00062 U	0.00065 U	0.00059 U	0.0033 U	0.0033 U	0.0031 U	0.0033 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0016 U	0.0015 U	0.0016 U	0.0014 U	0.0079 U	0.0081 U	0.0074 U	0.008 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.009 U	0.0083 U	0.0088 U	0.008 U	0.044 U	0.045 U	0.041 U	0.045 U
3-Nitroaniline	99-09-2	mg/kg					0.011 U	0.0099 U	0.01 U	0.0096 U	0.053 U	0.054 U	0.049 U	0.053 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.011 U	0.0099 U	0.01 U	0.0096 U	0.053 U	0.054 U	0.049 U	0.053 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.00097 U	0.0009 U	0.00095 U	0.00087 U	0.0048 U	0.0049 U	0.0045 U	0.0048 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0035 U	0.0033 U	0.0034 U	0.0032 U	0.017 U	0.018 U	0.016 U	0.018 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.014 U	0.013 U	0.014 U	0.013 U	0.071 U	0.072 U	0.066 U	0.071 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.00067 U	0.00063 U	0.00066 U	0.0006 U	0.0033 U	0.0034 U	0.0031 U	0.0033 U
4-Nitroaniline	100-01-6	mg/kg		27			0.0053 U	0.005 U	0.0052 U	0.0048 U	0.026 U	0.027 U	0.025 U	0.027 U
4-Nitrophenol	100-02-7	mg/kg					0.018 U	0.017 U	0.018 U	0.016 U	0.091 U	0.092 U	0.085 U	0.091 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00049 U	0.00046 U	0.00048 U	0.00044 U	0.0024 U	0.0025 U	0.0023 U	0.0024 U
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.00053 U	0.0005 U	0.00052 U	0.00048 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0017 U	0.0016 U	0.0017 U	0.0015 U	0.0085 U	0.0086 U	0.0079 U	0.0085 U
Azobenzene	103-33-3	mg/kg		5.6			0.00053 U	0.0005 U	0.00052 U	0.00048 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0012 U	0.0011 U	0.0011 U	0.0011 U	0.0058 U	0.0059 U	0.0054 U	0.0058 U
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0014 U	0.0013 U	0.0014 U	0.0012 U	0.0069 U	0.007 U	0.0064 U	0.0069 U
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.0011 U	0.00099 U	0.001 U	0.00096 U	0.0053 U	0.0054 U	0.0049 U	0.0053 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0019 U	0.0018 U	0.0019 U	0.0017 U	0.0095 U	0.0097 U	0.0089 U	0.0096 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0015 U	0.0014 U	0.0015 U	0.0013 U	0.0074 U	0.0075 U	0.0069 U	0.0074 U
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.13 U	0.12 U	0.13 U	--	0.65 U	0.66 U	0.6 U	0.65 U
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0053 U	0.005 U	0.0052 U	0.0048 U	0.026 U	0.027 U	0.025 U	0.027 U
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051		0.00065 U	0.00061 U	0.00064 U	0.00058 U	0.0032 U	0.0033 U	0.003 U	0.0032 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0019 U	0.0018 U	0.0019 U	0.0017 U	0.0095 U	0.0097 U	0.0089 U	0.0096 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.00082 U	0.00076 U	0.00065 U	0.00074 U	0.0041 U	0.0041 U	0.0038 U	0.0041 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.018 U	0.042 U	0.026 U	0.019 U	0.038 U	0.038 U	0.035 U	0.038 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.0056 U	0.0051 U	0.0053 U	0.0049 U	0.027 U	0.027 U	0.025 U	0.027 U
Carbazole	86-74-8	mg/kg	79				0.00078 U	0.00072 U	0.00076 U	0.0007 U	0.0039 U	0.0039 U	0.0036 U	0.0039 U
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0014 U	0.0013 U	0.0014 U	0.0012 U	0.0069 U	0.007 U	0.0064 U	0.0069 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0013 U	0.0012 U	0.0013 U	0.0011 U	0.0064 U	0.0064 U	0.0059 U	0.0064 U
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.00063 U	0.00059 U	0.00062 U	0.00056 U	0.0031 U	0.0032 U	0.0029 U	0.0031 U
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.007 U	0.0045 U	0.011 U	0.0021 U	0.012 U	0.012 U	0.011 U	0.012 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00053 U	0.0005 U	0.00052 U	0.00048 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.0029 U	0.0027 U	0.0028 U	0.0026 U	0.014 U	0.015 U	0.013 U	0.014 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0013 U	0.0012 U	0.0013 U	0.0011 U	0.0064 U	0.0064 U	0.0059 U	0.0064 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0013 U	0.0012 U	0.0013 U	0.0011 U	0.0064 U	0.0064 U	0.0059 U	0.0064 U
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.00053 U	0.0005 U	0.00052 U	0.00048 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0016 U	0.0015 U	0.0016 U	0.0014 U	0.0079 U	0.0081 U	0.0074 U	0.008 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0016 U	0.0015 U	0.0016 U	0.0014 U	0.0079 U	0.0081 U	0.0074 U	0.008 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.00082 U	0.00076 U	0.0008 U	0.00074 U	0.0041 U	0.0041 U	0.0038 U	0.0041 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.00046 U	0.00043 U	0.00045 U	0.00041 U	0.0023 U	0.0023 U	0.0021 U	0.0023 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.0013 U	0.0012 U	0.0013 U	0.0011 U	0.0064 U	0.0064 U	0.0059 U	0.0064 U
Isophorone	78-59-1	mg/kg		570			0.0009 U	0.00083 U	0.00088 U	0.0008 U	0.0044 U	0.0045 U	0.0041 U	0.0045 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.00053 U	0.0017 U	0.00052 U	0.00049 U	0.0026 U	0.0027 U	0.0025 U	0.0027 U

Table D-1. Copco No. 1 Debris Pile/Scrap Yard Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C1DP-15	C1DP-16	C1DP-16	C1DP-16	C1DP-17	C1DP-17	C1DP-17	C1DP-17
						Sample Date	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022	3/11/2022
						Depth Interval	3 - 6	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	FD	N
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.0021 U	0.002 U	0.0021 U	0.0019 U	0.011 U	0.011 U	0.0098 U	0.011 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.0023 U	0.0022 U	0.0023 U	0.0021 U	0.012 U	0.012 U	0.011 U	0.012 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.00085 U	0.00079 U	0.00084 U	0.00077 U	0.0042 U	0.0043 U	0.0039 U	0.0042 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		0.0067 U	0.038 J	0.026 J	0.022 J	0.033 U	0.034 U	0.031 U	0.033 U
Phenanthrene	85-01-8	mg/kg	5.5		11		0.00062 U	0.00058 U	0.00061 U	0.00055 U	0.0031 U	0.0031 U	0.0029 U	0.0031 U
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.0025 U	0.0023 U	0.0024 U	0.0022 U	0.012 U	0.012 U	0.011 U	0.012 U
Pyrene	129-00-0	mg/kg	10	1800	45		0.0014 U	0.0013 U	0.0014 U	0.0012 U	0.0069 U	0.007 U	0.0064 U	0.0069 U
Pyridine	110-86-1	mg/kg		58			0.017 U	0.016 U	0.016 U	0.015 U	0.084 U	0.085 U	0.078 U	0.084 U
SW8290														
1,2,3,4,6,7,8-HpCDD	35822-46-9	mg/kg	2.9E-05	0.00048			--	--	--	--	--	--	--	--
1,2,3,4,6,7,8-HpCDF	67562-39-4	mg/kg	2.9E-05	0.00048			--	--	--	--	--	--	--	--
1,2,3,4,7,8,9-HpCDF	55673-89-7	mg/kg	2.9E-05	0.00048			--	--	--	--	--	--	--	--
1,2,3,4,7,8-HxCDD	39227-28-6	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--
1,2,3,4,7,8-HxCDF	70648-26-9	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--
1,2,3,6,7,8-HxCDD	57653-85-7	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--
1,2,3,6,7,8-HxCDF	57117-44-9	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--
1,2,3,7,8,9-HxCDD	19408-74-3	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--
1,2,3,7,8,9-HxCDF	72918-21-9	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--
1,2,3,7,8-PeCDD	40321-76-4	mg/kg	2.9E-07	4.8E-06			--	--	--	--	--	--	--	--
1,2,3,7,8-PeCDF	57117-41-6	mg/kg	9.7E-06	0.00016			--	--	--	--	--	--	--	--
2,3,4,6,7,8-HxCDF	60851-34-5	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--
2,3,4,7,8-PeCDF	57117-31-4	mg/kg	9.7E-07	1.6E-05			--	--	--	--	--	--	--	--
2,3,7,8-TCDD	1746-01-6	mg/kg	2.9E-07	4.8E-06	0.3		--	--	--	--	--	--	--	--
2,3,7,8-TCDF	51207-31-9	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--
OCDD	3268-87-9	mg/kg	0.00097	0.016			--	--	--	--	--	--	--	--
OCDF	39001-02-0	mg/kg	0.00097	0.016			--	--	--	--	--	--	--	--

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

mg/kg = milligram(s) per kilogram

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-2. Copco No. 2 Wood-Stave Penstock Analytical Soil Results

					Location	C2WS-02	C2WS-02	C2WS-04	C2WS-04	C2WS-05	C2WS-05	C2WS-06	C2WS-06	C2WS-06	C2WS-07	C2WS-08	C2WS-08	C2WS-08
					Sample Date	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022
					Depth Interval	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	0.5 - 1.5	0 - 0.5	0 - 0.5	0.5 - 1.5	1.5 - 2.5
					Sample Type	N	N	N	N	N	N	N	N	FD	N	N	N	N
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater													
CALC																		
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0.3021	0.015479	1.8779	0.002872	0.9378	0.014518	0.3984	0.7112	0.26368	0.46236	0.05813	0.0003862	0.00014
SW6010B																		
Boron	7440-42-8	mg/kg	2	16000		3.7 U	4 U	4.3 J	4.7 J	4.8 J	6 U	4.7 J	4.5 U	3.9 U	4.2 U	4.2 J	4.6 U	5.4 U
SW6020																		
Antimony	7440-36-0	mg/kg	0.67	31		0.2 J	0.11 J	0.37	0.16 J	0.19 J	0.13 J	0.2 J	0.48	0.12 J	0.17 J	0.096 J	0.14 J	0.13 J
Arsenic	7440-38-2	mg/kg	19	19		2.8	2.6	5.4	5.1	5.2	4.7	6.3	8.9 J	6.2 J	11	4.6	4.7	5.4
Barium	7440-39-3	mg/kg	630	15000		140	140	81	150	180	120	150	270 J	190 J	180	180	200	220 J
Beryllium	7440-41-7	mg/kg	2.5	16		0.52	0.61	0.37	0.43	0.51	0.55	0.5	0.62 J	0.45 J	0.62	0.42	0.56	0.51
Cadmium	7440-43-9	mg/kg	0.54	71		0.12 J	0.1 J	0.093 J	0.098 J	0.12 J	0.12 J	0.076 J	0.11 J	0.092 J	0.1 J	0.1 J	0.13 J	0.091 J
Chromium	7440-47-3	mg/kg	200	120000		16	16	22	23	13	13	12	14	13	9.6	17	15	14
Cobalt	7440-48-4	mg/kg	13	23		14	13	14	19	14	14	11	13	13	9.6	13	11	11
Copper	7440-50-8	mg/kg	73	3100		25	24	35	38	36	24	25	34	29	25	28	28	25
Iron	7439-89-6	mg/kg		55000		29000	32000	29000	33000	34000	31000	27000	36000 J	28000 J	29000	27000	28000	27000 J
Lead	7439-92-1	mg/kg	34	80		8.5	4.8	24	4.3	32	5.2	29	12	12	9.3	6	6.3	5
Manganese	7439-96-5	mg/kg	2100	2100		1100	820	670	1100	840	1200	550	1700 J	1100 J	1300	570	570	230 J
Molybdenum	7439-98-7	mg/kg	2	390		0.7	0.73	0.36	0.48	0.44	0.48	0.38	0.61	0.41	0.53	0.33	0.34	0.18 J
Nickel	7440-02-0	mg/kg	110	820		10	10	20	23	14	10	13	13	13	9.7	13	13	11
Selenium	7782-49-2	mg/kg	0.52	390		3.3	3.1	2.4	2.4	2.9	3.4	2.7	3	2.7	3.3	2.7	2.7	3.1
Silver	7440-22-4	mg/kg	4.2	390		0.029 J	0.03 J	0.039 J	0.079 J	0.041 J	0.039 J	0.043 J	0.049 J	0.039 J	0.055 J	0.04 J	0.046 J	0.054 J
Thallium	7440-28-0	mg/kg	2.8	2.8		0.064 J	0.072 J	0.045 J	0.078 J	0.086 J	0.071 J	0.082 J	0.14 J	0.092 J	0.11 J	0.083 J	0.087 J	0.08 J
Vanadium	7440-62-2	mg/kg	280	390		82	87	84	80	82	74	66	73	73	55	72	62	63 J
Zinc	7440-66-6	mg/kg	170	23000		58	57	60	38	60	54	53	56	53	49	52	57	46
SW7471A																		
Mercury	7439-97-6	mg/kg	0.24	1		0.01 J	0.0087 J	0.067	0.049	0.13	0.017 J	0.094	0.069	0.061	0.089	0.015 J	0.029 J	0.0087 U
SW8270C																		
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	0.0037 U	0.0007 U	0.017 U	0.00064 U	0.007 U	0.00069 U	0.0069 UJ	0.0079 UJ	0.0036 U	0.0033 U	0.00077 U	0.00074 U	0.00074 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1	0.003 U	0.00058 U	0.014 U	0.00053 U	0.0058 U	0.00058 U	0.0057 UJ	0.0066 UJ	0.003 U	0.0027 U	0.00064 U	0.00062 U	0.00062 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4	0.0029 U	0.00056 U	0.013 U	0.00051 U	0.0056 U	0.00055 U	0.0055 UJ	0.0063 UJ	0.0029 U	0.0026 U	0.00062 U	0.00059 U	0.0006 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2	0.0051 U	0.00097 U	0.023 U	0.00088 U	0.0097 U	0.00096 U	0.0095 UJ	0.011 UJ	0.005 U	0.0046 U	0.0011 U	0.001 U	0.001 U
1-Methylnaphthalene	90-12-0	mg/kg		9.9		0.0042 J	0.00058 U	0.21	0.00053 U	0.068	0.00058 U	0.0057 UJ	0.025 J	0.0051 J	0.0027 U	0.0016 J	0.00062 U	0.00062 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9	0.0049 U	0.00095 U	0.023 U	0.00086 U	0.0095 U	0.00093 U	0.0093 U	0.011 U	0.0049 U	0.0045 UJ	0.001 U	0.001 U	0.001 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04	0.0079 UJ	0.0015 UJ	0.036 UJ	0.0014 UJ	0.015 UJ	0.0015 UJ	0.015 UJ	0.017 UJ	0.0078 UJ	0.0071 UJ	0.0017 UJ	0.0016 UJ	0.0016 UJ
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075	0.017 UJ	0.0033 U	0.079 U	0.003 U	0.033 U	0.0032 U	0.032 UJ	0.037 UJ	0.017 U	0.015 UJ	0.0036 U	0.0034 U	0.0035 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1	0.037 UJ	0.007 U	0.17 U	0.0064 U	0.07 U	0.0069 U	0.069 UJ	0.079 UJ	0.036 U	0.033 UJ	0.0077 U	0.0074 U	0.0074 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3	0.36 U	0.068 U	1.6 U	0.062 U	0.68 U	0.067 U	0.67 U	0.77 U	0.35 U	0.32 UJ	0.075 U	0.072 U	0.073 UJ
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023	0.026 U	0.005 U	0.12 U	0.0046 U	0.05 U	0.005 U	0.049 UJ	0.057 UJ	0.026 U	0.024 U	0.0055 U	0.0053 U	0.0053 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36		0.0091 U	0.0018 U	0.042 U	0.0016 U	0.018 U	0.0017 U	0.017 UJ	0.02 UJ	0.009 U	0.0082 U	0.0019 U	0.0018 U	0.0019 U
2-Chloronaphthalene	91-58-7	mg/kg		4100		0.003 U	0.00058 U	0.014 U	0.00053 U	0.0058 U	0.00058 U	0.0057 UJ	0.0066 UJ	0.003 U	0.0027 U	0.00064 U	0.00062 U	0.00062 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012	0.0024 UJ	0.00047 U	0.011 U	0.00043 U	0.0047 U	0.00046 U	0.0046 UJ	0.0053 UJ	0.0024 U	0.0022 UJ	0.00051 U	0.00049 U	0.0005 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88	0.0054 U	0.001 U	0.18	0.00094 U	0.049 J	0.001 U	0.01 UJ	0.016 J	0.0053 U	0.0048 U	0.0016 J	0.0011 U	0.0011 U
2-Methylphenol	95-48-7	mg/kg	0.67	3200		0.006 UJ	0.0011 U	0.028 U	0.001 U	0.011 U	0.0011 U	0.011 UJ	0.013 UJ	0.0059 U	0.0054 UJ	0.0013 U	0.0012 U	0.0012 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630		0.0091 U	0.0018 U	0.042 U	0.0016 U	0.018 U	0.0017 U	0.017 UJ	0.02 UJ	0.009 U	0.0082 U	0.0019 U	0.0018 U	0.0019 U

Table D-2. Copco No. 2 Wood-Stave Penstock Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WS-02	C2WS-02	C2WS-04	C2WS-04	C2WS-05	C2WS-05	C2WS-06	C2WS-06	C2WS-06	C2WS-07	C2WS-08	C2WS-08	C2WS-08
						Sample Date	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022
						Depth Interval	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	0.5 - 1.5	0 - 0.5	0 - 0.5	0.5 - 1.5	1.5 - 2.5
						Sample Type	N	N	N	N	N	N	N	N	FD	N	N	N	N
2-Nitrophenol	88-75-5	mg/kg					0.0038 UJ	0.00072 U	0.017 U	0.00066 U	0.0072 U	0.00071 U	0.0071 UJ	0.0082 UJ	0.0037 U	0.0034 UJ	0.0008 U	0.00076 U	0.00077 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0091 UJ	0.0018 U	0.042 U	0.0016 U	0.018 U	0.0017 U	0.017 UJ	0.02 UJ	0.009 U	0.0082 UJ	0.0019 U	0.0018 U	0.0019 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.051 U	0.0098 U	0.24 U	0.0089 U	0.098 U	0.0097 U	0.097 UJ	0.11 UJ	0.05 U	0.046 U	0.011 U	0.01 U	0.01 U
3-Nitroaniline	99-09-2	mg/kg					0.061 U	0.012 U	0.28 U	0.011 U	0.12 U	0.012 U	0.11 UJ	0.13 UJ	0.06 U	0.055 U	0.013 U	0.012 U	0.012 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.061 U	0.012 U	0.28 U	0.011 U	0.12 U	0.012 U	0.11 U	0.13 U	0.06 U	0.055 UJ	0.013 U	0.012 U	0.012 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.0055 U	0.0011 U	0.026 U	0.00097 U	0.011 U	0.001 U	0.01 UJ	0.012 UJ	0.0055 U	0.005 U	0.0012 U	0.0011 U	0.0011 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.02 U	0.0039 U	0.093 U	0.0035 U	0.039 U	0.0038 U	0.038 U	0.044 U	0.02 U	0.018 UJ	0.0042 U	0.0041 U	0.0041 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.082 U	0.016 U	0.38 U	0.014 U	0.16 U	0.015 U	0.15 UJ	0.18 UJ	0.08 U	0.074 U	0.017 U	0.017 U	0.017 UJ
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.0038 U	0.00074 U	0.018 U	0.00067 U	0.0074 U	0.00073 U	0.0072 UJ	0.0083 UJ	0.0038 U	0.0035 U	0.00081 U	0.00078 U	0.00078 U
4-Nitroaniline	100-01-6	mg/kg		27			0.03 U	0.0058 U	0.14 U	0.0053 U	0.058 U	0.0058 U	0.057 UJ	0.066 UJ	0.03 U	0.027 U	0.0064 U	0.0062 U	0.0062 U
4-Nitrophenol	100-02-7	mg/kg					0.1 U	0.02 U	0.48 U	0.018 U	0.2 U	0.02 U	0.2 U	0.23 U	0.1 U	0.095 UJ	0.022 U	0.021 U	0.021 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.0097 J	0.0012 J	0.29	0.00049 U	0.15	0.00089 J	0.016 J	0.061	0.013 J	0.012 J	0.005 J	0.00057 U	0.00057 U
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.088	0.007	0.86	0.0011 J	0.47	0.0065	0.097	0.22 J	0.084 J	0.018	0.0079	0.0011 J	0.00062 U
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.1	0.0061 J	1.8	0.0025 J	0.86	0.013	0.13	0.69 J	0.11 J	0.044	0.039	0.0033 J	0.002 U
Azobenzene	103-33-3	mg/kg		5.6			0.003 U	0.00058 U	0.014 U	0.00053 U	0.0058 U	0.00058 U	0.0057 UJ	0.0066 UJ	0.003 U	0.0027 U	0.00064 U	0.00062 U	0.00062 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.35	0.014	0.031 U	0.0027 J	0.013 U	0.015	0.41	1.1 J	0.32 J	0.33	0.1	0.0014 U	0.0014 U
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.15	0.0084	1.1	0.0017 J	0.53	0.0064 J	0.21	0.37	0.14	0.34	0.027	0.0016 U	0.0016 U
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.65	0.049	4.9	0.0089	2.8	0.035	0.88	1.3 J	0.53 J	0.4	0.13	0.0038 J	0.0014 J
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.092	0.0045 J	0.46	0.0019 U	0.28	0.0035 J	0.094	0.15	0.052	0.16	0.01	0.0022 U	0.0022 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0085 U	0.0016 U	0.039 U	0.0015 U	0.016 U	0.0016 U	0.016 U	0.018 U	0.0084 U	0.0077 U	0.0018 U	0.0017 U	0.0017 U
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.74 UJ	0.14 U	3.4 U	0.13 U	1.4 U	0.14 U	1.4 UJ	1.6 UJ	0.73 U	0.67 UJ	0.16 U	0.15 U	0.15 UJ
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.03 U	0.0058 U	0.14 U	0.0053 U	0.058 U	0.0058 U	0.057 UJ	0.066 UJ	0.03 U	0.027 U	0.0064 U	0.0062 U	0.0062 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.011 U	0.0021 U	0.051 U	0.0019 U	0.021 U	0.0021 U	0.021 UJ	0.024 UJ	0.011 U	0.0099 U	0.0023 U	0.0022 U	0.0022 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.0047 U	0.0009 U	0.022 U	0.00082 U	0.009 U	0.00089 U	0.0089 UJ	0.01 UJ	0.0046 U	0.0042 U	0.0011 J	0.00095 U	0.00096 U
bis (2-Chloroisopropyl) ether	39638-32-9	mg/kg					0.0037 U	0.00071 U	0.017 U	0.00065 U	0.0071 U	0.0007 U	0.007 UJ	0.008 UJ	0.0037 U	0.0034 U	0.00078 U	0.00075 U	0.00076 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.043 U	0.02 J	0.2 U	0.0076 U	0.083 U	0.0082 U	0.082 UJ	0.094 UJ	0.043 U	0.039 U	0.0091 J	0.0087 U	0.011 J
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.031 U	0.0094 J	0.14 U	0.0055 J	0.06 U	0.0059 U	0.059 UJ	0.067 UJ	0.031 U	0.028 U	0.0066 U	0.0063 U	0.015 J
Carbazole	86-74-8	mg/kg	79				0.27	0.011 J	3.6	0.0027 J	2.2	0.02	0.33 J	1.2 J	0.24 J	0.014 J	0.062	0.0009 U	0.00091 U
Chrysene	218-01-9	mg/kg	3.1	110	2.2		1.1	0.059	8.9	0.012	4.8	0.068	1.4	3.2 J	0.88 J	0.36	0.23	0.0062 J	0.0016 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.037	0.0014 U	0.2	0.0013 U	0.075	0.0025 J	0.043 J	0.073 J	0.029 J	0.027	0.0061 J	0.0015 U	0.0015 U
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.009 J	0.00069 U	0.7	0.00063 U	0.21	0.00068 U	0.014 J	0.096 J	0.0084 J	0.0055 J	0.0063 J	0.00079 J	0.00073 U
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.013 U	0.0026 U	0.062 U	0.0023 U	0.026 U	0.0025 U	0.025 UJ	0.029 UJ	0.013 U	0.012 U	0.0028 U	0.0027 U	0.0027 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.003 U	0.00058 U	0.014 U	0.00053 U	0.0058 U	0.00058 U	0.0057 UJ	0.0066 UJ	0.003 U	0.0027 U	0.00064 U	0.00062 U	0.00062 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.016 U	0.0032 J	0.076 U	0.0032 J	0.032 U	0.0031 U	0.031 UJ	0.036 UJ	0.016 U	0.015 U	0.0035 U	0.0062 J	0.0046 J
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0073 U	0.0041 J	0.034 U	0.0047 J	0.014 U	0.0069 J	0.075 J	0.016 UJ	0.054 J	0.049 J	0.0063 J	0.0051 J	0.0015 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		3.3	0.17	46	0.038	28	0.25	4.4	11 J	2.7 J	0.81	0.89	0.027	0.008
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.003 U	0.00058 U	0.43	0.00053 U	0.17	0.00058 U	0.027 J	0.16 J	0.019 J	0.013 J	0.01	0.0011 J	0.00062 U
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0091 U	0.0018 U	0.042 U	0.0016 U	0.018 U	0.0017 U	0.017 UJ	0.02 UJ	0.009 U	0.0082 U	0.0019 U	0.0018 U	0.0019 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0091 U	0.0018 U	0.042 U	0.0016 U	0.018 U	0.0017 U	0.017 UJ	0.02 UJ	0.009 U	0.0082 U	0.0019 U	0.0018 U	0.0019 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.0047 U	0.0009 U	0.022 U	0.00082 U	0.009 U	0.00089 U	0.0089 UJ	0.01 UJ	0.0046 U	0.0042 U	0.00099 U	0.00095 U	0.00096 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.0026 U	0.0005 U	0.012 U	0.00046 U	0.005 U	0.0005 U	0.0049 UJ	0.0057 UJ	0.0026 U	0.0024 U	0.00055 U	0.00053 U	0.00053 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.14	0.0072	0.79	0.0013 U	0.48	0.0055	0.15	0.25	0.088	0.22	0.018	0.0015 U	0.0015 U
Isophorone	78-59-1	mg/kg		570			0.0051 U	0.00098 U	0.024 U	0.00089 U	0.0098 U	0.00097 U	0.0097 UJ	0.011 UJ	0.005 U	0.0046 U	0.0011 U	0.001 U	0.001 U

Table D-2. Copco No. 2 Wood-Stave Penstock Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WS-02	C2WS-02	C2WS-04	C2WS-04	C2WS-05	C2WS-05	C2WS-06	C2WS-06	C2WS-06	C2WS-07	C2WS-08	C2WS-08	C2WS-08
						Sample Date	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022
						Depth Interval	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	0.5 - 1.5	0 - 0.5	0 - 0.5	0.5 - 1.5	1.5 - 2.5
						Sample Type	N	N	N	N	N	N	N	N	FD	N	N	N	N
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.011 J	0.00058 U	0.34	0.00053 U	0.076	0.00058 U	0.013 J	0.024 J	0.0098 J	0.0084 J	0.0025 J	0.00084 J	0.00062 U
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.012 U	0.0023 U	0.056 U	0.0021 U	0.023 U	0.0023 U	0.023 UJ	0.026 UJ	0.012 U	0.011 U	0.0026 U	0.0025 U	0.0025 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.013 U	0.0026 U	0.062 U	0.0023 U	0.026 U	0.0025 U	0.025 UJ	0.029 UJ	0.013 U	0.012 U	0.0028 U	0.0027 U	0.0027 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.0049 U	0.00094 U	0.075 J	0.00085 U	0.0093 U	0.00092 U	0.0092 UJ	0.011 UJ	0.0048 U	0.0044 U	0.001 U	0.00099 U	0.00099 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		0.96	0.058	6.3	0.05	5.2	0.11	1.8	4.2 J	1.4 J	0.18 J	0.22	0.044 J	0.032 J
Phenanthrene	85-01-8	mg/kg	5.5		11		0.48	0.024	21	0.01	8.9	0.055	0.87	5.4 J	0.54 J	0.21	0.21	0.0082	0.0034 J
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.014 UJ	0.0027 U	0.065 U	0.0024 U	0.027 U	0.0027 U	0.026 UJ	0.03 UJ	0.014 U	0.013 UJ	0.003 U	0.0028 U	0.0029 U
Pyrene	129-00-0	mg/kg	10	1800	45		2.1	0.11	20	0.023	10	0.14	2.8	6.7 J	1.8 J	0.64	0.59	0.027	0.006 J
Pyridine	110-86-1	mg/kg		58			0.096 U	0.018 U	0.44 U	0.017 U	0.18 U	0.018 U	0.18 U	0.21 U	0.095 U	0.087 U	0.02 U	0.019 U	0.02 UJ

Table D-2. Copco No. 2 Wood-Stave Penstock Analytical Soil Results

					Location	C2WS-09	C2WS-10	C2WS-10	C2WS-11	C2WS-11	C2WS-12	C2WS-12	C2WS-12	C2WS-12	C2WS-13	C2WS-13	C2WS-13	C2WS-14
					Sample Date	5/12/2022	5/12/2022	5/12/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022
					Depth Interval	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	2.5 - 3.5	5 - 6	0 - 0.5	0.5 - 2	2 - 3	0 - 0.5
					Sample Type	N	N	FD	N	N	N	N	N	N	N	N	N	N
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater													
CALC																		
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0.014999	0.008346	0.014505	0.004036	0 U	0.0004439	0 U	0 U	0 U	0.4391	0.000721	0.12887	2.1549
SW6010B																		
Boron	7440-42-8	mg/kg	2	16000		5.1 J	3.7 U	4 U	5.6 U	5.6 U	9.6 J	8.8 J	9.5 J	8.9 J	4.6 U	6.3 U	4.9 U	5.5 J
SW6020																		
Antimony	7440-36-0	mg/kg	0.67	31		0.17 J	0.041 J	0.039 J	0.04 U	0.04 U	0.06 J	0.045 J	0.058 J	0.038 J	0.12 J	0.087 J	0.21 J	0.14 J
Arsenic	7440-38-2	mg/kg	19	19		5.4	1.8	1.7	1.9	2.7	2.5	2.3	1.9	1.6	3.7	3.1	3.8	5.5
Barium	7440-39-3	mg/kg	630	15000		160	30	31	41	48	180	200	190	130	130	130 J	170	65
Beryllium	7440-41-7	mg/kg	2.5	16		0.6	0.11	0.12	0.13	0.17	0.52	0.53	0.57	0.56	0.72	0.74	0.78	0.26
Cadmium	7440-43-9	mg/kg	0.54	71		0.096 J	0.03 U	0.033 U	0.045 U	0.045 U	0.13 J	0.093 J	0.12 J	0.084 J	0.1 J	0.095 J	0.094 J	0.077 J
Chromium	7440-47-3	mg/kg	200	120000		13	20	23	25	31	12	11	9.6	14	11	10	11	19
Cobalt	7440-48-4	mg/kg	13	23		11	7.7	8.3	8.8	11	21	21	18	21	11	13	17	11
Copper	7440-50-8	mg/kg	73	3100		29	20	21	26	27	42	48	45	50	23	21	20	33
Iron	7439-89-6	mg/kg		55000		31000	23000	25000	27000 J	27000	51000	53000	45000	50000	34000	32000 J	33000	26000
Lead	7439-92-1	mg/kg	34	80		7.4	1.9	1.9	1.7	1.1	4.4	3.2	3.3	3.7	21	5.4	11	37
Manganese	7439-96-5	mg/kg	2100	2100		370	180	200	200 J	540	1700	1500	1500	1200	670	1100 J	1600	500
Molybdenum	7439-98-7	mg/kg	2	390		0.34	0.17	0.16 J	0.18 J	0.26	0.28	0.28	0.27	0.23	0.55	0.42	0.54	0.31
Nickel	7440-02-0	mg/kg	110	820		8.5	10	11	13	14	6.8	6.4	5.5	6.7	7.7	8.4	8.8	14
Selenium	7782-49-2	mg/kg	0.52	390		2.9	1.3	1.2	1.6	1.3	3.2	2.8	2.8	3.3	3.4	2.9	3.5	2
Silver	7440-22-4	mg/kg	4.2	390		0.044 J	0.011 J	0.011 J	0.015 J	0.012 J	0.034 J	0.032 J	0.022 J	0.032 J	0.042 J	0.057 J	0.059 J	0.031 J
Thallium	7440-28-0	mg/kg	2.8	2.8		0.092 J	0.021 U	0.023 U	0.032 U	0.032 U	0.052 J	0.044 J	0.051 J	0.038 J	0.08 J	0.074 J	0.091 J	0.03 J
Vanadium	7440-62-2	mg/kg	280	390		89	92	99	110	99	120	120	110	140	68	50 J	57	90
Zinc	7440-66-6	mg/kg	170	23000		70	38	41	45	45	67	71	61	85	67	46	49	64
SW7471A																		
Mercury	7439-97-6	mg/kg	0.24	1		0.029 J	0.0091 U	0.0074 U	0.01 U	0.0092 U	0.15	0.23	0.28	0.32	0.022 J	0.011 J	0.017 J	0.089
SW8270C																		
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	0.00095 U	0.00067 U	0.00072 U	0.00072 U	0.00071 U	0.00065 U	0.00063 U	0.00066 U	0.00059 U	0.00075 U	0.00075 U	0.0008 U	0.015 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1	0.00079 U	0.00055 U	0.0006 U	0.0006 U	0.00059 U	0.00054 U	0.00053 U	0.00055 U	0.00049 U	0.00062 U	0.00063 U	0.00066 U	0.013 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4	0.00076 U	0.00053 U	0.00058 U	0.00057 U	0.00056 U	0.00052 U	0.0005 U	0.00053 U	0.00047 U	0.0006 U	0.0006 U	0.00064 U	0.012 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2	0.0013 U	0.00092 U	0.001 U	0.00099 U	0.00098 U	0.00089 U	0.00087 U	0.00091 U	0.00082 U	0.001 U	0.001 U	0.0011 U	0.021 U
1-Methylnaphthalene	90-12-0	mg/kg		9.9		0.00079 U	0.00055 U	0.0006 U	0.0006 U	0.00059 U	0.00054 U	0.00053 U	0.00055 U	0.00049 U	0.0067	0.00063 U	0.0043	0.16
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9	0.0013 U	0.0009 U	0.00098 U	0.00097 U	0.00095 U	0.00087 U	0.00085 U	0.00089 U	0.0008 U	0.001 U	0.001 U	0.0011 U	0.021 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04	0.0021 U	0.0014 U	0.0016 U	0.0016 UJ	0.0015 UJ	0.0014 UJ	0.0014 UJ	0.0014 UJ	0.0013 UJ	0.0016 U	0.0016 U	0.0017 U	0.033 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075	0.0045 U	0.0031 U	0.0034 U	0.0033 U	0.0033 U	0.003 U	0.0029 U	0.0031 U	0.0028 U	0.0035 U	0.0035 U	0.0037 U	0.072 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1	0.0095 U	0.0067 U	0.0072 U	0.0072 U	0.0071 U	0.0065 U	0.0063 U	0.0066 U	0.0059 U	0.0075 U	0.0075 U	0.008 U	0.15 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3	0.093 U	0.065 U	0.071 U	0.07 U	0.069 U	0.063 U	0.061 U	0.064 U	0.058 U	0.073 U	0.073 U	0.078 U	1.5 U
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023	0.0068 U	0.0048 U	0.0052 U	0.0051 U	0.0051 U	0.0046 U	0.0045 U	0.0047 U	0.0043 U	0.0053 U	0.0054 U	0.0057 U	0.11 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36		0.0024 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0019 U	0.0019 U	0.002 U	0.038 U
2-Chloronaphthalene	91-58-7	mg/kg		4100		0.00079 U	0.00055 U	0.0006 U	0.0006 U	0.00059 U	0.00054 U	0.00053 U	0.00055 U	0.00049 U	0.00062 U	0.00063 U	0.00066 U	0.013 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012	0.00064 U	0.00044 U	0.00048 U	0.00048 U	0.00047 U	0.00043 U	0.00042 U	0.00044 U	0.0004 U	0.0005 U	0.0005 U	0.00053 U	0.01 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88	0.0014 U	0.00098 U	0.0011 U	0.0011 U	0.001 U	0.00095 U	0.00092 U	0.00096 U	0.00087 U	0.0042 J	0.0011 U	0.0027 J	0.091 J
2-Methylphenol	95-48-7	mg/kg	0.67	3200		0.0016 U	0.0011 U	0.0012 U	0.0012 U	0.0012 U	0.0011 U	0.001 U	0.0011 U	0.00097 U	0.0035 J	0.0012 U	0.0013 U	0.025 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630		0.0024 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0019 U	0.0019 U	0.002 U	0.038 U

Table D-2. Copco No. 2 Wood-Stave Penstock Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WS-09	C2WS-10	C2WS-10	C2WS-11	C2WS-11	C2WS-12	C2WS-12	C2WS-12	C2WS-12	C2WS-13	C2WS-13	C2WS-13	C2WS-14
						Sample Date	5/12/2022	5/12/2022	5/12/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/12/2022	5/12/2022	5/12/2022
						Depth Interval	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	2.5 - 3.5	5 - 6	0 - 0.5	0.5 - 2	2 - 3	0 - 0.5
						Sample Type	N	N	FD	N	N	N	N	N	N	N	N	N	N
2-Nitrophenol	88-75-5	mg/kg					0.00099 U	0.00069 U	0.00075 U	0.00074 U	0.00073 U	0.00067 U	0.00065 U	0.00068 U	0.00061 U	0.00077 U	0.00078 U	0.00082 U	0.016 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0024 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0086 J	0.0019 U	0.002 U	0.038 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.013 U	0.0093 U	0.01 U	0.01 U	0.0099 U	0.009 U	0.0088 U	0.0092 U	0.0083 U	0.01 U	0.011 U	0.011 U	0.21 U
3-Nitroaniline	99-09-2	mg/kg					0.016 U	0.011 U	0.012 U	0.012 U	0.012 U	0.011 U	0.011 U	0.011 U	0.0099 U	0.012 U	0.013 U	0.013 U	0.26 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.016 U	0.011 U	0.012 U	0.012 U	0.012 U	0.011 U	0.011 U	0.011 U	0.0099 U	0.012 U	0.013 U	0.013 U	0.26 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.0014 U	0.001 U	0.0011 U	0.0011 U	0.0011 U	0.00098 U	0.00096 U	0.001 U	0.0009 U	0.0011 U	0.0011 U	0.0012 U	0.023 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0052 U	0.0037 U	0.004 U	0.0039 U	0.0039 U	0.0036 U	0.0035 U	0.0036 U	0.0033 U	0.0041 U	0.0041 U	0.0044 U	0.084 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.021 U	0.015 U	0.016 U	0.016 U	0.016 U	0.014 U	0.014 U	0.015 U	0.013 U	0.017 U	0.017 U	0.018 U	0.34 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.001 U	0.0007 U	0.00076 U	0.00075 U	0.00074 U	0.00068 U	0.00066 U	0.00069 U	0.00062 U	0.00078 U	0.00079 U	0.00084 U	0.016 U
4-Nitroaniline	100-01-6	mg/kg		27			0.0079 U	0.0055 U	0.006 U	0.006 U	0.0059 U	0.0054 U	0.0053 U	0.0055 U	0.0049 U	0.0062 U	0.0063 U	0.0066 U	0.13 U
4-Nitrophenol	100-02-7	mg/kg					0.027 U	0.019 U	0.021 U	0.021 U	0.02 U	0.019 U	0.018 U	0.019 U	0.017 U	0.021 U	0.022 U	0.023 U	0.44 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00073 U	0.00051 U	0.00056 U	0.00055 U	0.00054 U	0.0005 U	0.00048 U	0.0005 U	0.00045 U	0.018	0.00058 U	0.01	0.28
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.0027 J	0.001 J	0.003	0.0006 U	0.00059 U	0.00054 U	0.00053 U	0.00055 U	0.00049 U	0.095	0.00063 U	0.04	0.74
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0063 J	0.0018 J	0.0061 J	0.0019 U	0.0019 U	0.0017 U	0.0017 U	0.0018 U	0.0016 U	0.22	0.0022 J	0.086	1.7
Azobenzene	103-33-3	mg/kg		5.6			0.00079 U	0.00055 U	0.0006 U	0.0006 U	0.00059 U	0.00054 U	0.00053 U	0.00055 U	0.00049 U	0.00062 U	0.00063 U	0.00066 U	0.013 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.015	0.0043 J	0.011	0.0043 J	0.0013 U	0.0012 U	0.0012 U	0.0012 U	0.0011 U	0.79	0.0026 J	0.17	2.4
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0067 J	0.0042 J	0.0071 J	0.0026 J	0.0015 U	0.0014 U	0.0014 U	0.0014 U	0.0013 U	0.21	0.0016 U	0.062	1
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.025	0.011 J	0.031 J	0.0074	0.0012 U	0.0042 J	0.0011 U	0.0011 U	0.00099 U	1.1	0.0043 J	0.34	6.5
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0037 J	0.0026 J	0.0027 J	0.0021 U	0.0021 U	0.0019 U	0.0019 U	0.002 U	0.0018 U	0.058	0.0023 U	0.022	0.39
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0098	0.0032 J	0.0098	0.0035 J	0.0016 U	0.0018 J	0.0015 U	0.0015 U	0.0014 U	0.31	0.0021 J	0.11	2
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.19 U	0.14 U	0.15 U	0.15 U	0.14 U	0.13 U	0.13 U	0.13 U	0.12 U	0.15 U	0.15 U	0.16 U	3.1 U
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0079 U	0.0055 U	0.006 U	0.006 U	0.0059 U	0.0054 U	0.0053 U	0.0055 U	0.0049 U	0.0062 U	0.0063 U	0.0066 U	0.13 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0029 U	0.002 U	0.0022 U	0.0021 U	0.0021 U	0.0019 U	0.0019 U	0.002 U	0.0018 U	0.0022 U	0.0023 U	0.0024 U	0.046 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.0012 U	0.00085 U	0.00093 U	0.00092 U	0.00091 U	0.00083 U	0.00081 U	0.00084 U	0.00076 U	0.00096 U	0.00097 U	0.001 U	0.02 U
bis (2-Chloroisopropyl) ether	39638-32-9	mg/kg					0.00097 U	0.00068 U	0.00074 U	0.00073 U	0.00072 U	0.00066 U	0.00064 U	0.00067 U	0.0006 U	0.00076 U	0.00077 U	0.00081 U	0.016 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.011 U	0.0079 U	0.0086 U	0.0085 U	0.0083 U	0.0076 U	0.0075 U	0.0091 J	0.007 U	0.0088 U	0.0089 U	0.0094 U	0.18 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.0081 U	0.0057 U	0.0062 U	0.0061 U	0.006 U	0.0055 U	0.0054 U	0.0056 U	0.005 U	0.0063 U	0.0064 U	0.0068 U	0.13 U
Carbazole	86-74-8	mg/kg	79				0.0048 J	0.00094 J	0.0055 J	0.00097 J	0.00086 U	0.00079 U	0.00077 U	0.0008 U	0.00072 U	0.48	0.0011 J	0.13	4.6
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.041	0.014 J	0.047 J	0.011	0.0015 U	0.0059 J	0.0014 U	0.0014 U	0.0013 U	2 J	0.01	0.57	9.9
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0035 J	0.0022 J	0.0025 J	0.0014 U	0.0014 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.024	0.0015 U	0.01	0.16
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.00094 U	0.00065 U	0.00071 U	0.0007 U	0.00069 U	0.00064 U	0.00062 U	0.00065 U	0.00058 U	0.021	0.00074 U	0.019 J	0.38
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.0051 U	0.0039 U	0.0027 U	0.0026 U	0.0026 U	0.0024 U	0.0023 U	0.0024 U	0.0022 U	0.0027 U	0.007 U	0.0029 U	0.056 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00079 U	0.00055 U	0.0006 U	0.0006 U	0.00059 U	0.00054 U	0.00053 U	0.00055 U	0.00049 U	0.00062 U	0.00063 U	0.00066 U	0.013 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.012 J	0.0063 J	0.0038 J	0.0032 U	0.0032 U	0.0029 U	0.0028 U	0.0033 J	0.0034 J	0.0034 U	0.0086 J	0.0036 U	0.069 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0019 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.0015 U	0.0015 U	0.0016 U	0.031 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.09	0.031 J	0.17 J	0.024	0.0015 J	0.014	0.0013 U	0.0013 U	0.0012 U	6.2 J	0.041 J	2.6	19
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.00079 U	0.00055 U	0.00074 J	0.0006 U	0.00059 U	0.00054 U	0.00053 U	0.00055 U	0.00049 U	0.023	0.00063 U	0.014	0.35
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0024 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0019 U	0.0019 U	0.002 U	0.038 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0024 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U	0.0016 U	0.0016 U	0.0016 U	0.0015 U	0.0019 U	0.0019 U	0.002 U	0.038 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.0012 U	0.00085 U	0.00093 U	0.00092 U	0.00091 U	0.00083 U	0.00081 U	0.00084 U	0.00076 U	0.00096 U	0.00097 U	0.001 U	0.02 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.00068 U	0.00048 U	0.00052 U	0.00051 U	0.00051 U	0.00046 U	0.00045 U	0.00047 U	0.00043 U	0.00053 U	0.00054 U	0.00057 U	0.011 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.0066	0.0037 J	0.0056	0.0022 J	0.0014 U	0.0013 U	0.0013 U	0.0013 U	0.0012 U	0.11	0.0015 U	0.042	0.75
Isophorone	78-59-1	mg/kg		570			0.0013 U	0.00093 U	0.001 U	0.001 U	0.00099 U	0.0009 U	0.00088 U	0.00092 U	0.00083 U	0.001 U	0.0011 U	0.0011 U	0.021 U

Table D-2. Copco No. 2 Wood-Stave Penstock Analytical Soil Results

			Location			C2WS-09	C2WS-10	C2WS-10	C2WS-11	C2WS-11	C2WS-12	C2WS-12	C2WS-12	C2WS-12	C2WS-13	C2WS-13	C2WS-13	C2WS-14
			Sample Date	Sample Date	Sample Date	5/12/2022	5/12/2022	5/12/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022
			Depth Interval	Depth Interval	Depth Interval	0 - 0.5	0 - 0.5	0 - 0.5	0 - 0.5	0.5 - 1.5	0 - 0.5	0.5 - 1.5	2.5 - 3.5	5 - 6	0 - 0.5	0.5 - 2	2 - 3	0 - 0.5
			Sample Type	Sample Type	Sample Type	N	N	FD	N	N	N	N	N	N	N	N	N	N
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater													
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.00086 J	0.00055 U	0.00067 J	0.00095 J	0.00061 J	0.0011 J	0.00053 U	0.00055 U	0.00049 U	0.0051	0.00063 U	0.0028 J	0.17
Nitrobenzene	98-95-3	mg/kg	2.2	5.1		0.0032 U	0.0022 U	0.0024 U	0.0024 U	0.0024 U	0.0022 U	0.0021 U	0.0022 U	0.002 U	0.0025 U	0.0025 U	0.0027 U	0.051 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078		0.0035 U	0.0024 U	0.0027 U	0.0026 U	0.0026 U	0.0024 U	0.0023 U	0.0024 U	0.0022 U	0.0027 U	0.0028 UJ	0.0029 U	0.056 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110		0.0013 U	0.00089 U	0.00097 U	0.00096 U	0.00094 U	0.00086 U	0.00084 U	0.00088 U	0.00079 U	0.00099 U	0.001 U	0.0011 U	0.02 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098	0.081	0.038 J	0.043 J	0.064	0.0074 U	0.0068 U	0.0066 U	0.0069 U	0.0062 U	1.2	0.031 J	0.34	12
Phenanthrene	85-01-8	mg/kg	5.5		11	0.013	0.0045 J	0.05 J	0.0042 J	0.00068 U	0.003 J	0.00061 U	0.00064 U	0.00057 U	1.5 J	0.012	0.69	16
Phenol	108-95-2	mg/kg	0.79	19000	0.16	0.0037 U	0.0026 U	0.0028 U	0.0027 U	0.0027 U	0.0025 U	0.0024 U	0.0025 U	0.0023 U	0.0029 U	0.0029 U	0.0031 U	0.059 U
Pyrene	129-00-0	mg/kg	10	1800	45	0.061	0.022 J	0.1 J	0.017	0.0015 U	0.0087	0.0014 U	0.0014 U	0.0013 U	3.8 J	0.021 J	1.1	22
Pyridine	110-86-1	mg/kg		58		0.025 UJ	0.018 UJ	0.019 UJ	0.019 U	0.019 U	0.017 U	0.017 U	0.017 U	0.016 U	0.02 UJ	0.02 UJ	0.021 UJ	0.4 UJ

Table D-2. Copco No. 2 Wood-Stave Penstock Analytical Soil Results

						Location	C2WS-15	C2WS-15	C2WS-15	C2WS-15	C2WS-16	C2WS-16
						Sample Date	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022
						Depth Interval	0 - 0.5	0.5 - 1.5	0.5 - 1.5	1.5 - 2.5	0 - 0.5	0.5 - 1.5
						Sample Type	N	N	FD	N	N	N
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater							
CALC												
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0.07605	1.0454	0.8956	2.0069	0.07291	0.021316	
SW6010B												
Boron	7440-42-8	mg/kg	2	16000		4.2 J	4 J	4.9 J	4.1 J	4.2 J	4.6 U	
SW6020												
Antimony	7440-36-0	mg/kg	0.67	31		0.12 J	0.15 J	0.17 J	0.14 J	0.15 J	0.15 J	
Arsenic	7440-38-2	mg/kg	19	19		4	5.6	5.6	5.7	4	4	
Barium	7440-39-3	mg/kg	630	15000		190	300	310	160	200	250	
Beryllium	7440-41-7	mg/kg	2.5	16		0.58	0.78	0.7	0.65	0.48	0.43	
Cadmium	7440-43-9	mg/kg	0.54	71		0.08 J	0.12 J	0.11 J	0.1 J	0.093 J	0.082 J	
Chromium	7440-47-3	mg/kg	200	120000		9.6	12 J	15 J	19	15	13	
Cobalt	7440-48-4	mg/kg	13	23		13	15	13	16	12	13	
Copper	7440-50-8	mg/kg	73	3100		64	37	36	51	27	22	
Iron	7439-89-6	mg/kg		55000		32000	32000	31000	35000	28000	26000	
Lead	7439-92-1	mg/kg	34	80		7	12 J	19 J	9.1	19	9.7	
Manganese	7439-96-5	mg/kg	2100	2100		860	900	850	890	740	980	
Molybdenum	7439-98-7	mg/kg	2	390		0.33	0.38	0.36	0.46	0.34	0.3	
Nickel	7440-02-0	mg/kg	110	820		10	11	13	23	11	9.5	
Selenium	7782-49-2	mg/kg	0.52	390		3.4	3.1	2.9	3.2	2.5	2.4	
Silver	7440-22-4	mg/kg	4.2	390		0.035 J	0.031 J	0.032 J	0.042 J	0.029 J	0.033 J	
Thallium	7440-28-0	mg/kg	2.8	2.8		0.12 J	0.15 J	0.14 J	0.096 J	0.1 J	0.098 J	
Vanadium	7440-62-2	mg/kg	280	390		69	70	73	84	71	65	
Zinc	7440-66-6	mg/kg	170	23000		67	67	66	83	59	53	
SW7471A												
Mercury	7439-97-6	mg/kg	0.24	1		0.1	0.0092 U	0.014 J	0.046	0.0077 J	0.0081 U	
SW8270C												
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	0.00069 U	0.0075 U	0.0072 UJ	0.013 U	0.00073 U	0.00066 U	
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1	0.00057 U	0.0062 U	0.006 UJ	0.011 U	0.00061 U	0.00055 U	
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4	0.00055 U	0.006 U	0.0057 UJ	0.01 U	0.00059 U	0.00053 U	
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2	0.00095 U	0.01 U	0.0099 UJ	0.018 U	0.001 U	0.00092 U	
1-Methylnaphthalene	90-12-0	mg/kg		9.9		0.014	0.0062 U	0.016 J	0.077	0.0081	0.001 J	
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9	0.00093 U	0.01 U	0.0097 U	0.018 U	0.00099 U	0.0009 U	
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04	0.0015 U	0.016 UJ	0.016 UJ	0.028 U	0.0016 U	0.0014 U	
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075	0.0032 U	0.035 UJ	0.034 UJ	0.061 U	0.0034 U	0.0031 U	
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1	0.0069 U	0.075 UJ	0.072 UJ	0.13 U	0.0073 U	0.0066 U	
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3	0.067 U	0.73 U	0.7 U	1.3 U	0.071 U	0.065 U	
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023	0.0049 U	0.054 U	0.052 UJ	0.093 U	0.0053 U	0.0048 U	
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36		0.0017 U	0.019 U	0.018 UJ	0.033 U	0.0018 U	0.0017 U	
2-Chloronaphthalene	91-58-7	mg/kg		4100		0.00057 U	0.0062 U	0.006 UJ	0.011 U	0.00061 U	0.00055 U	
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012	0.00046 U	0.005 UJ	0.0048 UJ	0.0087 U	0.00049 U	0.00044 U	
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88	0.012	0.011 U	0.011 UJ	0.045 J	0.0074	0.001 J	
2-Methylphenol	95-48-7	mg/kg	0.67	3200		0.0023 J	0.012 UJ	0.012 UJ	0.021 U	0.0012 U	0.0011 U	
2-Nitroaniline	88-74-4	mg/kg	5.3	630		0.0017 U	0.019 U	0.018 UJ	0.033 U	0.0018 U	0.0017 U	

Table D-2. Copco No. 2 Wood-Stave Penstock Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WS-15	C2WS-15	C2WS-15	C2WS-15	C2WS-16	C2WS-16
						Sample Date	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022
						Depth Interval	0 - 0.5	0.5 - 1.5	0.5 - 1.5	1.5 - 2.5	0 - 0.5	0.5 - 1.5
						Sample Type	N	N	FD	N	N	N
2-Nitrophenol	88-75-5	mg/kg					0.00071 U	0.0077 UJ	0.0074 UJ	0.013 U	0.00076 U	0.00069 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0053 J	0.019 UJ	0.018 UJ	0.033 U	0.0018 U	0.0017 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.0096 U	0.1 U	0.1 UJ	0.18 U	0.01 U	0.0093 U
3-Nitroaniline	99-09-2	mg/kg					0.011 U	0.12 U	0.12 UJ	0.22 U	0.012 U	0.011 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.011 U	0.12 U	0.12 U	0.22 U	0.012 U	0.011 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.001 U	0.011 U	0.011 UJ	0.02 U	0.0011 U	0.001 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0038 U	0.041 U	0.04 U	0.072 U	0.004 U	0.0037 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.015 U	0.17 U	0.16 UJ	0.29 U	0.016 U	0.015 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.00072 U	0.0078 U	0.0075 UJ	0.014 U	0.00077 U	0.0007 U
4-Nitroaniline	100-01-6	mg/kg		27			0.0057 U	0.062 U	0.06 UJ	0.11 U	0.0061 U	0.0055 U
4-Nitrophenol	100-02-7	mg/kg					0.02 U	0.21 U	0.21 U	0.37 U	0.021 U	0.019 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.014	0.0057 U	0.038 J	0.16	0.01	0.0014 J
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.029	0.31	0.22	0.67	0.017	0.0039
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.062	0.48	0.69	1.2	0.043	0.011
Azobenzene	103-33-3	mg/kg		5.6			0.00057 U	0.0062 U	0.006 UJ	0.011 U	0.00061 U	0.00055 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.09	1.4	1.1	2	0.078	0.022
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.036	0.52	0.42	0.96	0.038	0.01
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.22	2.7	2.6	5.9	0.18	0.049
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.015	0.19	0.17	0.37	0.016	0.0053 J
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.066	0.017 U	0.017 U	1.5	0.054	0.014
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.14 U	1.5 UJ	1.5 UJ	2.7 U	0.15 U	0.14 U
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0057 U	0.062 U	0.06 UJ	0.11 U	0.0061 U	0.0055 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0021 U	0.022 U	0.022 UJ	0.039 U	0.0022 U	0.002 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.00088 U	0.0096 U	0.0092 UJ	0.017 U	0.00094 U	0.00085 U
bis (2-Chloroisopropyl) ether	39638-32-9	mg/kg					0.0007 U	0.0076 U	0.0073 UJ	0.013 U	0.00075 U	0.00068 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.0081 U	0.088 U	0.085 UJ	0.15 U	0.0087 U	0.0079 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.0058 U	0.063 U	0.061 UJ	0.11 U	0.0062 U	0.0056 U
Carbazole	86-74-8	mg/kg	79				0.13	1.4	0.99 J	2.3	0.075	0.015 J
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.39	5.4	4.6	8.9	0.27	0.066
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0053 J	0.077	0.069 J	0.17	0.0055 J	0.0032 J
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.052	0.0073 U	0.051 J	0.25 J	0.02	0.0022 J
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.003 U	0.027 U	0.026 UJ	0.048 U	0.0029 U	0.0035 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00057 U	0.0062 U	0.006 UJ	0.011 U	0.00061 U	0.00055 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.0031 U	0.034 U	0.032 UJ	0.059 U	0.0077 J	0.0063 J
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0014 U	0.015 U	0.014 UJ	0.026 U	0.0015 U	0.0013 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		2.1	28	25 J	44	0.84	0.19
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.016	0.055	0.066	0.21	0.012	0.0018 J
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0017 U	0.019 U	0.018 UJ	0.033 U	0.0018 U	0.0017 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0017 U	0.019 U	0.018 UJ	0.033 U	0.0018 U	0.0017 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.00088 U	0.0096 U	0.0092 UJ	0.017 U	0.00094 U	0.00085 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.00049 U	0.0054 U	0.0052 UJ	0.0093 U	0.00053 U	0.00048 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.027	0.33	0.32	0.63	0.028	0.0081
Isophorone	78-59-1	mg/kg		570			0.0039 J	0.01 U	0.01 UJ	0.018 U	0.001 U	0.00093 U

Table D-2. Copco No. 2 Wood-Stave Penstock Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WS-15	C2WS-15	C2WS-15	C2WS-15	C2WS-16	C2WS-16
						Sample Date	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022	5/12/2022
						Depth Interval	0 - 0.5	0.5 - 1.5	0.5 - 1.5	1.5 - 2.5	0 - 0.5	0.5 - 1.5
						Sample Type	N	N	FD	N	N	N
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.023	0.0062 U	0.018 J	0.042 J	0.015	0.0017 J
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.0023 U	0.025 U	0.024 UJ	0.043 U	0.0024 U	0.0022 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.0025 U	0.027 U	0.026 UJ	0.048 U	0.0027 U	0.0024 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.00091 U	0.01 U	0.0096 UJ	0.017 U	0.00098 U	0.00089 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		0.22	5.3	4.5	0.54 J	1.1	0.29
Phenanthrene	85-01-8	mg/kg	5.5		11		0.93	4.6	5.5	11	0.43	0.057
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.0026 U	0.029 UJ	0.028 UJ	0.05 U	0.0028 U	0.0025 U
Pyrene	129-00-0	mg/kg	10	1800	45		0.79	10	9.7	16	0.51	0.12
Pyridine	110-86-1	mg/kg		58			0.018 UJ	0.2 U	0.19 U	0.34 UJ	0.019 UJ	0.017 UJ

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

mg/kg = milligram(s) per kilogram

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-3. Copco No. 2 Wood-Stave Penstock Analytical Water Results

			Location	C2WS-04	C2WS-06	C2WS-06
			Sample Date	5/13/2022	5/12/2022	5/12/2022
			Sample Type	N	N	FD
Analyte	CAS	Unit	Groundwater Screening Level			
CALC						
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	µg/L		--	0.0833	0.09311
SW6010B						
Boron	7440-42-8	µg/L	4000	41 U	41 U	41 U
SW6020						
Antimony	7440-36-0	µg/L	6	0.29 J	0.18 J	0.36 J
Arsenic	7440-38-2	µg/L	0.0082	41	8.6 J	37 J
Barium	7440-39-3	µg/L	1000	1100	110 J	770 J
Beryllium	7440-41-7	µg/L	4	5	0.55 J	3.1 J
Cadmium	7440-43-9	µg/L	5	1	0.093 J	0.63
Chromium	7440-47-3	µg/L	100	130	14 J	80 J
Cobalt	7440-48-4	µg/L	6	110	7.5 J	51 J
Copper	7440-50-8	µg/L	800	370	31 J	160 J
Iron	7439-89-6	µg/L	14000	210000	26000 J	120000 J
Lead	7439-92-1	µg/L	15	220	24 J	240 J
Manganese	7439-96-5	µg/L	430	7200	590 J	4700 J
Molybdenum	7439-98-7	µg/L	100	3.3	1.2 J	3.5 J
Nickel	7440-02-0	µg/L	100	130	11 J	63 J
Selenium	7782-49-2	µg/L	50	20	2.8 J	16
Silver	7440-22-4	µg/L	94	0.71	0.077 J	0.35 J
Thallium	7440-28-0	µg/L	0.2	0.8 J	0.095 J	0.59 J
Vanadium	7440-62-2	µg/L	86	450	60 J	330 J
Zinc	7440-66-6	µg/L	6000	510	54 J	270 J
SW7470A						
Mercury	7439-97-6	µg/L	0.063	0.67	0.15 U	0.46
SW8082						
Aroclor 1016	12674-11-2	µg/L	0.22	--	--	--
Aroclor 1221	11104-28-2	µg/L	0.0047	--	--	--
Aroclor 1232	11141-16-5	µg/L	0.0047	--	--	--
Aroclor 1242	53469-21-9	µg/L	0.0078	--	--	--
Aroclor 1248	12672-29-6	µg/L	0.0078	--	--	--
Aroclor 1254	11097-69-1	µg/L	0.0079	--	--	--
Aroclor 1260	11096-82-5	µg/L	0.0078	--	--	--
SW8270C						
1,2,4-Trichlorobenzene	120-82-1	µg/L	0.46	--	0.09 U	0.093 U
1,2-Dichlorobenzene	95-50-1	µg/L	300	--	0.05 U	0.052 U
1,3-Dichlorobenzene	541-73-1	µg/L	300	--	0.04 U	0.041 U
1,4-Dichlorobenzene	106-46-7	µg/L	0.48	--	0.04 U	0.041 U
1-Methylnaphthalene	90-12-0	µg/L	0.46	--	0.05 U	0.052 U
2,4,5-Trichlorophenol	95-95-4	µg/L	1200	--	0.1 U	0.1 U
2,4,6-Trichlorophenol	88-06-2	µg/L	0.65	--	0.1 U	0.1 U
2,4-Dichlorophenol	120-83-2	µg/L	46	--	0.2 U	0.21 U
2,4-Dimethylphenol	105-67-9	µg/L	360	--	0.16 U	0.17 U
2,4-Dinitrophenol	51-28-5	µg/L	39	--	0.45 U	0.47 U
2,4-Dinitrotoluene	121-14-2	µg/L	0.24	--	0.1 U	0.1 U
2,6-Dinitrotoluene	606-20-2	µg/L	0.049	--	0.1 U	0.1 U

Table D-3. Copco No. 2 Wood-Stave Penstock Analytical Water Results

Analyte	CAS	Unit	Location	C2WS-04	C2WS-06	C2WS-06
			Sample Date	5/13/2022	5/12/2022	5/12/2022
			Sample Type	N	N	FD
			Groundwater			
			Screening Level			
2-Chloronaphthalene	91-58-7	µg/L	350	--	0.07 U	0.073 U
2-Chlorophenol	95-57-8	µg/L	29	--	0.05 U	0.052 U
2-Methylnaphthalene	91-57-6	µg/L	17	--	0.06 U	0.062 U
2-Methylphenol	95-48-7	µg/L	930	--	0.05 U	0.052 U
2-Nitroaniline	88-74-4	µg/L	190	--	0.1 U	0.1 U
2-Nitrophenol	88-75-5	µg/L	5800	--	0.07 U	0.073 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	µg/L	5800	--	0.1 U	0.1 U
3,3'-Dichlorobenzidine	91-94-1	µg/L	0.047	--	0.12 U	0.12 U
3-Nitroaniline	99-09-2	µg/L	13	--	0.16 U	0.17 U
4,6-Dinitro-2-methylphenol	534-52-1	µg/L	1.5	--	0.55 U	0.57 U
4-Bromophenyl Phenyl Ether	101-55-3	µg/L		--	0.06 U	0.062 U
4-Chloro-3-methylphenol	59-50-7	µg/L	1400	--	0.13 U	0.13 U
4-Chloroaniline	106-47-8	µg/L	0.37	--	0.15 U	0.16 U
4-Chlorophenyl Phenylether	7005-72-3	µg/L		--	0.05 U	0.052 U
4-Nitroaniline	100-01-6	µg/L	3.8	--	0.21 U	0.22 U
4-Nitrophenol	100-02-7	µg/L	5800	--	1.7 U	1.8 U
Acenaphthene	83-32-9	µg/L	260	--	0.05 U	0.052 U
Acenaphthylene	208-96-8	µg/L	81	--	0.06 U	0.062 U
Anthracene	120-12-7	µg/L	1000	--	0.05 U	0.057 J
Azobenzene	103-33-3	µg/L	0.12	--	0.06 U	0.062 U
Benzo(a)anthracene	56-55-3	µg/L	0.017	--	0.11 J	0.14 J
Benzo(a)pyrene	50-32-8	µg/L	0.025	--	0.043 J	0.055 J
Benzo(b)fluoranthene	205-99-2	µg/L	0.25	--	0.28 J	0.23 J
Benzo(g,h,i)perylene	191-24-2	µg/L	81	--	0.04 U	0.041 U
Benzo(k)fluoranthene	207-08-9	µg/L	2.5	--	0.1 J	0.076 J
Benzoic Acid	65-85-0	µg/L	75000	--	1.3 UJ	1.4 UJ
Benzyl Alcohol	100-51-6	µg/L	2000	--	0.18 U	0.19 U
Bis (2-chloroethoxy) methane	111-91-1	µg/L	59	--	0.05 U	0.052 U
Bis (2-chloroethyl) ether	111-44-4	µg/L	0.0063	--	0.03 U	0.031 U
bis (2-Chloroisopropyl) ether	39638-32-9	µg/L		--	0.06 U	0.062 U
Bis (2-ethylhexyl) phthalate	117-81-7	µg/L	4	--	0.74 U	0.77 U
Butyl benzyl phthalate	85-68-7	µg/L	16	--	0.27 U	0.28 U
Carbazole	86-74-8	µg/L		--	0.1 U	0.1 U
Chrysene	218-01-9	µg/L	25	--	0.3	0.35
Dibenzo(a,h)anthracene	53-70-3	µg/L	0.0061	--	0.07 U	0.073 U
Dibenzofuran	132-64-9	µg/L	4	--	0.1 U	0.1 U
Diethylphthalate	84-66-2	µg/L	15000	--	0.15 U	0.16 U
Dimethylphthalate	131-11-3	µg/L		--	0.06 U	0.062 U
Di-N-Butylphthalate	84-74-2	µg/L	900	--	3 U	3.1 U
Di-n-octyl phthalate	117-84-0	µg/L	200	--	0.13 U	0.13 U
Fluoranthene	206-44-0	µg/L	800	--	0.88	0.87
Fluorene	86-73-7	µg/L	160	--	0.05 U	0.052 U
Hexachlorobenzene	118-74-1	µg/L	0.0088	--	0.08 U	0.083 U
Hexachlorobutadiene	87-68-3	µg/L	0.14	--	0.08 U	0.083 U
Hexachlorocyclopentadiene	77-47-4	µg/L	0.41	--	0.14 U	0.15 U
Hexachloroethane	67-72-1	µg/L	0.33	--	0.05 U	0.052 U

Table D-3. Copco No. 2 Wood-Stave Penstock Analytical Water Results

Analyte	CAS	Unit	Groundwater Screening Level	Location	C2WS-04	C2WS-06	C2WS-06
				Sample Date	5/13/2022	5/12/2022	5/12/2022
				Sample Type	N	N	FD
Indeno(1,2,3-cd)pyrene	193-39-5	µg/L	0.25		--	0.13 U	0.13 U
Isophorone	78-59-1	µg/L	78		--	0.1 U	0.1 U
Naphthalene	91-20-3	µg/L	0.12		--	0.16 U	0.17 U
Nitrobenzene	98-95-3	µg/L	0.14		--	0.04 U	0.041 U
N-Nitrosodi-N-propylamine	621-64-7	µg/L	0.011		--	0.06 U	0.062 U
N-Nitrosodiphenylamine	86-30-6	µg/L	12		--	0.07 U	0.073 U
Pentachlorophenol	87-86-5	µg/L	0.041		--	0.51 U	0.53 U
Phenanthrene	85-01-8	µg/L	81		--	0.14 J	0.17 J
Phenol	108-95-2	µg/L	5800		--	0.16 U	0.17 U
Pyrene	129-00-0	µg/L	81		--	0.53 J	0.58 J
Pyridine	110-86-1	µg/L	5.9		--	1 U	1.1 U

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

µg/L = microgram(s) per liter

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-4. Copco No. 2 Wood Pile Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WP-01	C2WP-01	C2WP-01	C2WP-02	C2WP-02	C2WP-02	C2WP-02	C2WP-02	C2WP-03	C2WP-03	C2WP-03	C2WP-04	C2WP-04	C2WP-04
						Sample Date	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
						Depth Interval	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	0 - 0.5	3 - 3.5	1 - 1.5	5 - 6	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	1 - 1.5	3 - 3.5
						Sample Type	N	N	N	N	FD	N	N	N	N	N	N	N	N	N
CALC																				
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0.025625	0 U	0 U	0.023699	0.04454	0 U	0 U	0 U	0 U	0.0003962	1.7E-06	0.00013	0.00848	0.0003997
SW6010B																				
Boron	7440-42-8	mg/kg	2	16000			5.2 U	5.3 U	4.1 U	4.1 U	2.4 U	4.3 U	5.4 U	4.1 J	3.2 J	2.9 J	5.2 U	3.7 J	3.4 J	5.8 U
SW6020																				
Antimony	7440-36-0	mg/kg	0.67	31			0.12 J	0.18 J	0.19 J	0.11 J	0.12 J	0.098 J	0.14 J	0.11 J	0.13 J	0.13 J	0.12 J	0.13 J	0.13 J	0.14 J
Arsenic	7440-38-2	mg/kg	19	19			4.7	5	6.8	4.3	4.7	4.5	4.9	6.2	4.1	4.6	5.9	3.9	9.4	5.3
Barium	7440-39-3	mg/kg	630	15000			190 J	190	200	170	180	170	200	170	190	180	220	180	190	180
Beryllium	7440-41-7	mg/kg	2.5	16			0.79 J	0.75	0.62	0.75	0.72	0.72	0.89	0.67	0.71	0.72	0.83	0.52	0.67	0.76
Cadmium	7440-43-9	mg/kg	0.54	71			0.087 J	0.11 J	0.12 J	0.095 J	0.089 J	0.081 J	0.1 J	0.11 J	0.2 J	0.1 J	0.11 J	0.12 J	0.12 J	0.089 J
Chromium	7440-47-3	mg/kg	200	120000			62 J	44	30	42	50	54	50	56	75	60	53	70	82	57
Cobalt	7440-48-4	mg/kg	13	23			30	25	22	24	26	27	27	29	33	29	30	30	34	30
Copper	7440-50-8	mg/kg	73	3100			56	50	40	48	50	52	55	58	61	52	53	55	62	51
Iron	7439-89-6	mg/kg		55000			52000	48000	40000	45000	50000	49000	52000	51000	55000	51000	53000	49000	56000	52000
Lead	7439-92-1	mg/kg	34	80			4.5	5	4.7	4.8	5	3.7	5	4.1	25	5.2	8.9	5.3	4.7	4.9
Manganese	7439-96-5	mg/kg	2100	2100			1000	980	960	890	940	890	1100	1100	1300	1200	1200	1100	1400	1100
Molybdenum	7439-98-7	mg/kg	2	390			0.42	0.51	0.88	0.39	0.56	0.37	0.48	0.56	0.46	0.49	0.71	0.51	0.83	0.59
Nickel	7440-02-0	mg/kg	110	820			59	46	32	50	50	57	59	58	63	60	59	58	66	56
Selenium	7782-49-2	mg/kg	0.52	390			4.1	4.1	4.7	4.2	3.9	3.3	4.3	3.8	4.1	4	3.6	3.7	3.8	3.8
Silver	7440-22-4	mg/kg	4.2	390			0.031 J	0.025 J	0.026 J	0.025 J	0.026 J	0.022 J	0.028 J	0.022 J	0.048 J	0.046 J	0.024 J	0.036 J	0.042 J	0.027 J
Thallium	7440-28-0	mg/kg	2.8	2.8			0.14 J	0.16 J	0.15 J	0.15 J	0.15 J	0.12 J	0.2 J	0.13 J	0.13 J	0.13 J	0.15 J	0.095 J	0.12 J	0.14 J
Vanadium	7440-62-2	mg/kg	280	390			130	130	140	110	130	130	130	150	160	140	130	140	170	140
Zinc	7440-66-6	mg/kg	170	23000			71 J	74	70	65	72	67	74	74	110	71	71	85	81	67
SW7471A																				
Mercury	7439-97-6	mg/kg	0.24	1			0.01 U	0.012 J	0.01 J	0.015 J	0.012 J	0.053	0.014 J	0.01 U	0.01 U	0.008 U	0.0095 J	0.014 J	0.0085 U	0.01 U
SW8011																				
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		8.5E-05 UJ	8E-05 UJ	7.9E-05 UJ	8.2E-05 UJ	8.3E-05 UJ	7.9E-05 UJ	9.3E-05 UJ	7.6E-05 UJ	8.7E-05 UJ	7.9E-05 UJ	7.4E-05 UJ	8.5E-05 UJ	8.5E-05 UJ	7.1E-05 UJ
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		1.3E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.3E-05 UJ	1.2E-05 UJ	1.4E-05 UJ	1.1E-05 UJ	1.3E-05 UJ	1.2E-05 UJ	1.1E-05 UJ	1.3E-05 UJ	1.3E-05 UJ	1.1E-05 UJ
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		1.5E-05 UJ	1.5E-05 UJ	1.4E-05 UJ	1.5E-05 UJ	1.5E-05 UJ	1.4E-05 UJ	1.7E-05 UJ	1.4E-05 UJ	1.6E-05 UJ	1.4E-05 UJ	1.3E-05 UJ	1.5E-05 UJ	1.5E-05 UJ	1.3E-05 UJ
SW8260B																				
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017		0.00064 UJ	0.0007 U	0.0007 U	0.00086 U	0.00061 U	0.00058 U	0.00072 U	0.00069 U	0.0007 U	0.00057 U	0.00068 U	0.00072 U	0.0007 U	0.00072 U
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7		0.00032 UJ	0.00036 U	0.00036 U	0.00044 U	0.00031 U	0.0003 U	0.00037 U	0.00035 U	0.00036 U	0.00029 U	0.00035 U	0.00036 U	0.00036 U	0.00037 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018		0.00097 UJ	0.0011 U	0.0011 U	0.0013 U	0.00094 U	0.00089 U	0.0011 U	0.001 U	0.0011 U	0.00087 U	0.001 U	0.0011 U	0.0011 U	0.0011 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700			0.00056 UJ	0.00062 U	0.00062 U	0.00076 U	0.00054 U	0.00052 U	0.00064 U	0.0006 U	0.00062 U	0.0005 U	0.0006 U	0.00063 U	0.00062 U	0.00064 U
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076		0.00027 UJ	0.0003 U	0.0003 U	0.00036 U	0.00026 U	0.00025 U	0.00031 U	0.00029 U	0.0003 U	0.00024 U	0.00029 U	0.0003 U	0.00031 U	0.00031 U
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2		0.00021 UJ	0.00023 U	0.00023 U	0.00028 U	0.0002 U	0.00019 U	0.00023 U	0.00022 U	0.00023 U	0.00018 U	0.00022 U	0.00023 U	0.00023 U	0.00023 U
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54		0.0012 UJ	0.0013 U	0.0013 U	0.0016 U	0.0011 U	0.0011 U	0.0013 U	0.0013 U	0.0013 U	0.0011 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U
1,1-Dichloropropene	563-58-6	mg/kg					0.00032 UJ	0.00036 U	0.00036 U	0.00044 U	0.00031 U	0.0003 U	0.00037 U	0.00035 U	0.00036 U	0.00029 U	0.00035 U	0.00036 U	0.00036 U	0.00037 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40			0.00065 UJ	0.00071 U	0.00071 U	0.00087 U	0.00062 U	0.00059 U	0.00074 U	0.0007 U	0.00071 U	0.00058 U	0.0007 U	0.00073 U	0.00071 U	0.00074 U
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		0.0011 UJ	0.0012 U	0.0012 U	0.0015 U	0.001 U	0.00099 U	0.0012 U	0.0012 U	0.0012 U	0.00097 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00045 UJ	0.0005 U	0.0005 U	0.00061 U	0.00044 U	0.00042 U	0.00052 U	0.00049 U	0.0005 U	0.00041 U	0.00049 U	0.00051 U	0.0005 U	0.00051 U
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300			0.0013 UJ	0.0014 U	0.0014 U	0.0017 U	0.0012 U	0.0012 U	0.0015 U	0.0014 U	0.0014 U	0.0012 U	0.0014 U	0.0015 U	0.0014 U	0.0015 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		0.0017 U	0.0019 U	0.0019 U	0.0023 U	0.0017 U	0.0016 U	0.002 U	0.0019 U	0.0019 U	0.0015 U	0.0019 U	0.0019 U	0.0019 U	0.002 U
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		0.00022 UJ	0.00024 U	0.00024 U	0.00029 U	0.00021 U	0.0002 U	0.00025 U	0.00023 U	0.00024 U	0.00019 U	0.00023 U	0.00024 U	0.00024 U	0.00025 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0014 UJ	0.0015 U	0.0015 U	0.0019 U	0.0014 U	0.0013 U	0.0016 U	0.0015 U	0.0015 U	0.0013 U	0.0015 U	0.0016 U	0.0015 U	0.0016 U
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.00022 UJ	0.00024 U	0.00024 U	0.00029 U	0.00021 U	0.0002 U	0.00025 U	0.00023 U	0.00024 U	0.00019 U	0.00023 U	0.00024 U	0.00024 U	0.00025 U
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.00043 UJ	0.00047 U	0.00047 U	0.00058 U	0.00042 U	0.0004 U	0.00049 U	0.00046 U	0.00047 U	0.00039 U	0.00046 U	0.00049 U	0.00048 U	0.00049 U

Table D-4. Copco No. 2 Wood Pile Analytical Results

Analyte	CAS	Unit	Location			C2WP-01	C2WP-01	C2WP-01	C2WP-02	C2WP-02	C2WP-02	C2WP-02	C2WP-02	C2WP-02	C2WP-03	C2WP-03	C2WP-03	C2WP-04	C2WP-04	C2WP-04	
			Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
						0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	0 - 0.5	3 - 3.5	1 - 1.5	5 - 6	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	1 - 1.5	3 - 3.5		
					N	N	N	N	FD	N	N	N	N	N	N	N	N	N	N	N	
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270		0.00088 UJ	0.00096 U	0.00096 U	0.0012 U	0.00084 U	0.0008 U	0.00099 U	0.00094 U	0.00096 U	0.00078 U	0.00094 U	0.00098 U	0.00096 U	0.00099 U		
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4	0.0012 UJ	0.0013 U	0.0013 U	0.0016 U	0.0011 U	0.0011 U	0.0013 U	0.0013 U	0.0013 U	0.0011 U	0.0013 U	0.0013 U	0.0013 U	0.0013 U		
1,3-Dichloropropane	142-28-9	mg/kg		410		0.00025 UJ	0.00027 U	0.00027 U	0.00033 U	0.00024 U	0.00023 U	0.00028 U	0.00027 U	0.00027 U	0.00022 U	0.00027 U	0.00028 U	0.00027 U	0.00028 U		
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2	0.0011 UJ	0.0012 U	0.0012 U	0.0014 U	0.001 U	0.00097 U	0.0012 U	0.0011 U	0.0012 U	0.00095 U	0.0011 U	0.0012 U	0.0012 U	0.0012 U		
2,2-Dichloropropane	594-20-7	mg/kg				0.00036 UJ	0.00039 U	0.00039 U	0.00048 U	0.00034 U	0.00033 U	0.0004 U	0.00038 U	0.00039 U	0.00032 U	0.00038 U	0.0004 U	0.00039 U	0.0004 U		
2-Butanone	78-93-3	mg/kg	350	27000	6.1	0.0096 UJ	0.011 U	0.011 U	0.013 U	0.0093 U	0.0088 U	0.011 U	0.01 U	0.011 U	0.0086 U	0.01 U	0.011 U	0.011 U	0.011 U		
2-Chlorotoluene	95-49-8	mg/kg		470		0.001 UJ	0.0011 U	0.0011 U	0.0014 U	0.00097 U	0.00092 U	0.0011 U	0.0011 U	0.0011 U	0.0009 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U		
2-Hexanone	591-78-6	mg/kg	0.36	200		0.0042 UJ	0.0046 U	0.0046 U	0.0057 U	0.0041 U	0.0039 U	0.0048 U	0.0045 U	0.0046 U	0.0038 U	0.0045 U	0.0047 U	0.0046 U	0.0048 U		
4-Chlorotoluene	106-43-4	mg/kg		440		0.0011 UJ	0.0012 U	0.0012 U	0.0015 U	0.001 U	0.00099 U	0.0012 U	0.0012 U	0.0012 U	0.00097 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U		
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36	0.0065 UJ	0.0071 U	0.0071 U	0.0087 U	0.0062 U	0.0059 U	0.0074 U	0.007 U	0.0071 U	0.0058 U	0.007 U	0.0073 U	0.0071 U	0.0074 U		
Acetone	67-64-1	mg/kg	1.2	61000	0.92	0.0093 U	0.01 U	0.01 U	0.013 U	0.009 U	0.0085 U	0.017 U	0.01 U	0.01 U	0.0084 U	0.01 U	0.01 U	0.01 U	0.011 U		
Benzene	71-43-2	mg/kg	24	0.33	0.025	0.00042 UJ	0.00046 U	0.00046 U	0.00057 U	0.00041 U	0.00039 U	0.00048 U	0.00045 U	0.00046 U	0.00038 U	0.00045 U	0.00047 U	0.00046 U	0.00048 U		
Bromobenzene	108-86-1	mg/kg		290		0.0011 UJ	0.0012 U	0.0012 U	0.0015 U	0.001 U	0.00099 U	0.0012 U	0.0012 U	0.0012 U	0.00097 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U		
Bromochloromethane	74-97-5	mg/kg		150		0.00027 UJ	0.0003 U	0.0003 U	0.00036 U	0.00026 U	0.00025 U	0.00031 U	0.00029 U	0.0003 U	0.00024 U	0.00029 U	0.0003 U	0.0003 U	0.00031 U		
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016	0.00019 UJ	0.00021 U	0.00021 U	0.00026 U	0.00019 U	0.00018 U	0.00022 U	0.00021 U	0.00021 U	0.00017 U	0.00021 U	0.00022 U	0.00021 U	0.00022 U		
Bromoform	75-25-2	mg/kg		19	0.69	0.00091 UJ	0.001 U	0.001 U	0.0012 U	0.00087 U	0.00083 U	0.001 U	0.00098 U	0.001 U	0.00081 U	0.00097 U	0.001 U	0.001 U	0.001 U		
Bromomethane	74-83-9	mg/kg		6.8	0.36	0.00023 UJ	0.00025 U	0.00025 U	0.00031 U	0.00022 U	0.00021 U	0.00026 U	0.00024 U	0.00025 U	0.0002 U	0.00024 U	0.00026 U	0.00025 U	0.00026 U		
Carbon Disulfide	75-15-0	mg/kg	0.81	770		0.00022 UJ	0.00024 U	0.00024 U	0.00029 U	0.00021 U	0.0002 U	0.00025 U	0.00023 U	0.00024 U	0.00019 U	0.00023 U	0.00024 U	0.00024 U	0.00025 U		
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076	0.00032 UJ	0.00036 U	0.00036 U	0.00044 U	0.00031 U	0.0003 U	0.00037 U	0.00035 U	0.00036 U	0.00029 U	0.00035 U	0.00036 U	0.00036 U	0.00037 U		
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4	0.00027 UJ	0.0003 U	0.0003 U	0.00036 U	0.00026 U	0.00025 U	0.00031 U	0.00029 U	0.0003 U	0.00024 U	0.00029 U	0.0003 U	0.0003 U	0.00031 U		
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35	0.00029 UJ	0.00032 U	0.00032 U	0.00039 U	0.00028 U	0.00027 U	0.00033 U	0.00031 U	0.00032 U	0.00026 U	0.00031 U	0.00033 U	0.00032 U	0.00033 U		
Chloroethane	75-00-3	mg/kg		14000	1.2	0.00081 U	0.00089 U	0.00089 U	0.0011 U	0.00078 U	0.00074 U	0.00092 U	0.00087 U	0.00089 U	0.00073 U	0.00087 U	0.00091 U	0.00089 U	0.00092 U		
Chloroform	67-66-3	mg/kg	8	0.32	0.023	0.00032 UJ	0.00036 U	0.00036 U	0.00044 U	0.00031 U	0.0003 U	0.00037 U	0.00035 U	0.00036 U	0.00029 U	0.00035 U	0.00036 U	0.00036 U	0.00037 U		
Chloromethane	74-87-3	mg/kg		110	11	0.001 U	0.0011 U	0.0011 U	0.0014 U	0.00097 U	0.00092 U	0.0011 U	0.0011 U	0.0011 U	0.0009 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U		
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19	0.00065 UJ	0.00071 U	0.00071 U	0.00087 U	0.00062 U	0.00059 U	0.00074 U	0.0007 U	0.00071 U	0.00058 U	0.0007 U	0.00073 U	0.00071 U	0.00074 U		
cis-1,3-Dichloropropene	10061-01-5	mg/kg				0.00022 UJ	0.00024 U	0.00024 U	0.00029 U	0.00021 U	0.0002 U	0.00025 U	0.00023 U	0.00024 U	0.00019 U	0.00023 U	0.00024 U	0.00024 U	0.00025 U		
Dibromomethane	74-95-3	mg/kg		24		0.00018 UJ	0.0002 U	0.0002 U	0.00025 U	0.00018 U	0.00017 U	0.00021 U	0.0002 U	0.0002 U	0.00016 U	0.0002 U	0.00021 U	0.0002 U	0.00021 U		
Dichlorodifluoromethane	75-71-8	mg/kg		87		0.00053 U	0.00058 U	0.00058 U	0.00071 U	0.00051 U	0.00049 U	0.0006 U	0.00057 U	0.00058 U	0.00047 U	0.00057 U	0.0006 U	0.00058 U	0.0006 U		
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12	0.011 UJ	0.012 U	0.012 U	0.014 U	0.01 U	0.0098 U	0.012 U	0.011 U	0.012 U	0.0096 U	0.011 U	0.012 U	0.012 U	0.012 U		
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43	0.00044 UJ	0.00049 U	0.00049 U	0.0006 U	0.00043 U	0.00041 U	0.0005 U	0.00048 U	0.00049 U	0.0004 U	0.00048 U	0.0005 U	0.00049 U	0.0005 U		
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028	0.00065 U	0.00071 U	0.00071 U	0.00087 U	0.00062 U	0.00059 U	0.00074 U	0.0007 U	0.00071 U	0.00058 U	0.0007 U	0.00073 U	0.00071 U	0.00074 U		
Isopropylbenzene	98-82-8	mg/kg		1900		0.0005 UJ	0.00055 U	0.00055 U	0.00067 U	0.00048 U	0.00046 U	0.00056 U	0.00053 U	0.00055 U	0.00045 U	0.00053 U	0.00056 U	0.00055 U	0.00056 U		
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028	0.00032 UJ	0.00036 U	0.00036 U	0.00044 U	0.00031 U	0.0003 U	0.00037 U	0.00035 U	0.00036 U	0.00029 U	0.00035 U	0.00036 U	0.00036 U	0.00037 U		
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.0019 UJ	0.0021 U	0.0021 U	0.0026 U	0.0019 U	0.0018 U	0.0022 U	0.0021 U	0.0021 U	0.0017 U	0.0021 U	0.0022 U	0.0021 U	0.0022 U		
n-Butylbenzene	104-51-8	mg/kg		2400		0.00068 UJ	0.00075 U	0.00075 U	0.00092 U	0.00066 U	0.00062 U	0.00077 U	0.00073 U	0.00075 U	0.00061 U	0.00073 U	0.00077 U	0.00075 U	0.00077 U		
n-Propylbenzene	103-65-1	mg/kg		3800		0.00082 UJ	0.0009 U	0.0009 U	0.0011 U	0.00079 U	0.00075 U	0.00093 U	0.00088 U	0.0009 U	0.00074 U	0.00088 U	0.00092 U	0.0009 U	0.00093 U		
p-Isopropyltoluene	99-87-6	mg/kg				0.00043 UJ	0.00047 U	0.00047 U	0.00058 U	0.00042 U	0.0004 U	0.00049 U	0.00046 U	0.00047 U	0.00039 U	0.00046 U	0.00049 U	0.00048 U	0.00049 U		
sec-Butylbenzene	135-98-8	mg/kg		2200		0.00072 UJ	0.0008 U	0.00079 U	0.00097 U	0.0007 U	0.00066 U	0.00082 U	0.00078 U	0.0008 U	0.00065 U	0.00078 U	0.00081 U	0.0008 U	0.00082 U		
Styrene	100-42-5	mg/kg	1.2	5600	0.92	0.0008 UJ	0.00088 U	0.00088 U	0.0011 U	0.00077 U	0.00073 U	0.00091 U	0.00086 U	0.00088 U	0.00072 U	0.00086 U	0.0009 U	0.00088 U	0.00091 U		
tert-Butylbenzene	98-06-6	mg/kg		2200		0.00071 UJ	0.00078 U	0.00078 U	0.00096 U	0.00069 U	0.00065 U	0.00081 U	0.00077 U	0.00078 U	0.00064 U	0.00077 U	0.0008 U	0.00079 U	0.00081 U		
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08	0.00043 UJ	0.00047 U	0.00047 U	0.00058 U	0.00042 U	0.0004 U	0.00049 U	0.00046 U	0.00047 U	0.00039 U	0.00046 U	0.00049 U	0.00048 U	0.00049 U		
Toluene	108-88-3	mg/kg	23	1100	3.2	0.0014 UJ	0.0015 U	0.0015 U	0.0019 U	0.0014 U	0.0013 U	0.0016 U	0.0015 U	0.0015 U	0.0013 U	0.0015 U	0.0016 U	0.0015 U	0.0016 U		
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65	0.00043 UJ	0.00047 U	0.00047 U	0.00058 U	0.00042 U	0.0004 U	0.00049 U	0.00046 U	0.00047 U	0.00039 U	0.00046 U	0.00049 U	0.00048 U	0.00049 U		
trans-1,3-Dichloropropene	10061-02-6	mg/kg				0.00065 UJ	0.00071 U	0.00071 U	0.00087 U	0.00062 U	0.00059 U	0.00074 U	0.0007 U	0.00071 U	0.00058 U	0.0007 U	0.00073 U	0.00071 U	0.00074 U		
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085	0.00032 UJ	0.00036 U	0.00036 U	0.00044 U	0.00031 U	0.0003 U	0.00037 U	0.00035 U	0.00036 U	0.00029 U	0.00035 U	0.00036 U	0.00036 U	0.00037 U		
Trichlorofluoromethane	75-69-4	mg/kg	52	1200		0.00032 UJ	0.00036 U	0.00036 U	0.00044 U	0.00031 U	0.0003 U	0.00037 U	0.00035 U	0.00036 U	0.00029 U	0.00035 U	0.00036 U	0.00036 U	0.00037 U		
Vinyl Acetate	108-05-4	mg/kg		910		0.0016 UJ	0.0018 U	0.0018 U	0.0022 U	0.0016 U	0.0015 U	0.0018 U	0.0017 U	0.0018 U	0.0015 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U		

Table D-4. Copco No. 2 Wood Pile Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WP-01	C2WP-01	C2WP-01	C2WP-02	C2WP-02	C2WP-02	C2WP-02	C2WP-02	C2WP-03	C2WP-03	C2WP-03	C2WP-04	C2WP-04	C2WP-04
						Sample Date	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
						Depth Interval	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	0 - 0.5	3 - 3.5	1 - 1.5	5 - 6	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	1 - 1.5	3 - 3.5
						Sample Type	N	N	N	N	FD	N	N	N	N	N	N	N	N	N
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00032 U	0.00036 U	0.00036 U	0.00044 U	0.00031 U	0.0003 U	0.00037 U	0.00035 U	0.00036 U	0.00029 U	0.00035 U	0.00036 U	0.00036 U	0.00037 U
Xylene, o	95-47-6	mg/kg	1.4	650			0.00099 UJ	0.0011 U	0.0011 U	0.0013 U	0.00096 U	0.00091 U	0.0011 U	0.0011 U	0.0011 U	0.00089 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00061 UJ	0.00066 U	0.00066 U	0.00081 U	0.00058 U	0.00055 U	0.00069 U	0.00065 U	0.00066 U	0.00054 U	0.00065 U	0.00068 U	0.00067 U	0.00069 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.00099 UJ	0.0011 U	0.0011 U	0.0013 U	0.00096 U	0.00091 U	0.0011 U	0.0011 U	0.0011 U	0.00089 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U
SW8270C																				
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00076 UJ	0.00077 UJ	0.00069 UJ	0.00078 UJ	0.00077 U	0.00071 U	0.00085 UJ	0.00069 U	0.00077 U	0.0007 U	0.00069 U	0.00079 U	0.00078 U	0.00065 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.00063 UJ	0.00064 UJ	0.00057 UJ	0.00065 UJ	0.00064 U	0.00059 U	0.00071 UJ	0.00057 U	0.00064 U	0.00059 U	0.00058 U	0.00065 U	0.00065 U	0.00054 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.00067 J	0.00061 UJ	0.00055 UJ	0.00062 UJ	0.00062 U	0.00057 U	0.00068 UJ	0.00055 U	0.00062 U	0.00056 U	0.00055 U	0.00063 U	0.00063 U	0.00052 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0011 UJ	0.0011 UJ	0.00095 UJ	0.0011 UJ	0.0011 U	0.00098 U	0.0012 UJ	0.00095 U	0.0011 U	0.00097 U	0.00095 U	0.0011 U	0.0011 U	0.0009 U
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.00066 J	0.00064 UJ	0.00057 UJ	0.0014 J	0.00064 U	0.00059 U	0.00075 J	0.00057 U	0.00064 U	0.00061 J	0.00058 U	0.011	0.0066	0.00054 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9		0.001 UJ	0.001 UJ	0.00093 UJ	0.0011 UJ	0.001 U	0.00096 U	0.0011 UJ	0.00093 U	0.001 U	0.00095 U	0.00093 U	0.0011 U	--	0.00088 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04		0.0016 UJ	0.0017 UJ	0.0015 UJ	0.0017 UJ	0.0017 U	0.0015 U	0.0018 UJ	0.0015 U	0.0017 U	0.0015 U	0.0015 U	0.0017 U	0.0078 J	0.0014 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.0035 UJ	0.0036 UJ	0.0032 UJ	0.0036 UJ	0.0036 U	0.0033 U	0.004 UJ	0.0032 U	0.0036 U	0.0033 U	0.0032 U	0.0037 U	0.0037 U	0.003 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.0076 UJ	0.0077 UJ	0.0069 UJ	0.0078 UJ	0.0077 U	0.0071 U	0.0085 UJ	0.0069 U	0.0077 U	0.007 U	0.0069 U	0.0079 U	0.0078 U	0.0065 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.074 U	0.075 U	0.067 U	0.076 U	0.075 U	0.069 U	0.083 U	0.067 U	0.075 U	0.069 U	0.067 U	0.077 U	--	0.063 U
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.0054 UJ	0.0055 UJ	0.0049 UJ	0.0056 UJ	0.0055 U	0.0051 U	0.0061 UJ	0.0049 U	0.0055 U	0.005 U	0.0049 U	0.0056 U	0.0056 U	0.0047 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.0019 UJ	0.0019 UJ	0.0017 UJ	0.0019 UJ	0.0019 U	0.0018 U	0.0021 UJ	0.0017 U	0.0019 U	0.0018 U	0.0017 U	0.002 U	0.002 U	0.0016 U
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.00063 UJ	0.00064 UJ	0.00057 UJ	0.00065 UJ	0.00064 U	0.00059 U	0.00071 UJ	0.00057 U	0.00064 U	0.00059 U	0.00058 U	0.00065 U	0.00065 U	0.00054 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.00061 J	0.00051 UJ	0.00046 UJ	0.00052 UJ	0.00051 U	0.00047 U	0.00057 UJ	0.00046 U	0.00052 U	0.00047 U	0.00046 U	0.00052 U	0.00052 U	0.00043 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.0011 UJ	0.0011 UJ	0.001 UJ	0.0014 J	0.0011 U	0.001 U	0.0012 UJ	0.001 U	0.0011 U	0.0013 J	0.001 U	0.027	0.013	0.00095 U
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.0012 UJ	0.0013 UJ	0.0011 UJ	0.003 J	0.0013 U	0.0012 U	0.0014 UJ	0.0011 U	0.0013 U	0.0011 U	0.0011 U	0.0013 U	0.0013 U	0.0011 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.0019 UJ	0.0019 UJ	0.0017 UJ	0.0019 UJ	0.0019 U	0.0018 U	0.0021 UJ	0.0017 U	0.0019 U	0.0018 U	0.0017 U	0.002 U	0.002 U	0.0016 U
2-Nitrophenol	88-75-5	mg/kg					0.00079 UJ	0.00079 UJ	0.00071 UJ	0.0008 UJ	0.0008 U	0.00073 U	0.00088 UJ	0.00071 U	0.0008 U	0.00073 U	0.00071 U	0.00081 U	0.00081 U	0.00067 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0019 UJ	0.0019 UJ	0.0017 UJ	0.0079 J	0.0019 U	0.0018 U	0.0021 UJ	0.0017 U	0.0019 U	0.0018 U	0.0017 U	0.002 U	0.002 U	0.0016 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.011 UJ	0.011 U	0.0096 U	0.011 U	0.011 U	0.0099 U	0.012 U	0.0096 U	0.011 U	0.0098 U	0.0097 U	0.011 U	0.011 U	0.0091 U
3-Nitroaniline	99-09-2	mg/kg					0.013 UJ	0.013 U	0.011 U	0.013 U	0.013 U	0.012 U	0.014 U	0.011 U	0.013 U	0.012 U	0.012 U	0.013 U	0.013 U	0.011 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.013 U	0.013 U	0.011 U	0.013 U	0.013 U	0.012 U	0.014 U	0.011 U	0.013 U	0.012 U	0.012 U	0.013 U	--	0.011 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.0012 UJ	0.0012 UJ	0.001 UJ	0.0012 UJ	0.0012 U	0.0011 U	0.0013 UJ	0.001 U	0.0012 U	0.0011 U	0.001 U	0.0012 U	0.0012 U	0.00099 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0042 UJ	0.0042 UJ	0.0038 UJ	0.0043 UJ	0.0042 U	0.0039 U	0.0047 UJ	0.0038 U	0.0043 U	0.0039 U	0.0038 U	0.0043 U	--	0.0036 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.017 UJ	0.017 U	0.015 U	0.017 U	0.017 U	0.016 U	0.019 U	0.015 U	0.017 U	0.016 U	0.015 U	0.018 U	0.018 U	0.015 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.0008 UJ	0.00081 UJ	0.00072 UJ	0.00082 UJ	0.00081 U	0.00075 U	0.00089 UJ	0.00072 U	0.00081 U	0.00074 U	0.00072 U	0.00083 U	0.00082 U	0.00068 U
4-Nitroaniline	100-01-6	mg/kg		27			0.0063 UJ	0.0064 U	0.0057 U	0.0065 U	0.0064 U	0.0059 U	0.0071 U	0.0057 U	0.0064 U	0.0059 U	0.0058 U	0.0065 U	0.0065 U	0.0054 U
4-Nitrophenol	100-02-7	mg/kg					0.022 U	0.022 U	0.02 U	0.022 U	0.022 U	0.02 U	0.024 U	0.02 U	0.022 U	0.02 U	0.02 U	0.023 U	--	0.019 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00058 UJ	0.00059 UJ	0.00053 UJ	0.0006 UJ	0.00059 U	0.00054 U	0.00065 UJ	0.00053 U	0.00059 U	0.00054 U	0.00053 U	0.0006 U	0.0006 U	0.0005 U
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.0011 J	0.00064 UJ	0.00057 UJ	0.0013 J	0.00083 J	0.00059 U	0.00071 UJ	0.00057 U	0.00064 U	0.00059 U	0.00058 U	0.00065 U	0.00065 U	0.00054 U
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0033 J	0.002 UJ	0.0018 UJ	0.0023 J	0.0055 J	0.0019 U	0.0023 UJ	0.0018 U	0.0021 U	0.0019 U	0.0018 U	0.0021 U	0.0021 U	0.0017 U
Azobenzene	103-33-3	mg/kg		5.6			0.00063 UJ	0.00064 UJ	0.00057 UJ	0.00065 UJ	0.00064 U	0.00059 U	0.00071 UJ	0.00057 U	0.0012 J	0.00059 U	0.00058 U	0.00065 U	0.00065 U	0.00054 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0055 J	0.0014 UJ	0.0013 UJ	0.0014 UJ	0.0014 U	0.0013 U	0.0016 UJ	0.0013 U	0.0014 U	0.0013 U	0.0013 U	0.0014 U	0.043	0.0039 J
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.012 J	0.0017 UJ	0.0015 UJ	0.012 J	0.018 J	0.0015 UJ	0.0018 UJ	0.0015 UJ	0.0017 UJ	0.0015 UJ	0.0015 U	0.0017 UJ	0.0017 UJ	0.0014 U
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.069 J	0.0013 UJ	0.0011 UJ	0.073 J	0.17 J	0.0012 U	0.0014 UJ	0.0011 U	0.0013 U	0.0039 J	0.0012 U	0.0013 U	0.04	0.0011 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.017	0.0023 U	0.0021 U	0.015	0.026	0.0021 U	0.0025 U	0.0021 U	0.0023 U	0.0021 U	0.0021 U	0.0024 U	0.0024 U	0.002 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.021 J	0.0018 U	0.0016 U	0.023	0.042	0.0017 U	0.002 U	0.0016 U	0.0018 U	0.0016 U	0.0016 U	0.0018 U	0.0018 U	0.0015 U
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.15 UJ	0.16 UJ	0.14 UJ	0.16 UJ	0.16 U	0.14 U	0.17 UJ	0.14 U	0.16 U	0.14 U	0.14 U	0.16 U	0.16 U	0.13 U
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0063 U	0.0064 U	0.0057 U	0.0065 U	0.0064 U	0.0059 U	0.0071 U	0.0057 U	0.0064 U	0.0059 U	0.0058 U	0.0065 U	0.0065 U	0.0054 U
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051		0.00077 U	0.00078 U	0.0007 U	0.00079 U	0.00079 U	0.00072 U	0.00086 U	0.0007 U	0.00079 U	0.00072 U	0.0007 U	0.0008 U	0.0008 U	0.00066 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0023 UJ	0.0023 UJ	0.0021 UJ	0.0023 UJ										

Table D-4. Copco No. 2 Wood Pile Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WP-01	C2WP-01	C2WP-01	C2WP-02	C2WP-02	C2WP-02	C2WP-02	C2WP-02	C2WP-03	C2WP-03	C2WP-03	C2WP-04	C2WP-04	C2WP-04	
						Sample Date	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
						Depth Interval	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	0 - 0.5	3 - 3.5	1 - 1.5	5 - 6	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	1 - 1.5	3 - 3.5	
						Sample Type	N	N	N	N	FD	N	N	N	N	N	N	N	N	N	N
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.037 U	0.044 U	0.04 U	0.036 U	0.011 U	0.013 U	0.054 U	0.019 U	0.014 U	0.011 U	0.031 U	0.0093 U	0.097 U	0.018 U	
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.0065 U	0.0065 U	0.0058 U	0.0066 U	0.009 U	0.014 U	0.0072 U	0.0066 U	0.0075 U	0.0073 U	0.0065 U	0.0067 U	0.51	0.0055 U	
Carbazole	86-74-8	mg/kg	79				0.0047 J	0.00093 U	0.00084 U	0.0062 J	0.014 J	0.00086 U	0.001 U	0.00084 U	0.00094 U	0.0015 J	0.00084 U	0.00096 U	0.011 J	0.00079 U	
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.065 J	0.0017 UJ	0.0015 UJ	0.069 J	0.12 J	0.0015 U	0.0018 UJ	0.0015 U	0.0017 U	0.0062 J	0.0017 J	0.13	0.18	0.0097	
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0039 J	0.0015 UJ	0.0014 UJ	0.0023 J	0.0052 J	0.0014 U	0.0017 UJ	0.0014 U	0.0015 U	0.0014 U	0.0014 U	0.0016 U	0.0016 U	0.0013 U	
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.00093 J	0.00075 UJ	0.00068 UJ	0.00077 UJ	0.00076 U	0.0007 U	0.00083 UJ	0.00068 U	0.00076 U	0.0017 J	0.00068 U	0.00077 U	0.00077 U	0.00064 U	
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.0028 UJ	0.0028 UJ	0.0025 UJ	0.0029 UJ	0.0028 U	0.0026 U	0.0031 UJ	0.0025 U	0.0028 U	0.0026 U	0.0031 J	0.0029 U	0.0029 U	0.0061 J	
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00063 UJ	0.00064 UJ	0.00057 UJ	0.00065 UJ	0.00064 U	0.00059 U	0.00071 UJ	0.00057 U	0.00064 U	0.00059 U	0.00058 U	0.00065 U	0.00065 U	0.00054 U	
Di-n-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.0085 U	0.01 U	0.0092 U	0.0079 U	0.0036 U	0.0034 U	0.0097 U	0.0032 U	0.0051 U	0.0044 U	0.0062 U	0.0035 U	0.0052 U	0.0029 U	
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0015 U	0.0015 U	0.0014 U	0.0016 U	0.0057 J	0.0014 U	0.0017 U	0.0014 U	0.0035 J	0.0014 U	0.0014 U	0.0016 U	0.061	0.0013 U	
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.052 J	0.0015 UJ	0.0014 UJ	0.08 J	0.13 J	0.0014 U	0.0024 J	0.0014 U	0.0015 U	0.004 J	0.0014 U	0.12	0.16	0.019	
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.00084 J	0.00064 UJ	0.00057 UJ	0.00065 UJ	0.00064 U	0.00059 U	0.00071 UJ	0.00057 U	0.00064 U	0.00059 U	0.00058 U	0.021	0.00065 U	0.00054 U	
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0019 UJ	0.0019 UJ	0.0017 UJ	0.0019 UJ	0.0019 U	0.0018 U	0.0021 UJ	0.0017 U	0.0019 U	0.0018 U	0.0017 U	0.002 U	0.002 U	0.0016 U	
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0019 UJ	0.0019 UJ	0.0017 UJ	0.0019 UJ	0.0019 U	0.0018 U	0.0021 UJ	0.0017 U	0.0019 U	0.0018 U	0.0017 U	0.002 U	0.002 U	0.0016 U	
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.00098 U	0.00098 U	0.00088 U	0.001 U	0.00099 U	0.00091 U	0.0011 U	0.00088 U	0.00099 U	0.0009 U	0.00089 U	0.001 U	0.001 U	0.00083 U	
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.00054 UJ	0.00055 UJ	0.00049 UJ	0.00056 UJ	0.00055 U	0.00051 U	0.00061 UJ	0.00049 U	0.00055 U	0.0005 U	0.00049 U	0.00056 U	0.00056 U	0.00047 U	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.02	0.0015 U	0.0014 U	0.018	0.038	0.0014 U	0.0017 U	0.0014 U	0.0015 U	0.0014 U	0.0014 U	0.0016 U	0.0016 U	0.0013 U	
Isophorone	78-59-1	mg/kg		570			0.0011 UJ	0.0011 UJ	0.00096 UJ	0.0011 UJ	0.0011 U	0.00099 U	0.0012 UJ	0.00096 U	0.0011 U	0.00098 U	0.00097 U	0.0011 U	0.0011 U	0.00091 U	
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.00098 J	0.00064 UJ	0.00057 UJ	0.0016 J	0.00064 U	0.00059 U	0.00098 J	0.00057 U	0.00097 J	0.0031	0.00058 U	0.012	0.0038	0.00054 U	
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.0025 UJ	0.0026 UJ	0.0023 UJ	0.0026 UJ	0.0026 U	0.0024 U	0.0028 UJ	0.0023 U	0.0026 U	0.0023 U	0.0023 U	0.0023 U	0.0026 U	0.0022 U	
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.0028 UJ	0.0028 UJ	0.0025 UJ	0.0029 UJ	0.0028 U	0.0026 U	0.0031 UJ	0.0025 U	0.0028 U	0.0026 U	0.0025 U	0.0029 U	0.0029 U	0.0024 U	
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.001 UJ	0.001 UJ	0.00092 UJ	0.001 UJ	0.001 U	0.00095 U	0.0011 UJ	0.00092 U	0.001 U	0.00094 U	0.00092 U	0.001 U	0.001 U	0.00087 U	
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		0.012 J	0.0081 UJ	0.0083 J	0.01 J	0.043 J	0.0075 U	0.0089 UJ	0.0072 U	0.017 J	0.37	0.2	27	32	5.2	
Phenanthrene	85-01-8	mg/kg	5.5		11		0.01 J	0.00074 UJ	0.00066 UJ	0.013 J	0.031	0.00069 U	0.0014 J	0.00067 U	0.0012 J	0.0051 J	0.00067 U	0.12	0.17	0.022	
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.0039 J	0.0029 UJ	0.0026 UJ	0.025 J	0.003 U	0.0027 U	0.01 J	0.0026 U	0.003 U	0.0027 U	0.0026 U	0.0046 J	0.003 U	0.0025 U	
Pyrene	129-00-0	mg/kg	10	1800	45		0.049 J	0.0017 UJ	0.0015 UJ	0.071 J	0.1 J	0.0015 U	0.0024 J	0.0015 U	0.0017 U	0.005 J	0.0015 U	0.15	0.14	0.019	
Pyridine	110-86-1	mg/kg		58			0.02 U	0.02 U	0.018 U	0.02 U	0.02 U	0.019 U	0.022 U	0.018 U	0.02 U	0.019 U	0.018 U	0.021 U	0.021 U	0.017 U	

Table D-4. Copco No. 2 Wood Pile Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WP-04	C2WP-05	C2WP-05	C2WP-05	C2WP-06	C2WP-06	C2WP-06	C2WP-06	C2WP-06	C2WP-07	C2WP-07	C2WP-07	C2WP-WC
						Sample Date	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
						Depth Interval	5 - 6	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	0 - 0.5	1 - 1.5	3 - 3.5	5 - 6	0 - 0.5	2 - 2.5	4 - 5	-
						Sample Type	N	N	N	N	N	FD	N	N	N	N	N	N	N
CALC																			
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0.011325	0.0007782	0 U	0 U	3.1E-06	6.4E-06	0 U	0.00016	0 U	0.0004817	0.00014	0 U	0.007986
SW6010B																			
Boron	7440-42-8	mg/kg	2	16000		3.7 J	3.2 J	2.8 J	3.2 J	2.7 U	2.3 U	2.8 J	3.7 J	3.4 J	3 J	2.4 U	2.1 U	2.5 J	
SW6020																			
Antimony	7440-36-0	mg/kg	0.67	31		0.14 J	0.12 J	0.11 J	0.11 J	0.13 J	0.078 J	0.12 J	0.11 J	0.1 J	0.11 J	0.096 J	0.096 J	0.11 J	
Arsenic	7440-38-2	mg/kg	19	19		4.9	4.6	6.7	5	5.4	3.6	4.5	6.2	5	4.6	6.7	5.5	5.1	
Barium	7440-39-3	mg/kg	630	15000		170	190	170	170	190	180	220	180	180	190	190	180	180	
Beryllium	7440-41-7	mg/kg	2.5	16		0.69	0.69	0.65	0.71	0.74	0.54	0.77	0.72	0.66	0.67	0.66	0.63	0.64	
Cadmium	7440-43-9	mg/kg	0.54	71		0.093 J	0.11 J	0.083 J	0.095 J	0.14 J	0.1 J	0.1 J	0.074 J	0.083 J	0.12 J	0.087 J	0.071 J	0.094 J	
Chromium	7440-47-3	mg/kg	200	120000		62	79	68	69	80	67	83	76	70	87	83	71	67	
Cobalt	7440-48-4	mg/kg	13	23		29	33	30	30	35	30	36	32	29	36	34	31	29	
Copper	7440-50-8	mg/kg	73	3100		56	59	56	59	63	52	65	65	59	60	61	59	55	
Iron	7439-89-6	mg/kg		55000		52000	56000	54000	56000	58000	46000	59000	58000	53000	57000	58000	53000	52000	
Lead	7439-92-1	mg/kg	34	80		4.6	4.3	3.8	4.1	9.6	7.4	4.2	3.8	3.5	4.3	4	3.5	4.7	
Manganese	7439-96-5	mg/kg	2100	2100		1100	1300	1100	1100	1400	1300	1500	1100	1100	1400	1300	1200	1100	
Molybdenum	7439-98-7	mg/kg	2	390		0.68	0.53	1	0.58	0.89	0.43	0.45	0.5	0.38	0.49	0.72	0.48	0.54	
Nickel	7440-02-0	mg/kg	110	820		61	67	59	65	68	60	73	68	64	69	68	68	59	
Selenium	7782-49-2	mg/kg	0.52	390		3.6	3.8	3.8	4.1	4.3	3.3	4.6	4.1	3.9	4.3	3.9	3.7	4	
Silver	7440-22-4	mg/kg	4.2	390		0.024 J	0.043 J	0.041 J	0.024 J	0.043 J	0.028 J	0.043 J	0.026 J	0.035 J	0.049 J	0.044 J	0.03 J	0.023 J	
Thallium	7440-28-0	mg/kg	2.8	2.8		0.16 J	0.12 J	0.12 J	0.14 J	0.11 J	0.076 J	0.12 J	0.11 J	0.11 J	0.11 J	0.1 J	0.11 J	0.12 J	
Vanadium	7440-62-2	mg/kg	280	390		140	160	150	160	160	130	170	170	140	160	160	150	140	
Zinc	7440-66-6	mg/kg	170	23000		73	81	72	73	85	65	76	74	66	79	71	65	72	
SW7471A																			
Mercury	7439-97-6	mg/kg	0.24	1		0.01 J	0.017 J	0.011 U	0.01 U	0.012 J	0.015 J	0.0092 U	0.01 J	0.055	0.014 J	0.0095 U	0.011 J	0.0095 J	
SW8011																			
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	7.6E-05 UJ	7.6E-05 UJ	7.6E-05 UJ	7.8E-05 UJ	8.3E-05 UJ	8.1E-05 UJ	7.9E-05 UJ	7.9E-05 UJ	6.8E-05 UJ	8.5E-05 UJ	7.6E-05 UJ	6.8E-05 UJ	7E-05 UJ	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	1.1E-05 UJ	1.1E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.3E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1E-05 UJ	1.3E-05 UJ	1.1E-05 UJ	1E-05 UJ	1.1E-05 UJ	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	1.4E-05 UJ	1.4E-05 UJ	1.4E-05 UJ	1.4E-05 UJ	1.5E-05 UJ	1.5E-05 UJ	1.4E-05 UJ	1.4E-05 UJ	1.2E-05 UJ	1.6E-05 UJ	1.4E-05 UJ	1.2E-05 UJ	1.3E-05 UJ	
SW8260B																			
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017	0.0007 U	0.00064 U	0.0007 U	0.00074 U	0.00065 U	0.00063 U	0.00064 U	0.00067 U	0.00077 U	0.00085 U	0.00065 U	0.00081 U	0.00088 U	
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7	0.00035 U	0.00033 U	0.00036 U	0.00038 U	0.00033 U	0.00032 U	0.00032 U	0.00034 U	0.00039 U	0.00043 U	0.00033 U	0.00041 U	0.00045 U	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018	0.0011 U	0.00098 U	0.0011 U	0.0011 U	0.001 U	0.00096 U	0.00097 U	0.001 U	0.0012 U	0.0013 U	0.00099 U	0.0012 U	0.0013 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700		0.00062 U	0.00057 U	0.00062 U	0.00065 U	0.00058 U	0.00056 U	0.00056 U	0.00059 U	0.00068 U	0.00075 U	0.00057 U	0.00071 U	0.00077 U	
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076	0.0003 U	0.00027 U	0.0003 U	0.00031 U	0.00028 U	0.00027 U	0.00027 U	0.00028 U	0.00033 U	0.00036 U	0.00028 U	0.00034 U	0.00037 U	
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2	0.00022 U	0.00021 U	0.00023 U	0.00024 U	0.00021 U	0.0002 U	0.00021 U	0.00022 U	0.00025 U	0.00028 U	0.00021 U	0.00026 U	0.00028 U	
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54	0.0013 U	0.0012 U	0.0013 U	0.0014 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0016 U	0.0012 U	0.0015 U	0.0016 U	
1,1-Dichloropropene	563-58-6	mg/kg				0.00035 U	0.00033 U	0.00036 U	0.00038 U	0.00033 U	0.00032 U	0.00032 U	0.00034 U	0.00039 U	0.00043 U	0.00033 U	0.00041 U	0.00045 U	
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40		0.00071 U	0.00065 U	0.00071 U	0.00076 U	0.00066 U	0.00064 U	0.00065 U	0.00068 U	0.00078 U	0.00087 U	0.00066 U	0.00082 U	0.00089 U	
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	0.0012 U	0.0011 U	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0013 U	0.0014 U	0.0011 U	0.0014 U	0.0015 U	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	0.0005 U	0.00046 U	0.0005 U	0.00053 U	0.00047 U	0.00045 U	0.00045 U	0.00048 U	0.00055 U	0.00061 U	0.00046 U	0.00057 U	0.00062 U	
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300		0.0014 U	0.0013 U	0.0014 U	0.0015 U	0.0013 U	0.0013 U	0.0013 U	0.0014 U	0.0016 U	0.0017 U	0.0013 U	0.0016 U	0.0018 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	0.0019 U	0.0017 U	0.0019 U	0.002 U	0.0018 U	0.0017 U	0.0017 U	0.0018 U	0.0021 U	0.0023 U	0.0018 U	0.0022 U	0.0024 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	0.00024 U	0.00022 U	0.00024 U	0.00025 U	0.00022 U	0.00021 U	0.00022 U	0.00023 U	0.00026 U	0.00029 U	0.00022 U	0.00027 U	0.0003 U	
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1	0.0015 U	0.0014 U	0.0015 U	0.0016 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0017 U	0.0019 U	0.0014 U	0.0018 U	0.0019 U	
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007	0.00024 U	0.00022 U	0.00024 U	0.00025 U	0.00022 U	0.00021 U	0.00022 U	0.00023 U	0.00026 U	0.00029 U	0.00022 U	0.00027 U	0.0003 U	
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065	0.00047 U	0.00044 U	0.00048 U	0.0005 U	0.00044 U	0.00043 U	0.00043 U	0.00045 U	0.00052 U	0.00058 U	0.00044 U	0.00055 U	0.00059 U	

Table D-4. Copco No. 2 Wood Pile Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WP-04	C2WP-05	C2WP-05	C2WP-05	C2WP-06	C2WP-06	C2WP-06	C2WP-06	C2WP-06	C2WP-07	C2WP-07	C2WP-07	C2WP-WC
						Sample Date	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
						Depth Interval	5 - 6	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	0 - 0.5	1 - 1.5	3 - 3.5	5 - 6	0 - 0.5	2 - 2.5	4 - 5	-
						Sample Type	N	N	N	N	N	FD	N	N	N	N	N	N	N
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.00096 U	0.00088 U	0.00096 U	0.001 U	0.0009 U	0.00087 U	0.00088 U	0.00092 U	0.0011 U	0.0012 U	0.00089 U	0.0011 U	0.0012 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0013 U	0.0012 U	0.0013 U	0.0014 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0016 U	0.0012 U	0.0015 U	0.0016 U
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00027 U	0.00025 U	0.00027 U	0.00029 U	0.00025 U	0.00025 U	0.00025 U	0.00026 U	0.0003 U	0.00033 U	0.00025 U	0.00031 U	0.00034 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0012 U	0.0011 U	0.0012 U	0.0012 U	0.0011 U	0.001 U	0.0011 U	0.0011 U	0.0013 U	0.0014 U	0.0011 U	0.0013 U	0.0015 U
2,2-Dichloropropane	594-20-7	mg/kg					0.00039 U	0.00036 U	0.00039 U	0.00042 U	0.00037 U	0.00035 U	0.00036 U	0.00037 U	0.00043 U	0.00048 U	0.00036 U	0.00045 U	0.00049 U
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.011 U	0.0097 U	0.011 U	0.011 U	0.0099 U	0.0095 U	0.0096 U	0.01 U	0.012 U	0.013 U	0.0098 U	0.012 U	0.013 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.0011 U	0.001 U	0.0011 U	0.0012 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.0012 U	0.0013 U	0.001 U	0.0013 U	0.0014 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0046 U	0.0043 U	0.0046 U	0.0049 U	0.0043 U	0.0042 U	0.0042 U	0.0044 U	0.0051 U	0.0056 U	0.0043 U	0.0053 U	0.0058 U
4-Chlorotoluene	106-43-4	mg/kg		440			0.0012 U	0.0011 U	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0013 U	0.0014 U	0.0011 U	0.0014 U	0.0015 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.0071 U	0.0065 U	0.0071 U	0.0076 U	0.0066 U	0.0064 U	0.0065 U	0.0068 U	0.0078 U	0.0087 U	0.0066 U	0.0082 U	0.0089 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.01 U	0.0094 U	0.01 U	0.011 U	0.0096 U	0.0092 U	0.0093 U	0.0098 U	0.011 U	0.012 U	0.0095 U	0.012 U	0.013 U
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00046 U	0.00043 U	0.00046 U	0.00049 U	0.00043 U	0.00042 U	0.00042 U	0.00044 U	0.00051 U	0.00056 U	0.00043 U	0.00053 U	0.00058 U
Bromobenzene	108-86-1	mg/kg		290			0.0012 U	0.0011 U	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0013 U	0.0014 U	0.0011 U	0.0014 U	0.0015 U
Bromochloromethane	74-97-5	mg/kg		150			0.0003 U	0.00027 U	0.0003 U	0.00031 U	0.00028 U	0.00027 U	0.00027 U	0.00028 U	0.00033 U	0.00036 U	0.00028 U	0.00034 U	0.00037 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00021 U	0.0002 U	0.00021 U	0.00023 U	0.0002 U	0.00019 U	0.00019 U	0.0002 U	0.00023 U	0.00026 U	0.0002 U	0.00025 U	0.00027 U
Bromoform	75-25-2	mg/kg		19	0.69		0.00099 U	0.00092 U	0.001 U	0.0011 U	0.00093 U	0.0009 U	0.00091 U	0.00095 U	0.0011 U	0.0012 U	0.00092 U	0.0011 U	0.0012 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00025 U	0.00023 U	0.00025 U	0.00026 U	0.00023 U	0.00022 U	0.00023 U	0.00024 U	0.00027 U	0.0003 U	0.00023 U	0.00029 U	0.00031 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00024 U	0.00022 U	0.00024 U	0.00025 U	0.00022 U	0.00021 U	0.00022 U	0.00023 U	0.00026 U	0.00029 U	0.00022 U	0.00027 U	0.0003 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.00035 U	0.00033 U	0.00036 U	0.00038 U	0.00033 U	0.00032 U	0.00032 U	0.00034 U	0.00039 U	0.00043 U	0.00033 U	0.00041 U	0.00045 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.0003 U	0.00027 U	0.0003 U	0.00031 U	0.00028 U	0.00027 U	0.00027 U	0.00028 U	0.00033 U	0.00036 U	0.00028 U	0.00034 U	0.00037 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00032 U	0.00029 U	0.00032 U	0.00034 U	0.0003 U	0.00029 U	0.00029 U	0.00031 U	0.00035 U	0.00039 U	0.0003 U	0.00037 U	0.0004 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.00089 U	0.00082 U	0.00089 U	0.00094 U	0.00083 U	0.0008 U	0.00081 U	0.00085 U	0.00098 U	0.0011 U	0.00083 U	0.001 U	0.0011 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.00035 U	0.00033 U	0.00036 U	0.00038 U	0.00033 U	0.00032 U	0.00032 U	0.00034 U	0.00039 U	0.00043 U	0.00033 U	0.00041 U	0.00045 U
Chloromethane	74-87-3	mg/kg		110	11		0.0011 U	0.001 U	0.0011 U	0.0012 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.0012 U	0.0013 U	0.001 U	0.0013 U	0.0014 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.00071 U	0.00065 U	0.00071 U	0.00076 U	0.00066 U	0.00064 U	0.00065 U	0.00068 U	0.00078 U	0.00087 U	0.00066 U	0.00082 U	0.00089 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00024 U	0.00022 U	0.00024 U	0.00025 U	0.00022 U	0.00021 U	0.00022 U	0.00023 U	0.00026 U	0.00029 U	0.00022 U	0.00027 U	0.0003 U
Dibromomethane	74-95-3	mg/kg		24			0.0002 U	0.00019 U	0.0002 U	0.00021 U	0.00019 U	0.00018 U	0.00018 U	0.00019 U	0.00022 U	0.00025 U	0.00019 U	0.00023 U	0.00025 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00058 U	0.00053 U	0.00058 U	0.00062 U	0.00054 U	0.00052 U	0.00053 U	0.00056 U	0.00064 U	0.00071 U	0.00054 U	0.00067 U	0.00073 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.012 U	0.011 U	0.012 U	0.012 U	0.011 U	0.011 U	0.011 U	0.011 U	0.013 U	0.014 U	0.011 U	0.014 U	0.015 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00049 U	0.00045 U	0.00049 U	0.00052 U	0.00045 U	0.00044 U	0.00044 U	0.00047 U	0.00053 U	0.00059 U	0.00045 U	0.00056 U	0.00061 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.00071 U	0.00065 U	0.00071 U	0.00076 U	0.00066 U	0.00064 U	0.00065 U	0.00068 U	0.00078 U	0.00087 U	0.00066 U	0.00082 U	0.00089 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00054 U	0.0005 U	0.00055 U	0.00058 U	0.00051 U	0.00049 U	0.0005 U	0.00052 U	0.0006 U	0.00067 U	0.00051 U	0.00063 U	0.00068 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.00035 U	0.00033 U	0.00036 U	0.00038 U	0.00033 U	0.00032 U	0.00032 U	0.00034 U	0.00039 U	0.00043 U	0.00033 U	0.00041 U	0.00045 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0021 U	0.002 U	0.0021 U	0.0023 U	0.002 U	0.0019 U	0.0019 U	0.002 U	0.0023 U	0.0026 U	0.002 U	0.0025 U	0.0027 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.00075 U	0.00069 U	0.00075 U	0.00079 U	0.0007 U	0.00067 U	0.00068 U	0.00072 U	0.00082 U	0.00091 U	0.00069 U	0.00086 U	0.00094 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.0009 U	0.00083 U	0.0009 U	0.00096 U	0.00084 U	0.00081 U	0.00082 U	0.00086 U	0.00099 U	0.0011 U	0.00084 U	0.001 U	0.0011 U
p-Isopropyltoluene	99-87-6	mg/kg					0.00047 U	0.00044 U	0.00048 U	0.0005 U	0.00044 U	0.00043 U	0.00043 U	0.00045 U	0.00052 U	0.00058 U	0.00044 U	0.00055 U	0.00059 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.00079 U	0.00073 U	0.0008 U	0.00084 U	0.00074 U	0.00072 U	0.00073 U	0.00076 U	0.00087 U	0.00097 U	0.00074 U	0.00092 U	0.00099 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.00088 U	0.00081 U	0.00088 U	0.00093 U	0.00082 U	0.00079 U	0.0008 U	0.00084 U	0.00097 U	0.0011 U	0.00081 U	0.001 U	0.0011 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00078 U	0.00072 U	0.00078 U	0.00083 U	0.00073 U	0.00071 U	0.00071 U	0.00075 U	0.00086 U	0.00096 U	0.00073 U	0.0009 U	0.00098 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00047 U	0.00044 U	0.00048 U	0.0005 U	0.00044 U	0.00043 U	0.00043 U	0.00045 U	0.00052 U	0.00058 U	0.00044 U	0.00055 U	0.00059 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0015 U	0.0014 U	0.0015 U	0.0016 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0017 U	0.0019 U	0.0014 U	0.0018 U	0.0019 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00047 U	0.00044 U	0.00048 U	0.0005 U	0.00044 U	0.00043 U	0.00043 U	0.00045 U	0.00052 U	0.00058 U	0.00044 U	0.00055 U	0.00059 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.00071 U	0.00065 U	0.00071 U	0.00076 U	0.00066 U	0.00064 U	0.00065 U	0.00068 U	0.00078 U	0.00087 U	0.00066 U	0.00082 U	0.00089 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.00035 U	0.00033 U	0.00036 U	0.00038 U	0.00033 U	0.00032 U	0.00032 U	0.00034 U	0.00039 U	0.00043 U	0.00033 U	0.00041 U	0.00045 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.00035 U	0.00033 U	0.00036 U	0.00038 U	0.00033 U	0.00032 U	0.00032 U	0.00034 U	0.00039 U	0.00043 U	0.00033 U	0.00041 U	0.00045 U
Vinyl Acetate	108-05-4	mg/kg		910			0.0018 U	0.0016 U	0.0018 U	0.0019 U	0.0017 U	0.0016 U	0.0016 U	0.0017 U	0.002 U	0.0022 U	0.0017 U	0.0021 U	0.0022 U

Table D-4. Copco No. 2 Wood Pile Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WP-04	C2WP-05	C2WP-05	C2WP-05	C2WP-06	C2WP-06	C2WP-06	C2WP-06	C2WP-06	C2WP-07	C2WP-07	C2WP-07	C2WP-WC
						Sample Date	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
						Depth Interval	5 - 6	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	0 - 0.5	1 - 1.5	3 - 3.5	5 - 6	0 - 0.5	2 - 2.5	4 - 5	-
						Sample Type	N	N	N	N	N	FD	N	N	N	N	N	N	N
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00035 U	0.00033 U	0.00036 U	0.00038 U	0.00033 U	0.00032 U	0.00032 U	0.00034 U	0.00039 U	0.00043 U	0.00033 U	0.00041 U	0.00045 U
Xylene, o	95-47-6	mg/kg	1.4	650			0.0011 U	0.001 U	0.0011 U	0.0012 U	0.001 U	0.00099 U	0.001 U	0.001 U	0.0012 U	0.0013 U	0.001 U	0.0013 U	0.0014 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00066 U	0.00061 U	0.00067 U	0.00071 U	0.00062 U	0.0006 U	0.00061 U	0.00064 U	0.00073 U	0.00081 U	0.00062 U	0.00077 U	0.00083 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0011 U	0.001 U	0.0011 U	0.0012 U	0.001 U	0.00099 U	0.001 U	0.001 U	0.0012 U	0.0013 U	0.001 U	0.0013 U	0.0014 U
SW8270C																			
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00064 U	0.00075 U	0.0007 U	0.00069 U	0.00075 U	0.00075 UJ	0.00074 U	0.00069 U	0.00069 U	0.00079 U	0.00071 U	0.00068 U	0.00071 UJ
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.00053 U	0.00062 U	0.00058 U	0.00058 U	0.00063 U	0.00063 UJ	0.00061 U	0.00058 U	0.00058 U	0.00066 U	0.00059 U	0.00057 U	0.00059 UJ
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.00051 U	0.0006 U	0.00056 U	0.00055 U	0.0006 U	0.0006 UJ	0.00059 U	0.00055 U	0.00055 U	0.00063 U	0.00057 U	0.00054 U	0.00056 UJ
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.00088 U	0.001 U	0.00097 U	0.00096 U	0.001 U	0.001 UJ	0.001 U	0.00096 U	0.00096 U	0.0011 U	0.00099 U	0.00094 U	0.00098 UJ
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.0015 J	0.00078 J	0.00058 U	0.00058 U	0.00063 U	0.00063 UJ	0.00061 U	0.00058 U	0.00058 U	0.00066 U	0.00059 U	0.00057 U	0.00059 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9		0.00086 U	0.001 U	0.00095 U	0.00093 U	0.001 U	0.001 UJ	0.001 U	0.00093 U	0.00094 U	0.0011 U	0.00096 U	0.00092 U	0.00095 UJ
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04		0.0014 U	0.0016 U	0.0015 U	0.0015 U	0.0016 U	0.0016 UJ	0.0016 U	0.0015 U	0.0015 U	0.0017 U	0.0015 U	0.0015 U	0.0015 UJ
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.003 U	0.0035 U	0.0033 U	0.0032 U	0.0035 U	0.0035 UJ	0.0034 U	0.0032 U	0.0032 U	0.0037 U	0.0033 U	0.0032 U	0.0033 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.0064 U	0.0075 U	0.007 U	0.0069 U	0.0075 U	0.0075 UJ	0.0074 U	0.0069 U	0.0069 U	0.0079 U	0.0071 U	0.0068 U	0.0071 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.062 U	0.073 U	0.068 U	0.068 U	0.073 U	0.073 UJ	0.072 U	0.067 U	0.068 U	0.077 U	0.069 U	0.066 U	0.069 UJ
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.0046 U	0.0054 U	0.005 U	0.005 U	0.0054 U	0.0054 UJ	0.0053 U	0.005 U	0.005 U	0.0057 U	0.0051 U	0.0049 U	0.0051 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.0016 U	0.0019 U	0.0018 U	0.0017 U	0.0019 U	0.0019 UJ	0.0018 U	0.0017 U	0.0017 U	0.002 U	0.0018 U	0.0017 U	0.0018 U
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.00053 U	0.00062 U	0.00058 U	0.00058 U	0.00063 U	0.00063 UJ	0.00061 U	0.00058 U	0.00058 U	0.00066 U	0.00059 U	0.00057 U	0.00059 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.00042 U	0.0005 U	0.00047 U	0.00046 U	0.0005 U	0.0005 UJ	0.00049 U	0.00046 U	0.00046 U	0.00053 U	0.00047 U	0.00045 U	0.00047 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.0018 J	0.0013 J	0.001 U	0.001 U	0.0011 U	0.0011 UJ	0.0011 U	0.001 U	0.001 U	0.0012 J	0.0016 J	0.001 U	0.001 U
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.001 U	0.0012 U	0.0011 U	0.0011 U	0.0012 U	0.0012 UJ	0.0012 U	0.0011 U	0.0011 U	0.0013 U	0.0012 U	0.0011 U	0.0012 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.0016 U	0.0019 U	0.0018 U	0.0017 U	0.0019 U	0.0019 UJ	0.0018 U	0.0017 U	0.0017 U	0.002 U	0.0018 U	0.0017 U	0.0018 U
2-Nitrophenol	88-75-5	mg/kg					0.00066 U	0.00077 U	0.00072 U	0.00072 U	0.00078 U	0.00078 UJ	0.00076 U	0.00071 U	0.00072 U	0.00082 U	0.00074 U	0.0007 U	0.00073 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0016 U	0.0019 U	0.0018 U	0.0017 U	0.0019 U	0.0019 UJ	0.0018 U	0.0017 U	0.0017 U	0.002 U	0.0018 U	0.0017 U	0.0018 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.0089 U	0.01 U	0.0098 U	0.0097 U	0.011 U	0.011 UJ	0.01 U	0.0097 U	0.0097 U	0.011 U	0.01 U	0.0095 U	0.0099 U
3-Nitroaniline	99-09-2	mg/kg					0.011 U	0.012 U	0.012 U	0.012 U	0.013 U	0.013 UJ	0.012 U	0.012 U	0.012 U	0.013 U	0.012 U	0.011 U	0.012 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.011 U	0.012 U	0.012 U	0.012 U	0.013 U	0.013 UJ	0.012 U	0.012 U	0.012 U	0.013 U	0.012 U	0.011 U	0.012 UJ
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.00097 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 UJ	0.0011 U	0.001 U	0.0011 U	0.0012 U	0.0011 U	0.001 U	0.0011 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0035 U	0.0041 U	0.0039 U	0.0038 U	0.0041 U	0.0041 UJ	0.0041 U	0.0038 U	0.0038 U	0.0043 U	0.0039 U	0.0037 U	0.0039 UJ
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.014 U	0.017 U	0.016 U	0.015 U	0.017 U	0.017 UJ	0.016 U	0.015 U	0.015 U	0.018 U	0.016 U	0.015 U	0.016 UJ
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.00067 U	0.00079 U	0.00074 U	0.00073 U	0.00079 U	0.00079 UJ	0.00077 U	0.00073 U	0.00073 U	0.00083 U	0.00075 U	0.00071 U	0.00074 U
4-Nitroaniline	100-01-6	mg/kg		27			0.0053 U	0.0062 U	0.0058 U	0.0058 U	0.0063 U	0.0063 UJ	0.0063 J	0.0058 U	0.0058 U	0.0066 U	0.0059 U	0.0057 U	0.0059 U
4-Nitrophenol	100-02-7	mg/kg					0.018 U	0.021 U	0.02 U	0.02 U	0.022 U	0.022 UJ	0.021 U	0.02 U	0.02 U	0.023 U	0.02 U	0.02 U	0.02 UJ
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00049 U	0.00057 U	0.00054 U	0.00053 U	0.00058 U	0.00058 UJ	0.00057 U	0.00053 U	0.00053 U	0.00061 U	0.00055 U	0.00052 U	0.00054 UJ
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.00053 U	0.00062 U	0.00058 U	0.00058 U	0.00063 U	0.00063 UJ	0.00061 U	0.00058 U	0.00058 U	0.00066 U	0.00059 U	0.00057 U	0.00059 UJ
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0017 U	0.002 U	0.0019 U	0.0018 U	0.002 U	0.002 UJ	0.002 U	0.0018 U	0.0018 U	0.0021 U	0.0019 U	0.0018 U	0.0019 UJ
Azobenzene	103-33-3	mg/kg		5.6			0.00053 U	0.00062 U	0.00058 U	0.00058 U	0.00063 U	0.00063 UJ	0.00061 U	0.00058 U	0.00058 U	0.00066 U	0.00059 U	0.00057 U	0.00059 UJ
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.011	0.0014 U	0.0013 U	0.0013 U	0.0014 U	0.0014 UJ	0.0014 U	0.0016 J	0.0013 U	0.0019 J	0.0014 J	0.0012 U	0.0013 UJ
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0085 J	0.0016 UJ	0.0015 UJ	0.0015 UJ	0.0016 UJ	0.0016 UJ	0.0016 UJ	0.0015 UJ	0.0015 UJ	0.0017 UJ	0.0015 UJ	0.0015 UJ	0.0057 J
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.017	0.0053	0.0012 U	0.0012 U	0.0013 U	0.0013 UJ	0.0012 U	0.0012 U	0.0012 U	0.0029 J	0.0012 U	0.0011 U	0.016 J
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0019 U	0.0022 U	0.0021 U	0.0021 U	0.0023 U	0.0023 UJ	0.0022 U	0.0021 U	0.0021 U	0.0024 U	0.0021 U	0.002 U	0.0047 J
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0015 U	0.0017 U	0.0016 U	0.0016 U	0.0018 U	0.0018 UJ	0.0017 U	0.0016 U	0.0016 U	0.0018 U	0.0017 U	0.0016 U	0.0059 J
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.13 U	0.15 U	0.14 U	0.14 U	0.15 U	0.15 UJ	0.15 U	0.14 U	0.14 U	0.23 J	0.14 U	0.14 U	0.14 UJ
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0053 U	0.0062 U	0.0058 U	0.0058 U	0.0063 U	0.0063 UJ	0.0061 U	0.0058 U	0.0058 U	0.0066 U	0.0059 U	0.0057 U	0.0059 UJ
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051		0.00065 U	0.00076 U	0.00071 U	0.0007 U	0.00076 U	0.00076 UJ	0.00075 U	0.0007 U	0.0007 U	0.0008 U	0.00072 U	0.00069 U	0.00072 UJ
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0019 U	0.0022 U	0.0021 U	0.0021 U	0.0023 U	0.0023 UJ	0.0022 U	0.0021 U	0.0021 U	0.0024 U	0.0021 U	0.002 U	0.0021 UJ
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.00082 U	0.00096 U	0.0009 U	0.00089 U	0.00097 U	0.00096 UJ	0.00095 U	0.00089 U	0.00089 U	0.001 U	0.00091 U	0.00087 U	0.00091 UJ

Table D-4. Copco No. 2 Wood Pile Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2WP-04	C2WP-05	C2WP-05	C2WP-05	C2WP-06	C2WP-06	C2WP-06	C2WP-06	C2WP-06	C2WP-07	C2WP-07	C2WP-07	C2WP-WC
						Sample Date	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022	3/8/2022
Depth Interval							5 - 6	0 - 0.5	2 - 2.5	4 - 5	0 - 0.5	0 - 0.5	1 - 1.5	3 - 3.5	5 - 6	0 - 0.5	2 - 2.5	4 - 5	-
Sample Type							N	N	N	N	N	FD	N	N	N	N	N	N	N
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.011 U	0.015 U	0.025 U	0.011 U	0.018 U	0.023 U	0.014 U	0.01 U	0.015 U	0.13	0.054 U	0.019 U	0.018 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.0061 U	0.0064 U	0.0097 U	0.0059 U	0.0085 U	0.0086 U	0.007 U	0.0093 U	0.0065 U	0.01 U	0.016 U	0.0086 U	0.027 U
Carbazole	86-74-8	mg/kg	79				0.014 J	0.00091 U	0.0017 J	0.00084 U	0.0018 J	0.00091 UJ	0.00092 J	0.00084 U	0.00084 U	0.0025 J	0.0015 J	0.00083 U	0.00086 U
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.025	0.0082	0.0015 U	0.0015 U	0.0031 J	0.0064 J	0.0016 U	0.0015 U	0.0015 U	0.0017 J	0.0015 U	0.0015 U	0.017 J
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0013 U	0.0015 U	0.0014 U	0.0014 U	0.0015 U	0.0015 UJ	0.0015 U	0.0014 U	0.0014 U	0.0016 U	0.0014 U	0.0014 U	0.0014 U
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.00063 U	0.0019 J	0.00069 U	0.00068 U	0.0013 J	0.00074 UJ	0.00073 U	0.00068 U	0.00068 U	0.0025 J	0.0018 J	0.00067 U	0.00069 U
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.0023 U	0.0027 U	0.0026 U	0.0025 U	0.0028 U	0.0028 UJ	0.0027 U	0.0025 U	0.0025 U	0.0081 J	0.0026 U	0.0025 U	0.0026 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00053 U	0.00062 U	0.00058 U	0.00058 U	0.00063 U	0.00063 UJ	0.00061 U	0.00058 U	0.00058 U	0.00066 U	0.00059 U	0.00057 U	0.00059 U
Di-n-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.0061 U	0.0034 U	0.0035 U	0.0033 U	0.0034 U	0.0058 U	0.0038 U	0.0041 U	0.0031 U	0.0047 U	0.0057 U	0.0031 U	0.0041 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0064 J	0.0033 J	0.0051 J	0.0016 J	0.0057 J	0.014 U	0.0032 J	0.0014 U	0.0023 J	0.023	0.011 J	0.0032 J	0.0014 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.083	0.0065	0.0019 J	0.0014 U	0.0015 U	0.0025 J	0.0015 U	0.0014 U	0.0014 J	0.003 J	0.0023 J	0.0014 U	0.011 J
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.0097	0.0013 J	0.00058 U	0.00058 U	0.00063 U	0.00063 UJ	0.00061 U	0.00058 U	0.00058 U	0.00066 U	0.00059 U	0.00057 U	0.00059 UJ
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0016 U	0.0019 U	0.0018 U	0.0017 U	0.0019 U	0.0019 UJ	0.0018 U	0.0017 U	0.0017 U	0.002 U	0.0018 U	0.0017 U	0.0018 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0016 U	0.0019 U	0.0018 U	0.0017 U	0.0019 U	0.0019 UJ	0.0018 U	0.0017 U	0.0017 U	0.002 U	0.0018 U	0.0017 U	0.0018 UJ
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.00082 U	0.00096 U	0.0009 U	0.00089 U	0.00097 U	0.00096 UJ	0.00095 U	0.00089 U	0.00089 U	0.001 U	0.00091 U	0.00087 U	0.00091 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.00046 U	0.00054 U	0.0005 U	0.0005 U	0.00054 U	0.00054 UJ	0.00053 U	0.0005 U	0.0005 U	0.00057 U	0.00051 U	0.00049 U	0.00051 UJ
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.0013 U	0.0024 J	0.0014 U	0.0014 U	0.0015 U	0.0015 UJ	0.0015 U	0.0014 U	0.0014 U	0.0016 U	0.0014 U	0.0014 U	0.0061 J
Isophorone	78-59-1	mg/kg		570			0.00089 U	0.001 U	0.00098 U	0.00097 U	0.0011 U	0.0011 UJ	0.001 U	0.00097 U	0.00097 U	0.0011 U	0.001 U	0.00095 U	0.00099 UJ
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.00053 U	0.0022 J	0.0006 J	0.00058 U	0.0022 J	0.00081 J	0.001 J	0.00058 U	0.00058 U	0.0035	0.003	0.00057 U	0.00059 UJ
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.0021 U	0.0025 U	0.0023 U	0.0023 U	0.0025 U	0.0025 UJ	0.0025 U	0.0023 U	0.0023 U	0.0026 U	0.0024 U	0.0023 U	0.0024 UJ
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.0023 U	0.0027 U	0.0026 U	0.0025 U	0.0028 U	0.0028 UJ	0.0027 U	0.0025 U	0.0025 U	0.0029 U	0.0026 U	0.0025 U	0.0026 UJ
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.00085 U	0.001 U	0.00093 U	0.00092 U	0.001 U	0.001 UJ	0.00098 U	0.00092 U	0.00092 U	0.0011 U	0.00095 U	0.00091 U	0.00094 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		7.2	0.34	0.077	0.03 J	0.3	0.53 J	0.028 J	0.0073 U	0.0073 U	0.09	0.0075 U	0.0071 U	0.94 J
Phenanthrene	85-01-8	mg/kg	5.5	11			0.091	0.0065 J	0.0015 J	0.00067 U	0.0032 J	0.0029 J	0.0013 J	0.00067 U	0.00067 U	0.0034 J	0.003 J	0.00066 U	0.0064 J
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.0024 U	0.0029 U	0.0027 U	0.0027 U	0.0029 U	0.0029 UJ	0.0028 U	0.0027 U	0.0027 U	0.003 U	0.0027 U	0.0026 U	0.0027 UJ
Pyrene	129-00-0	mg/kg	10	1800	45		0.071	0.012	0.0027 J	0.0015 U	0.0027 J	0.0045 J	0.0016 U	0.0018 J	0.0015 J	0.0017 U	0.0015 U	0.0015 U	0.013 J
Pyridine	110-86-1	mg/kg		58			0.017 U	0.02 U	0.018 U	0.018 U	0.02 U	0.02 UJ	0.019 U	0.018 U	0.018 U	0.021 U	0.019 U	0.018 U	0.019 UJ

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

mg/kg = milligram(s) per kilogram

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-5. Copco No. 2 Transformer Fire Analytical Results

						Location	C2TF-01	C2TF-01	C2TF-03	C2TF-03
						Sample Date	3/9/2022	3/9/2022	3/10/2022	3/10/2022
						Depth Interval	0 - 1	1 - 2	1 - 1.5	1 - 1.5
						Sample Type	N	N	N	FD
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater					
CALC										
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0.47814	0.111522	0 U	0 U	
SW8015-E										
Diesel Range Organics	DRO	mg/kg		260	1100	90 U	4400	24 J	22 J	
Extended Range Organics	ERO	mg/kg		12000		200 U	220 U	170	160	
SW8082										
Aroclor 1016	12674-11-2	mg/kg	1.1	4		0.00082 UJ	0.00083 U	0.00073 U	0.00073 U	
Aroclor 1221	11104-28-2	mg/kg		0.2		0.00047 UJ	0.00047 U	0.00041 U	0.00041 U	
Aroclor 1232	11141-16-5	mg/kg		0.17		0.00055 UJ	0.00055 U	0.00048 U	0.00048 U	
Aroclor 1242	53469-21-9	mg/kg	0.041	0.23		0.00039 UJ	0.00039 U	0.00034 U	0.00035 U	
Aroclor 1248	12672-29-6	mg/kg	0.0073	0.23		0.00032 UJ	0.00032 U	0.00028 U	0.00029 U	
Aroclor 1254	11097-69-1	mg/kg	0.041	0.24		0.00041 UJ	0.00041 U	0.00036 U	0.00037 U	
Aroclor 1260	11096-82-5	mg/kg	0.88	0.24		0.00082 UJ	0.00083 U	0.0064	0.00073 U	
Aroclor 1262	37324-23-5	mg/kg		0.024		1	0.71	0.00046 U	0.00046 U	
Aroclor 1268	11100-14-4	mg/kg		0.024		0.00028 UJ	0.00028 U	0.00025 U	0.00025 U	
SW8260B										
Benzene	71-43-2	mg/kg	24	0.33	0.025	0.00042 U	0.00041 U	0.00046 U	0.00041 U	
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43	0.00044 U	0.00043 UJ	0.00049 U	0.00043 U	
Toluene	108-88-3	mg/kg	23	1100	3.2	0.0014 U	0.0014 U	0.0015 U	0.0014 U	
Xylene, o	95-47-6	mg/kg	1.4	650		0.00099 U	0.00097 UJ	0.0011 U	0.00097 U	
Xylenes, m & p	179601-23-1	mg/kg	1.4	550		0.0006 U	0.00059 UJ	0.00066 U	0.00059 U	
SW8270SIM										
1-Methylnaphthalene	90-12-0	mg/kg		9.9		0.0058	0.0015 J	0.00056 U	0.00053 U	
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88	0.011	0.0029 J	0.0018 U	0.0017 U	
Acenaphthene	83-32-9	mg/kg	0.25	3300	12	0.015	0.0008 J	0.00053 U	0.00051 U	
Acenaphthylene	208-96-8	mg/kg	120		6.4	0.01	0.003 J	0.00045 U	0.00042 U	
Anthracene	120-12-7	mg/kg	6.8	17000	1.9	0.04	0.0054	0.00053 U	0.00051 U	
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10	0.13	0.022	0.0016 U	0.0015 U	
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7	0.31	0.072	0.00075 U	0.00071 U	
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4	0.55	0.14	0.001 U	0.00098 U	
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27	0.39	0.088	0.00045 U	0.00042 U	
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8	0.19	0.047	0.00053 U	0.00051 U	
Chrysene	218-01-9	mg/kg	3.1	110	2.2	0.24	0.052	0.0013 U	0.0013 U	
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29	0.06	0.014	0.00064 U	0.00061 U	
Fluoranthene	206-44-0	mg/kg	10	2400	86	0.23	0.031	0.0012 U	0.0012 U	
Fluorene	86-73-7	mg/kg	3.7	2300	6	0.0087	0.00052 U	0.00045 U	0.00042 U	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16	0.38	0.088	0.00053 U	0.00051 U	
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.027	0.0042 J	0.0014 U	0.0014 U	
Phenanthrene	85-01-8	mg/kg	5.5		11	0.11	0.0099	0.0015 U	0.0014 U	
Pyrene	129-00-0	mg/kg	10	1800	45	0.27	0.041	0.00086 U	0.00082 U	

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

mg/kg = milligram(s) per kilogram

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-6. Copco No. 2 Former Mobile Oil Containment Building Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2CB-08	C2CB-08	C2CB-08	C2CB-09	C2CB-09	C2CB-10	C2CB-10	C2CB-10	C2CB-10	C2CB-10	C2CB-11	C2CB-11	
						Sample Date	5/11/2022	5/11/2022	5/11/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022
						Depth Interval	0 - 5	5 - 10	10 - 15	0 - 5	5 - 10	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	0 - 5	5 - 10	
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N
CALC																			
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0 U	0.00065	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	
CATFH																			
Gasoline Range Organics	GRO	mg/kg		430	1100		--	--	--	--	--	--	--	--	--	--	--	--	
SW8011																			
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		8.2E-05 U	6.8E-05 U	7.6E-05 U	8.2E-05 U	8.3E-05 U	8E-05 U	6.7E-05 U	6.8E-05 U	7.9E-05 U	7.8E-05 U	7.9E-05 U	7.7E-05 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		1.2E-05 U	1E-05 U	1.2E-05 U	1.2E-05 U	1.3E-05 U	1.2E-05 U	1E-05 U	1E-05 U	1.2E-05 U	1.2E-05 U	1.2E-05 U	1.2E-05 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		1.5E-05 U	1.2E-05 U	1.4E-05 U	1.5E-05 U	1.5E-05 U	1.5E-05 U	1.2E-05 U	1.2E-05 U	1.4E-05 U	1.4E-05 U	1.4E-05 U	1.4E-05 U	
SW8015-E																			
Diesel Range Organics	DRO	mg/kg		260	1100		14 U	18 U	76 J	12 U	13 J	12 U	86	13 J	16 J	19 J	12 U	19 J	
Extended Range Organics	ERO	mg/kg		12000			55 J	77	380 J	25 J	25 U	24 U	120	27 J	24 U	44 J	24 U	54 J	
SW8015-P																			
Gasoline Range Organics	GRO	mg/kg		430	1100		2.7 U	1.5 U	2 U	2.1 U	2 U	1.8 U	1.7 U	1.4 U	2 U	1.8 U	1.8 U	1.7 U	
SW8260B																			
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017		0.0012 U	0.00055 U	0.00054 UJ	0.00073 UJ	0.00073 UJ	0.0006 UJ	0.00064 UJ	0.00078 UJ	0.00084 UJ	0.00079 UJ	0.0011 U	0.00078 U	
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7		0.00061 U	0.00028 U	0.00027 U	0.00037 U	0.00037 U	0.00031 U	0.00032 U	0.0004 U	0.00043 U	0.0004 U	0.00056 U	0.0004 U	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018		0.0018 U	0.00084 U	0.00082 U	0.0011 U	0.0011 U	0.00092 U	0.00097 U	0.0012 U	0.0013 U	0.0012 U	0.0017 U	0.0012 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700			0.0011 U	0.00048 U	0.00047 UJ	0.00065 U	0.00065 U	0.00053 U	0.00056 U	0.00069 U	0.00074 U	0.0007 U	0.00097 U	0.00069 U	
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076		0.0011 U	0.00049 U	0.00048 U	0.00066 U	0.00066 U	0.00054 U	0.00057 U	0.0007 U	0.00075 U	0.00071 U	0.00099 U	0.0007 U	
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2		0.00039 U	0.00018 U	0.00017 U	0.00024 U	0.00024 U	0.00019 U	0.0002 U	0.00025 U	0.00027 U	0.00026 U	0.00035 U	0.00025 U	
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54		0.0022 U	0.001 U	0.001 U	0.0014 U	0.0014 U	0.0011 U	0.0012 U	0.0015 U	0.0016 U	0.0015 U	0.002 U	0.0015 U	
1,1-Dichloropropene	563-58-6	mg/kg					0.00061 UJ	0.00028 U	0.00027 U	0.00037 U	0.00037 U	0.00031 U	0.00032 U	0.0004 U	0.00043 U	0.0004 U	0.00056 U	0.0004 U	
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40			0.0012 U	0.00056 U	0.00055 UJ	0.00075 U	0.00075 U	0.00061 U	0.00065 U	0.0008 U	0.00085 U	0.00081 U	0.0011 U	0.00079 U	
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		0.002 U	0.00093 U	0.00091 U	0.0012 U	0.0012 U	0.001 U	0.0011 U	0.0013 U	0.0014 U	0.0013 U	0.0019 U	0.0013 U	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00085 U	0.00039 U	0.00038 UJ	0.00052 U	0.00052 U	0.00043 U	0.00045 U	0.00056 U	0.0006 U	0.00056 U	0.00078 U	0.00056 U	
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300			0.0024 U	0.0011 U	0.0011 U	0.0015 U	0.0015 U	0.0012 U	0.0013 U	0.0016 U	0.0017 U	0.0016 U	0.0022 U	0.0016 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		0.0033 U	0.0015 U	0.0015 U	0.002 U	0.002 U	0.0016 U	0.0017 U	0.0021 U	0.0023 U	0.0021 U	0.003 U	0.0021 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		0.00041 U	0.00019 U	0.00018 U	0.00025 U	0.00025 U	0.0002 U	0.00022 U	0.00027 U	0.00028 U	0.00027 U	0.00037 U	0.00026 U	
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0026 U	0.0012 U	0.0012 UJ	0.0016 U	0.0016 U	0.0013 U	0.0014 U	0.0017 U	0.0019 U	0.0017 U	0.0024 U	0.0017 U	
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.00041 U	0.00019 U	0.00018 U	0.00025 U	0.00025 U	0.0002 U	0.00022 U	0.00027 U	0.00028 U	0.00027 U	0.00037 U	0.00026 U	
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.00081 U	0.00037 U	0.00036 U	0.0005 U	0.0005 U	0.00041 U	0.00043 U	0.00053 U	0.00057 U	0.00054 U	0.00074 U	0.00053 U	
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.0016 U	0.00075 U	0.00074 U	0.001 U	0.001 U	0.00083 U	0.00087 U	0.0011 U	0.0012 U	0.0011 U	0.0015 U	0.0011 U	
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0022 U	0.001 U	0.001 UJ	0.0014 U	0.0014 U	0.0011 U	0.0012 U	0.0015 U	0.0016 U	0.0015 U	0.002 U	0.0015 U	
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00047 U	0.00021 U	0.00021 UJ	0.00029 U	0.00029 U	0.00023 U	0.00025 U	0.00031 U	0.00033 U	0.00031 U	0.00043 U	0.0003 U	
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.002 U	0.00091 U	0.00089 UJ	0.0012 U	0.0012 U	0.001 U	0.0011 U	0.0013 U	0.0014 U	0.0013 U	0.0018 U	0.0013 U	
2,2-Dichloropropane	594-20-7	mg/kg					0.0016 U	0.00072 U	0.0007 U	0.00096 U	0.00096 U	0.00079 U	0.00083 U	0.001 U	0.0011 U	0.001 U	0.0014 U	0.001 U	
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.018 U	0.0083 U	0.0081 UJ	0.011 U	0.011 U	0.0091 U	0.0096 U	0.012 U	0.013 U	0.012 U	0.017 U	0.012 U	
2-Chlorotoluene	95-49-8	mg/kg		470			0.0019 U	0.00086 U	0.00085 UJ	0.0012 U	0.0012 U	0.00095 U	0.001 U	0.0012 U	0.0013 U	0.0012 U	0.0017 U	0.0012 U	
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0079 U	0.0036 U	0.0036 U	0.0048 U	0.0049 U	0.004 U	0.0042 U	0.0052 U	0.0056 U	0.0052 U	0.0073 U	0.0052 U	
4-Chlorotoluene	106-43-4	mg/kg		440			0.002 U	0.00093 U	0.00091 U	0.0012 U	0.0012 U	0.001 U	0.0011 U	0.0013 U	0.0014 U	0.0013 U	0.0019 U	0.0013 U	
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.012 U	0.0056 U	0.0055 U	0.0075 U	0.0075 U	0.0061 U	0.0065 U	0.008 U	0.0085 U	0.0081 U	0.011 U	0.0079 U	
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.018 U	0.008 U	0.0079 U	0.011 U	0.011 U	0.0088 U	0.0093 U	0.011 U	0.012 U	0.062 J	0.016 U	0.011 U	
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00079 U	0.00036 U	0.00036 U	0.00048 U	0.00049 U	0.0004 U	0.00042 U	0.00052 U	0.00056 U	0.00052 U	0.00073 U	0.00052 U	

Table D-6. Copco No. 2 Former Mobile Oil Containment Building Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2CB-08	C2CB-08	C2CB-08	C2CB-09	C2CB-09	C2CB-10	C2CB-10	C2CB-10	C2CB-10	C2CB-10	C2CB-10	C2CB-11	C2CB-11
						Sample Date	5/11/2022	5/11/2022	5/11/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022
Depth Interval	0 - 5	5 - 10	10 - 15	0 - 5	5 - 10	0 - 5	5 - 10	10 - 15	0 - 5	5 - 10	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	0 - 5	5 - 10		
Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bromobenzene	108-86-1	mg/kg		290			0.002 U	0.00093 U	0.00091 UJ	0.0012 U	0.0012 U	0.001 U	0.0011 U	0.0013 U	0.0014 U	0.0013 U	0.0019 U	0.0013 U	0.0013 U
Bromochloromethane	74-97-5	mg/kg		150			0.00051 U	0.00023 U	0.00023 U	0.00031 U	0.00031 U	0.00026 U	0.00027 U	0.00033 U	0.00036 U	0.00034 U	0.00046 U	0.00033 U	0.00033 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00037 U	0.00017 U	0.00016 U	0.00022 U	0.00022 U	0.00018 U	0.00019 U	0.00024 U	0.00026 U	0.00024 U	0.00033 U	0.00033 U	0.00024 U
Bromoform	75-25-2	mg/kg		19	0.69		0.0017 U	0.00078 U	0.00077 U	0.001 U	0.001 U	0.00086 U	0.0009 U	0.0011 U	0.0012 U	0.0011 U	0.0016 U	0.0011 U	0.0011 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00043 U	0.0002 U	0.00019 U	0.00026 U	0.00026 U	0.00021 U	0.00023 U	0.00028 U	0.0003 U	0.00028 U	0.00039 U	0.00028 U	0.00028 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00041 U	0.00019 U	0.00018 U	0.00025 U	0.00025 U	0.0002 U	0.00022 U	0.00027 U	0.00028 U	0.00027 U	0.00037 U	0.00026 U	0.00026 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.00061 U	0.00028 U	0.00027 U	0.00037 U	0.00037 U	0.00031 U	0.00032 U	0.0004 U	0.00043 U	0.0004 U	0.00056 U	0.0004 U	0.0004 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.00051 U	0.00023 U	0.00023 U	0.00031 U	0.00031 U	0.00026 U	0.00027 U	0.00033 U	0.00036 U	0.00034 U	0.00046 U	0.00033 U	0.00033 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.0011 U	0.00052 U	0.00051 U	0.0007 U	0.0007 U	0.00057 U	0.0006 U	0.00074 U	0.0008 U	0.00075 U	0.001 U	0.00074 U	0.00074 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.0015 U	0.0007 U	0.00068 U	0.00093 U	0.00093 U	0.00077 U	0.00081 U	0.001 U	0.0011 U	0.001 U	0.0014 U	0.00099 U	0.00099 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.00061 U	0.00028 U	0.00027 U	0.00037 U	0.00037 U	0.00031 U	0.00032 U	0.0004 U	0.00043 U	0.0004 U	0.00056 U	0.0004 U	0.0004 U
Chloromethane	74-87-3	mg/kg		110	11		0.0019 U	0.00086 U	0.00085 U	0.0012 U	0.0012 U	0.00095 U	0.001 U	0.0012 U	0.0013 U	0.0012 U	0.0017 U	0.0012 U	0.0012 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.0012 U	0.00056 U	0.00055 U	0.00075 U	0.00075 U	0.00061 U	0.00065 U	0.0008 U	0.00085 U	0.00081 U	0.0011 U	0.00079 U	0.00079 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00041 U	0.00019 U	0.00018 UJ	0.00025 U	0.00025 U	0.0002 U	0.00022 U	0.00027 U	0.00028 U	0.00027 U	0.00037 U	0.00026 U	0.00026 U
Dibromomethane	74-95-3	mg/kg		24			0.00085 U	0.00039 U	0.00038 U	0.00052 U	0.00052 U	0.00043 U	0.00045 U	0.00056 U	0.0006 U	0.00056 U	0.00078 U	0.00056 U	0.00056 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.001 U	0.00046 U	0.00045 U	0.00061 U	0.00061 U	0.0005 U	0.00053 U	0.00065 U	0.0007 U	0.00066 U	0.00091 U	0.00065 U	0.00065 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.02 U	0.0092 U	0.009 UJ	0.012 U	0.012 U	0.01 U	0.011 U	0.013 U	0.014 U	0.013 U	0.018 U	0.013 U	0.013 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00083 U	0.00038 U	0.00037 UJ	0.00051 UJ	0.00051 UJ	0.00042 UJ	0.00044 UJ	0.00054 UJ	0.00058 UJ	0.00055 UJ	0.00076 U	0.00054 U	0.00054 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0012 U	0.00056 U	0.00055 UJ	0.00075 U	0.00075 U	0.00061 U	0.00065 U	0.0008 U	0.00085 U	0.00081 U	0.0011 U	0.00079 U	0.00079 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00093 U	0.00043 U	0.00042 UJ	0.00057 UJ	0.00057 UJ	0.00047 UJ	0.0005 UJ	0.00061 UJ	0.00065 UJ	0.00062 UJ	0.00086 U	0.00061 U	0.00061 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.00061 U	0.00028 U	0.00027 U	0.00037 U	0.00037 U	0.00031 U	0.00032 U	0.0004 U	0.00043 U	0.0004 U	0.00056 U	0.0004 U	0.0004 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0037 U	0.0017 U	0.0016 U	0.0022 U	0.0022 U	0.0018 U	0.0019 U	0.0024 U	0.0026 U	0.0024 U	0.0033 U	0.0024 U	0.0024 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.0013 U	0.00059 U	0.00057 U	0.00078 U	0.00078 U	0.00064 U	0.00068 U	0.00084 U	0.0009 U	0.00085 U	0.0012 U	0.00083 U	0.00083 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.0015 U	0.00071 U	0.00069 U	0.00094 U	0.00095 U	0.00078 U	0.00082 U	0.001 U	0.0011 U	0.001 U	0.0014 U	0.001 U	0.001 U
p-Isopropyltoluene	99-87-6	mg/kg					0.00081 U	0.00037 U	0.00036 U	0.0005 U	0.0005 U	0.00041 U	0.00043 U	0.00053 U	0.00057 U	0.00054 U	0.00074 U	0.00053 U	0.00053 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.0014 U	0.00062 U	0.00061 U	0.00083 U	0.00083 U	0.00068 U	0.00072 U	0.00089 U	0.00095 U	0.0009 U	0.0012 U	0.00089 U	0.00089 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.0015 U	0.00069 U	0.00067 UJ	0.00092 U	0.00092 U	0.00076 U	0.0008 U	0.00098 U	0.0011 U	0.00099 U	0.0014 U	0.00098 U	0.00098 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.0013 U	0.00061 U	0.0006 UJ	0.00082 U	0.00082 U	0.00067 U	0.00071 U	0.00088 U	0.00094 U	0.00089 U	0.0012 U	0.00087 U	0.00087 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00081 UJ	0.00037 U	0.00036 UJ	0.0005 U	0.0005 U	0.00041 U	0.00043 U	0.00053 U	0.00057 U	0.00054 U	0.00074 U	0.00053 U	0.00053 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0026 U	0.0012 U	0.0012 UJ	0.0016 U	0.0016 U	0.0013 U	0.0014 U	0.0017 U	0.0019 U	0.0017 U	0.0024 U	0.0017 U	0.0017 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00081 U	0.00037 U	0.00036 U	0.0005 U	0.0005 U	0.00041 U	0.00043 U	0.00053 U	0.00057 U	0.00054 U	0.00074 U	0.00053 U	0.00053 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.0012 U	0.00056 U	0.00055 UJ	0.00075 U	0.00075 U	0.00061 U	0.00065 U	0.0008 U	0.00085 U	0.00081 U	0.0011 U	0.00079 U	0.00079 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.00061 U	0.00028 U	0.00027 UJ	0.00037 U	0.00037 U	0.00031 U	0.00032 U	0.0004 U	0.00043 U	0.0004 U	0.00056 U	0.0004 U	0.0004 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.00061 U	0.00028 U	0.00027 U	0.00037 U	0.00037 U	0.00031 U	0.00032 U	0.0004 U	0.00043 U	0.0004 U	0.00056 U	0.0004 U	0.0004 U
Vinyl Acetate	108-05-4	mg/kg		910			0.003 U	0.0014 U	0.0014 UJ	0.0019 U	0.0019 U	0.0015 U	0.0016 U	0.002 U	0.0021 U	0.002 U	0.0028 U	0.002 U	0.002 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00061 U	0.00028 U	0.00027 U	0.00037 U	0.00037 U	0.00031 U	0.00032 U	0.0004 U	0.00043 U	0.0004 U	0.00056 U	0.0004 U	0.0004 U
Xylene, o	95-47-6	mg/kg	1.4	650			0.0019 U	0.00085 U	0.00084 UJ	0.0011 UJ	0.0011 UJ	0.00094 UJ	0.00099 UJ	0.0012 UJ	0.0013 UJ	0.0012 UJ	0.0017 U	0.0012 U	0.0012 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.0024 U	0.0011 U	0.0011 UJ	0.0015 UJ	0.0015 UJ	0.0012 UJ	0.0013 UJ	0.0016 UJ	0.0017 UJ	0.0016 UJ	0.0022 U	0.0015 U	0.0015 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0019 U	0.00085 U	0.00084 UJ	0.0011 UJ	0.0011 UJ	0.00094 UJ	0.00099 UJ	0.0012 UJ	0.0013 UJ	0.0012 UJ	0.0017 U	0.0012 U	0.0012 U
SW8270SIM																			
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.00077 U	0.00074 U	0.00072 U	0.00077 U	0.00077 U	0.00076 U	0.00069 U	0.00071 U	0.00074 U	0.00076 U	0.00076 U	0.00075 U	0.00075 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.0025 U	0.0024 U	0.0024 U	0.0025 U	0.0025 U	0.0025 U	0.0022 U	0.0023 U	0.0024 U	0.0025 U	0.0025 U	0.0024 U	0.0024 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00074 U	0.0007 U	0.00069 U	0.00073 U	0.00074 U	0.00072 U	0.00066 U	0.00068 U	0.0007 U	0.00072 U	0.00072 U	0.00071 U	0.00071 U

Table D-6. Copco No. 2 Former Mobile Oil Containment Building Analytical Soil Results

						Location	C2CB-08	C2CB-08	C2CB-08	C2CB-09	C2CB-09	C2CB-10	C2CB-10	C2CB-10	C2CB-10	C2CB-10	C2CB-11	C2CB-11	
						Sample Date	5/11/2022	5/11/2022	5/11/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022
						Depth Interval	0 - 5	5 - 10	10 - 15	0 - 5	5 - 10	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	0 - 5	5 - 10	
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater														
Acenaphthylene	208-96-8	mg/kg	120		6.4	0.00061 U	0.00058 U	0.00057 U	0.00061 U	0.00061 U	0.0006 U	0.00055 U	0.00056 U	0.00091 J	0.0006 U	0.0006 U	0.0006 U	0.00059 U	
Anthracene	120-12-7	mg/kg	6.8	17000	1.9	0.00074 U	0.0007 U	0.00069 U	0.00073 U	0.00074 U	0.00072 U	0.00066 U	0.00068 U	0.0007 U	0.00072 U	0.00072 U	0.00072 U	0.00071 U	
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10	0.0022 U	0.0021 U	0.002 U	0.0022 U	0.0022 U	0.0021 U	0.002 U	0.002 U	0.0021 U	0.0022 U	0.0021 U	0.0021 U	0.0021 U	
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7	0.001 U	0.00098 U	0.00096 U	0.001 U	0.001 U	0.001 U	0.00092 U	0.00095 U	0.00098 U	0.001 U	0.001 U	0.001 U	0.001 U	
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4	0.0014 U	0.0044 J	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0013 U	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	0.0014 U	
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27	0.00061 U	0.0033 J	0.0028 J	0.00061 U	0.00061 U	0.0006 U	0.00055 U	0.00056 U	0.00059 U	0.0006 U	0.0006 U	0.0006 U	0.00059 U	
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8	0.00074 U	0.0007 U	0.00069 U	0.00073 U	0.00074 U	0.00072 U	0.00066 U	0.00068 U	0.0007 U	0.00072 U	0.00072 U	0.00072 U	0.00071 U	
Chrysene	218-01-9	mg/kg	3.1	110	2.2	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U	0.0016 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	0.0018 U	
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29	0.00088 U	0.00084 U	0.00083 U	0.00088 U	0.00088 U	0.00086 U	0.00079 U	0.00081 U	0.00084 U	0.00087 U	0.00087 U	0.00087 U	0.00086 U	
Fluoranthene	206-44-0	mg/kg	10	2400	86	0.0025 J	0.0023 J	0.0016 U	0.0017 U	0.0017 U	0.0017 U	0.0015 U	0.0016 U	0.0018 J	0.0017 J	0.0017 U	0.0017 U	0.0017 U	
Fluorene	86-73-7	mg/kg	3.7	2300	6	0.00061 U	0.00058 U	0.00057 U	0.00061 U	0.00061 U	0.0006 U	0.00055 U	0.00056 U	0.00059 U	0.0006 U	0.0006 U	0.0006 U	0.00059 U	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16	0.00074 U	0.0021 J	0.00069 U	0.00073 U	0.00074 U	0.00072 U	0.00066 U	0.00068 U	0.0007 U	0.00072 U	0.00072 U	0.00072 U	0.00071 U	
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.002 J	0.0019 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0018 U	0.0018 U	0.012	0.002 U	0.002 U	0.002 U	0.0019 U	
Phenanthrene	85-01-8	mg/kg	5.5		11	0.002 U	0.0019 U	0.0019 U	0.002 U	0.002 U	0.002 U	0.0018 U	0.0018 U	0.0029 J	0.002 U	0.002 U	0.002 U	0.0019 U	
Pyrene	129-00-0	mg/kg	10	1800	45	0.0024 J	0.0028 J	0.002 J	0.0012 U	0.0012 U	0.0012 U	0.0011 U	0.0011 U	0.0021 J	0.0012 U	0.0012 U	0.0012 U	0.0012 U	

Table D-6. Copco No. 2 Former Mobile Oil Containment Building Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2CB-11	C2CB-11	C2CB-11	C2CB-11	C2CB-12	C2CB-12	C2CB-12	C2CB-13	C2CB-13	C2CB-13	C2CB-13	C2CB-13
						Sample Date	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022
						Depth Interval	10 - 15	10 - 15	15 - 20	20 - 23	0 - 5	5 - 10	5 - 10	0.5 - 5	5 - 10	10 - 15	15 - 20	15 - 20
						Sample Type	N	FD	N	N	N	N	FD	N	N	N	N	FD
CALC																		
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0 U	0 U	0 U	0 U	0 U	0 U	0 U	0.002124	0 U	0 U	0 U	0 U
CATFH																		
Gasoline Range Organics	GRO	mg/kg		430	1100		--	--	--	--	--	--	--	--	--	--	--	--
SW8011																		
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		7.5E-05 U	8.1E-05 U	7.3E-05 U	7.2E-05 U	7.5E-05 U	6.9E-05 U	7.9E-05 U	6.7E-05 U	6.9E-05 U	6.5E-05 U	6.7E-05 U	7.4E-05 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		1.1E-05 U	1.2E-05 U	1.1E-05 U	1.1E-05 U	1.1E-05 U	1E-05 U	1.2E-05 U	1E-05 U	1E-05 U	9.9E-06 U	1E-05 U	1.1E-05 U
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		1.4E-05 U	1.5E-05 U	1.3E-05 U	1.3E-05 U	1.4E-05 U	1.2E-05 U	1.4E-05 U	1.2E-05 U	1.3E-05 U	1.2E-05 U	1.2E-05 U	1.3E-05 U
SW8015-E																		
Diesel Range Organics	DRO	mg/kg		260	1100		11 U	12 U	12 U	11 U	9.5 U	9.7 U	9.8 U	38 J	9.7 UJ	11 U	12 U	9.9 U
Extended Range Organics	ERO	mg/kg		12000			23 J	24 U	34 J	23 U	19 U	20 U	20 U	32 J	20 UJ	22 U	23 U	20 U
SW8015-P																		
Gasoline Range Organics	GRO	mg/kg		430	1100		1.8 U	2.2 U	1.9 U	1.5 U	1.8 U	1.8 U	2.4 U	1.7 U	1.7 U	1.5 U	1.5 U	1.5 U
SW8260B																		
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017		0.00083 U	0.00077 U	0.0006 U	0.00052 U	0.00064 U	0.00075 U	0.00066 U	0.00076 U	0.00066 UJ	0.00064 U	0.00059 U	0.00055 U
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7		0.00042 U	0.00039 U	0.00031 U	0.00026 U	0.00033 U	0.00038 U	0.00034 U	0.00039 U	0.00033 U	0.00033 U	0.0003 U	0.00028 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018		0.0013 U	0.0012 U	0.00092 U	0.00079 U	0.00098 U	0.0011 U	0.001 U	0.0012 U	0.001 UJ	0.00098 U	0.00091 U	0.00084 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700			0.00073 U	0.00068 U	0.00053 U	0.00046 U	0.00056 U	0.00066 U	0.00058 U	0.00067 U	0.00058 U	0.00057 U	0.00052 U	0.00048 U
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076		0.00075 U	0.0007 U	0.00054 U	0.00047 U	0.00058 U	0.00067 U	0.00059 U	0.00068 U	0.00059 UJ	0.00058 U	0.00053 U	0.00049 U
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2		0.00027 U	0.00025 U	0.00019 U	0.00017 U	0.00021 U	0.00024 U	0.00021 U	0.00025 U	0.00021 U	0.00021 U	0.00019 U	0.00018 U
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54		0.0016 U	0.0014 U	0.0011 U	0.00097 U	0.0012 U	0.0014 U	0.0012 U	0.0014 U	0.0012 U	0.0012 U	0.0011 U	0.001 U
1,1-Dichloropropene	563-58-6	mg/kg					0.00042 U	0.00039 U	0.00031 U	0.00026 U	0.00033 U	0.00038 U	0.00034 U	0.00039 U	0.00033 UJ	0.00033 U	0.0003 U	0.00028 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40			0.00085 U	0.00079 U	0.00062 U	0.00053 U	0.00065 U	0.00076 U	0.00067 U	0.00078 U	0.00067 UJ	0.00066 U	0.0006 U	0.00056 U
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		0.0014 U	0.0013 U	0.001 U	0.00088 U	0.0011 U	0.0013 U	0.0011 U	0.0013 U	0.0011 UJ	0.0011 U	0.001 U	0.00093 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00059 U	0.00055 U	0.00043 U	0.00037 U	0.00046 U	0.00053 U	0.00047 U	0.00054 U	0.00047 UJ	0.00046 U	0.00042 U	0.00039 U
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300			0.0017 U	0.0016 U	0.0012 U	0.0011 U	0.0013 U	0.0015 U	0.0013 U	0.0016 U	0.0013 UJ	0.0013 U	0.0012 U	0.0011 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		0.0023 U	0.0021 U	0.0016 U	0.0014 U	0.0017 U	0.002 U	0.0018 U	0.0021 U	0.0018 U	0.0017 U	0.0016 U	0.0015 U
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		0.00028 U	0.00026 U	0.00021 U	0.00018 U	0.00022 U	0.00025 U	0.00022 U	0.00026 U	0.00022 UJ	0.00022 U	0.0002 U	0.00019 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0018 U	0.0017 U	0.0013 U	0.0011 U	0.0014 U	0.0017 U	0.0015 U	0.0017 U	0.0014 UJ	0.0014 U	0.0013 U	0.0012 U
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.00028 U	0.00026 U	0.00021 U	0.00018 U	0.00022 U	0.00025 U	0.00022 U	0.00026 U	0.00022 UJ	0.00022 U	0.0002 U	0.00019 U
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.00057 U	0.00053 U	0.00041 U	0.00035 U	0.00043 U	0.00051 U	0.00045 U	0.00052 U	0.00045 UJ	0.00044 U	0.0004 U	0.00037 U
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.0011 U	0.0011 U	0.00083 U	0.00072 U	0.00088 U	0.001 U	0.00091 U	0.001 U	0.0009 UJ	0.00088 U	0.00082 U	0.00075 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0016 U	0.0014 U	0.0011 U	0.00097 U	0.0012 U	0.0014 U	0.0012 U	0.0014 U	0.0012 UJ	0.0012 U	0.0011 U	0.001 U
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00033 U	0.0003 U	0.00024 U	0.0002 U	0.00025 U	0.00029 U	0.00026 U	0.0003 U	0.00026 UJ	0.00025 U	0.00023 U	0.00021 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0014 U	0.0013 U	0.001 U	0.00087 U	0.0011 U	0.0012 U	0.0011 U	0.0013 U	0.0011 UJ	0.0011 U	0.00099 U	0.00091 U
2,2-Dichloropropane	594-20-7	mg/kg					0.0011 U	0.001 U	0.00079 U	0.00068 U	0.00084 U	0.00098 U	0.00086 U	0.001 U	0.00086 U	0.00084 U	0.00078 U	0.00072 U
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.013 U	0.012 U	0.0091 U	0.0079 U	0.0097 U	0.011 U	0.01 U	0.012 U	0.0099 UJ	0.0097 U	0.009 U	0.0083 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.0013 U	0.0012 U	0.00095 U	0.00082 U	0.001 U	0.0012 U	0.001 U	0.0012 U	0.001 UJ	0.001 U	0.00094 U	0.00086 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0055 U	0.0051 U	0.004 U	0.0034 U	0.0042 U	0.005 U	0.0044 U	0.005 U	0.0043 UJ	0.0043 U	0.0039 U	0.0036 U
4-Chlorotoluene	106-43-4	mg/kg		440			0.0014 U	0.0013 U	0.001 U	0.00088 U	0.0011 U	0.0013 U	0.0011 U	0.0013 U	0.0011 UJ	0.0011 U	0.001 U	0.00093 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.0085 U	0.0079 U	0.0062 U	0.0053 U	0.0065 U	0.0076 U	0.0067 U	0.0078 U	0.0067 U	0.0066 U	0.006 U	0.0056 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.012 U	0.011 U	0.0088 U	0.0076 U	0.0094 U	0.011 U	0.0097 U	0.011 U	0.0096 U	0.0094 U	0.0087 U	0.008 U
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00055 U	0.00051 U	0.0004 U	0.00034 U	0.00042 U	0.0005 U	0.00044 U	0.0005 U	0.00043 UJ	0.00043 U	0.00039 U	0.00036 U

Table D-6. Copco No. 2 Former Mobile Oil Containment Building Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2CB-11	C2CB-11	C2CB-11	C2CB-11	C2CB-12	C2CB-12	C2CB-12	C2CB-13	C2CB-13	C2CB-13	C2CB-13	C2CB-13	
						Sample Date	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022
						Depth Interval	10 - 15	10 - 15	15 - 20	20 - 23	0 - 5	5 - 10	5 - 10	0.5 - 5	5 - 10	10 - 15	15 - 20	15 - 20	
						Sample Type	N	FD	N	N	N	N	FD	N	N	N	N	N	FD
Bromobenzene	108-86-1	mg/kg		290			0.0014 U	0.0013 U	0.001 U	0.00088 U	0.0011 U	0.0013 U	0.0011 U	0.0013 U	0.0011 UJ	0.0011 U	0.001 U	0.00093 U	
Bromochloromethane	74-97-5	mg/kg		150			0.00035 U	0.00033 U	0.00026 U	0.00022 U	0.00027 U	0.00032 U	0.00028 U	0.00032 U	0.00028 UJ	0.00027 U	0.00025 U	0.00023 U	
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00025 U	0.00024 U	0.00018 U	0.00016 U	0.0002 U	0.00023 U	0.0002 U	0.00023 U	0.0002 UJ	0.0002 U	0.00018 U	0.00017 U	
Bromoform	75-25-2	mg/kg		19	0.69		0.0012 U	0.0011 U	0.00086 U	0.00074 U	0.00091 U	0.0011 U	0.00094 U	0.0011 U	0.00094 UJ	0.00092 U	0.00085 U	0.00078 U	
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.0003 U	0.00028 U	0.00022 U	0.00019 U	0.00023 U	0.00027 U	0.00024 U	0.00027 U	0.00023 U	0.00023 U	0.00021 U	0.0002 U	
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00028 U	0.00026 U	0.00021 U	0.00018 U	0.00022 U	0.00025 U	0.00022 U	0.00026 U	0.00022 U	0.00022 U	0.0002 U	0.00019 U	
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.00042 U	0.00039 U	0.00031 U	0.00026 U	0.00033 U	0.00038 U	0.00034 U	0.00039 U	0.00033 U	0.00033 U	0.0003 U	0.00028 U	
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.00035 U	0.00033 U	0.00026 U	0.00022 U	0.00027 U	0.00032 U	0.00028 U	0.00032 U	0.00028 UJ	0.00027 U	0.00025 U	0.00023 U	
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00079 U	0.00074 U	0.00057 U	0.00049 U	0.00061 U	0.00071 U	0.00063 U	0.00072 U	0.00062 UJ	0.00061 U	0.00056 U	0.00052 U	
Chloroethane	75-00-3	mg/kg		14000	1.2		0.0011 U	0.00099 U	0.00077 U	0.00066 U	0.00081 U	0.00095 U	0.00084 U	0.00097 U	0.00084 U	0.00082 U	0.00076 U	0.0007 U	
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.00042 U	0.00039 U	0.00031 U	0.00026 U	0.00033 U	0.00038 U	0.00034 U	0.00039 U	0.00033 U	0.00033 U	0.0003 U	0.00028 U	
Chloromethane	74-87-3	mg/kg		110	11		0.0013 U	0.0012 U	0.00095 U	0.00082 U	0.001 U	0.0012 U	0.001 U	0.0012 U	0.001 U	0.001 U	0.00094 U	0.00086 U	
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.00085 U	0.00079 U	0.00062 U	0.00053 U	0.00065 U	0.00076 U	0.00067 U	0.00078 U	0.00067 UJ	0.00066 U	0.0006 U	0.00056 U	
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00028 U	0.00026 U	0.00021 U	0.00018 U	0.00022 U	0.00025 U	0.00022 U	0.00026 U	0.00022 UJ	0.00022 U	0.0002 U	0.00019 U	
Dibromomethane	74-95-3	mg/kg		24			0.00059 U	0.00055 U	0.00043 U	0.00037 U	0.00046 U	0.00053 U	0.00047 U	0.00054 U	0.00047 UJ	0.00046 U	0.00042 U	0.00039 U	
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00069 U	0.00064 U	0.0005 U	0.00043 U	0.00053 U	0.00062 U	0.00055 U	0.00063 U	0.00055 U	0.00054 U	0.00049 U	0.00046 U	
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.014 U	0.013 U	0.01 U	0.0087 U	0.011 U	0.013 U	0.011 U	0.013 U	0.011 U	0.011 U	0.01 U	0.0092 U	
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00058 U	0.00054 U	0.00042 U	0.00036 U	0.00045 U	0.00052 U	0.00046 U	0.00053 U	0.00046 UJ	0.00045 U	0.00041 U	0.00038 U	
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.00085 U	0.00079 U	0.00062 U	0.00053 U	0.00065 U	0.00076 U	0.00067 U	0.00078 U	0.00067 UJ	0.00066 U	0.0006 U	0.00056 U	
Isopropylbenzene	98-82-8	mg/kg		1900			0.00065 U	0.0006 U	0.00047 U	0.00041 U	0.0005 U	0.00059 U	0.00052 U	0.00059 U	0.00051 UJ	0.0005 U	0.00046 U	0.00043 U	
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.00042 U	0.00039 U	0.00031 U	0.00026 U	0.00033 U	0.00038 U	0.00034 U	0.00039 U	0.00033 U	0.00033 U	0.0003 U	0.00028 U	
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0025 U	0.0024 U	0.0018 U	0.0016 U	0.002 U	0.0023 U	0.002 U	0.0023 U	0.002 UJ	0.002 U	0.0018 U	0.0017 U	
n-Butylbenzene	104-51-8	mg/kg		2400			0.00089 U	0.00083 U	0.00065 U	0.00056 U	0.00068 U	0.0008 U	0.00071 U	0.00081 U	0.0007 UJ	0.00069 U	0.00063 U	0.00059 U	
n-Propylbenzene	103-65-1	mg/kg		3800			0.0011 U	0.001 U	0.00078 U	0.00067 U	0.00083 U	0.00097 U	0.00085 U	0.00098 U	0.00085 UJ	0.00083 U	0.00077 U	0.00071 U	
p-Isopropyltoluene	99-87-6	mg/kg					0.00057 U	0.00053 U	0.00041 U	0.00035 U	0.00043 U	0.00051 U	0.00045 U	0.00052 U	0.00045 UJ	0.00044 U	0.0004 U	0.00037 U	
sec-Butylbenzene	135-98-8	mg/kg		2200			0.00095 U	0.00088 U	0.00069 U	0.00059 U	0.00073 U	0.00085 U	0.00075 U	0.00087 U	0.00075 UJ	0.00073 U	0.00068 U	0.00062 U	
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.001 U	0.00097 U	0.00076 U	0.00065 U	0.0008 U	0.00094 U	0.00083 U	0.00096 U	0.00083 UJ	0.00081 U	0.00075 U	0.00069 U	
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00093 U	0.00087 U	0.00068 U	0.00058 U	0.00072 U	0.00084 U	0.00074 U	0.00085 U	0.00074 UJ	0.00072 U	0.00067 U	0.00061 U	
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00057 U	0.00053 U	0.00041 U	0.00035 U	0.00043 U	0.00051 U	0.00045 U	0.00052 U	0.00045 UJ	0.00044 U	0.0004 U	0.00037 U	
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0018 U	0.0017 U	0.0013 U	0.0011 U	0.0014 U	0.0017 U	0.0015 U	0.0017 U	0.0014 UJ	0.0014 U	0.0013 U	0.0012 U	
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00057 U	0.00053 U	0.00041 U	0.00035 U	0.00043 U	0.00051 U	0.00045 U	0.00052 U	0.00045 U	0.00044 U	0.0004 U	0.00037 U	
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.00085 U	0.00079 U	0.00062 U	0.00053 U	0.00065 U	0.00076 U	0.00067 U	0.00078 U	0.00067 UJ	0.00066 U	0.0006 U	0.00056 U	
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.00042 U	0.00039 U	0.00031 U	0.00026 U	0.00033 U	0.00038 U	0.00034 U	0.00039 U	0.00033 UJ	0.00033 U	0.0003 U	0.00028 U	
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.00042 U	0.00039 U	0.00031 U	0.00026 U	0.00033 U	0.00038 U	0.00034 U	0.00039 U	0.00033 UJ	0.00033 U	0.0003 U	0.00028 U	
Vinyl Acetate	108-05-4	mg/kg		910			0.0021 U	0.002 U	0.0015 U	0.0013 U	0.0016 U	0.0019 U	0.0017 U	0.0019 U	0.0017 UJ	0.0016 U	0.0015 U	0.0014 U	
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00042 U	0.00039 U	0.00031 U	0.00026 U	0.00033 U	0.00038 U	0.00034 U	0.00039 U	0.00033 U	0.00033 U	0.0003 U	0.00028 U	
Xylene, o	95-47-6	mg/kg	1.4	650			0.0013 U	0.0012 U	0.00094 U	0.00081 U	0.001 U	0.0012 U	0.001 U	0.0012 U	0.001 UJ	0.001 U	0.00093 U	0.00085 U	
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.0017 U	0.0015 U	0.0012 U	0.001 U	0.0013 U	0.0015 U	0.0013 U	0.0015 U	0.0013 UJ	0.0013 U	0.0012 U	0.0011 U	
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0013 U	0.0012 U	0.00094 U	0.00081 U	0.001 U	0.0012 U	0.001 U	0.0012 U	0.001 UJ	0.001 U	0.00093 U	0.00085 U	
SW8270SIM																			
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.00072 U	0.00074 U	0.00076 U	0.00069 U	0.00067 U	0.00073 U	0.00075 U	0.00073 U	0.00072 U	0.00069 U	0.0007 UJ	0.00071 U	
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.0023 U	0.0024 U	0.0025 U	0.0023 U	0.0022 U	0.0024 U	0.0025 U	0.0024 U	0.0023 U	0.0022 U	0.0023 UJ	0.0023 U	
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00068 U	0.00071 U	0.00072 U	0.00066 U	0.00064 U	0.0007 U	0.00072 U	0.0007 U	0.00069 U	0.00066 U	0.00067 UJ	0.00068 U	

Table D-6. Copco No. 2 Former Mobile Oil Containment Building Analytical Soil Results

						Location	C2CB-11	C2CB-11	C2CB-11	C2CB-11	C2CB-12	C2CB-12	C2CB-12	C2CB-13	C2CB-13	C2CB-13	C2CB-13	C2CB-13	
						Sample Date	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022	5/11/2022
						Depth Interval	10 - 15	10 - 15	15 - 20	20 - 23	0 - 5	5 - 10	5 - 10	0.5 - 5	5 - 10	10 - 15	15 - 20	15 - 20	
						Sample Type	N	FD	N	N	N	N	FD	N	N	N	N	FD	
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater														
Acenaphthylene	208-96-8	mg/kg	120		6.4	0.00057 U	0.00059 U	0.0006 U	0.00055 U	0.00053 U	0.00058 U	0.0006 U	0.00058 U	0.00057 U	0.00055 U	0.00056 UJ	0.00057 U		
Anthracene	120-12-7	mg/kg	6.8	17000	1.9	0.00068 U	0.00071 U	0.00072 U	0.00066 U	0.00064 U	0.0007 U	0.00072 U	0.0007 U	0.00069 U	0.00066 U	0.00067 UJ	0.00068 U		
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10	0.002 U	0.0021 U	0.0021 U	0.002 U	0.0019 U	0.0021 U	0.0021 U	0.0021 U	0.002 U	0.002 U	0.002 UJ	0.002 U		
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7	0.00095 U	0.00099 U	0.001 U	0.00092 U	0.00089 U	0.00098 U	0.001 U	0.0014 J	0.00096 U	0.00092 U	0.00094 UJ	0.00095 U		
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4	0.0013 U	0.0014 U	0.0014 U	0.0013 U	0.0012 U	0.0014 U	0.0014 U	0.0014 U	0.0049 J	0.0013 U	0.0013 U	0.0013 UJ	0.0013 U	
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27	0.00057 U	0.00059 U	0.0006 U	0.00055 U	0.00053 U	0.00058 U	0.0006 U	0.0021 J	0.00057 U	0.00055 U	0.00056 UJ	0.00057 U		
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8	0.00068 U	0.00071 U	0.00072 U	0.00066 U	0.00064 U	0.0007 U	0.00072 U	0.0007 U	0.00069 U	0.00066 U	0.00067 UJ	0.00068 U		
Chrysene	218-01-9	mg/kg	3.1	110	2.2	0.0017 U	0.0018 U	0.0018 U	0.0016 U	0.0016 U	0.0017 U	0.0018 U	0.004 J	0.0017 U	0.0016 U	0.0017 UJ	0.0017 U		
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29	0.00082 U	0.00085 U	0.00087 U	0.00079 U	0.00076 U	0.00084 U	0.00086 U	0.00084 U	0.00083 U	0.00079 U	0.0008 UJ	0.00081 U		
Fluoranthene	206-44-0	mg/kg	10	2400	86	0.0016 U	0.0017 U	0.0017 U	0.0015 U	0.0015 U	0.0016 U	0.0017 U	0.0031 J	0.0016 U	0.0015 U	0.0016 UJ	0.0016 U		
Fluorene	86-73-7	mg/kg	3.7	2300	6	0.00057 U	0.00059 U	0.0006 U	0.00055 U	0.00053 U	0.00058 U	0.0006 U	0.00058 U	0.00057 U	0.00055 U	0.00056 UJ	0.00057 U		
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16	0.00068 U	0.00071 U	0.00072 U	0.00066 U	0.00064 U	0.0007 U	0.00072 U	0.0023 J	0.00069 U	0.00066 U	0.00067 UJ	0.00068 U		
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.0018 U	0.0019 U	0.002 U	0.0018 U	0.0017 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.0018 U	0.0018 UJ	0.0018 U		
Phenanthrene	85-01-8	mg/kg	5.5		11	0.0019 U	0.0019 U	0.002 U	0.0018 U	0.0017 U	0.0019 U	0.002 U	0.0019 U	0.0019 U	0.0018 U	0.0018 UJ	0.0018 U		
Pyrene	129-00-0	mg/kg	10	1800	45	0.0011 U	0.0011 U	0.0012 U	0.0011 U	0.001 U	0.0011 U	0.0012 U	0.0031 J	0.0011 U	0.0011 U	0.0011 UJ	0.0011 U		

Table D-6. Copco No. 2 Former Mobile Oil Containment Building Analytical Soil Results

						Location	C2CB-13	C2CB-14	C2CB-14
						Sample Date	5/11/2022	5/10/2022	5/10/2022
						Depth Interval	20 - 23	0 - 5	5 - 10
						Sample Type	N	N	N
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater				
CALC									
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0 U	6.5E-06	0.0031437	
CATFH									
Gasoline Range Organics	GRO	mg/kg		430	1100	--	--	--	
SW8011									
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	6.4E-05 U	7.8E-05 U	7.4E-05 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	9.8E-06 U	1.2E-05 U	1.1E-05 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	1.2E-05 U	1.4E-05 U	1.3E-05 U	
SW8015-E									
Diesel Range Organics	DRO	mg/kg		260	1100	9.6 U	11 U	11 U	
Extended Range Organics	ERO	mg/kg		12000		19 U	23 U	22 U	
SW8015-P									
Gasoline Range Organics	GRO	mg/kg		430	1100	1.5 U	1.9 U	1.9 U	
SW8260B									
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017	0.00059 U	0.00069 U	0.0007 U	
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7	0.0003 U	0.00035 U	0.00036 U	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018	0.0009 U	0.0011 U	0.0011 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700		0.00052 U	0.00061 U	0.00062 U	
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076	0.00053 U	0.00062 U	0.00063 U	
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2	0.00019 U	0.00022 U	0.00023 U	
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54	0.0011 U	0.0013 U	0.0013 U	
1,1-Dichloropropene	563-58-6	mg/kg				0.0003 U	0.00035 U	0.00036 U	
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40		0.0006 U	0.0007 U	0.00072 U	
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	0.001 U	0.0012 U	0.0012 U	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	0.00042 U	0.00049 U	0.0005 U	
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300		0.0012 U	0.0014 U	0.0014 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	0.0016 U	0.0019 U	0.0019 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	0.0002 U	0.00023 U	0.00024 U	
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1	0.0013 U	0.0015 U	0.0016 U	
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007	0.0002 U	0.00023 U	0.00024 U	
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065	0.0004 U	0.00047 U	0.00048 U	
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270		0.00081 U	0.00095 U	0.00097 U	
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4	0.0011 U	0.0013 U	0.0013 U	
1,3-Dichloropropane	142-28-9	mg/kg		410		0.00023 U	0.00027 U	0.00027 U	
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2	0.00098 U	0.0011 U	0.0012 U	
2,2-Dichloropropane	594-20-7	mg/kg				0.00077 U	0.0009 U	0.00092 U	
2-Butanone	78-93-3	mg/kg	350	27000	6.1	0.0089 U	0.01 U	0.011 U	
2-Chlorotoluene	95-49-8	mg/kg		470		0.00093 U	0.0011 U	0.0011 U	
2-Hexanone	591-78-6	mg/kg	0.36	200		0.0039 U	0.0046 U	0.0047 U	
4-Chlorotoluene	106-43-4	mg/kg		440		0.001 U	0.0012 U	0.0012 U	
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36	0.006 U	0.007 U	0.0072 U	
Acetone	67-64-1	mg/kg	1.2	61000	0.92	0.0086 U	0.01 U	0.01 U	
Benzene	71-43-2	mg/kg	24	0.33	0.025	0.00039 U	0.00046 U	0.00047 U	

Table D-6. Copco No. 2 Former Mobile Oil Containment Building Analytical Soil Results

						Location	C2CB-13	C2CB-14	C2CB-14
						Sample Date	5/11/2022	5/10/2022	5/10/2022
						Depth Interval	20 - 23	0 - 5	5 - 10
						Sample Type	N	N	N
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater				
Bromobenzene	108-86-1	mg/kg		290		0.001 U	0.0012 U	0.0012 U	
Bromochloromethane	74-97-5	mg/kg		150		0.00025 U	0.00029 U	0.0003 U	
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016	0.00018 U	0.00021 U	0.00021 U	
Bromoform	75-25-2	mg/kg		19	0.69	0.00084 U	0.00098 U	0.001 U	
Bromomethane	74-83-9	mg/kg		6.8	0.36	0.00021 U	0.00025 U	0.00025 U	
Carbon Disulfide	75-15-0	mg/kg	0.81	770		0.0002 U	0.00023 U	0.00024 U	
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076	0.0003 U	0.00035 U	0.00036 U	
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4	0.00025 U	0.00029 U	0.0003 U	
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35	0.00056 U	0.00065 U	0.00067 U	
Chloroethane	75-00-3	mg/kg		14000	1.2	0.00075 U	0.00088 U	0.0009 U	
Chloroform	67-66-3	mg/kg	8	0.32	0.023	0.0003 U	0.00035 U	0.00036 U	
Chloromethane	74-87-3	mg/kg		110	11	0.00093 U	0.0011 U	0.0011 U	
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19	0.0006 U	0.0007 U	0.00072 U	
cis-1,3-Dichloropropene	10061-01-5	mg/kg				0.0002 U	0.00023 U	0.00024 U	
Dibromomethane	74-95-3	mg/kg		24		0.00042 U	0.00049 U	0.0005 U	
Dichlorodifluoromethane	75-71-8	mg/kg		87		0.00049 U	0.00057 U	0.00059 U	
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12	0.0099 U	0.012 U	0.012 U	
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43	0.00041 U	0.00048 U	0.00049 U	
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028	0.0006 U	0.0007 U	0.00072 U	
Isopropylbenzene	98-82-8	mg/kg		1900		0.00046 U	0.00054 U	0.00055 U	
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028	0.0003 U	0.00035 U	0.00036 U	
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.0018 U	0.0021 U	0.0021 U	
n-Butylbenzene	104-51-8	mg/kg		2400		0.00063 U	0.00074 U	0.00075 U	
n-Propylbenzene	103-65-1	mg/kg		3800		0.00076 U	0.00089 U	0.00091 U	
p-Isopropyltoluene	99-87-6	mg/kg				0.0004 U	0.00047 U	0.00048 U	
sec-Butylbenzene	135-98-8	mg/kg		2200		0.00067 U	0.00078 U	0.0008 U	
Styrene	100-42-5	mg/kg	1.2	5600	0.92	0.00074 U	0.00086 U	0.00088 U	
tert-Butylbenzene	98-06-6	mg/kg		2200		0.00066 U	0.00077 U	0.00079 U	
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08	0.0004 U	0.00047 U	0.00048 U	
Toluene	108-88-3	mg/kg	23	1100	3.2	0.0013 U	0.0015 U	0.0016 U	
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65	0.0004 U	0.00047 U	0.00048 U	
trans-1,3-Dichloropropene	10061-02-6	mg/kg				0.0006 U	0.0007 U	0.00072 U	
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085	0.0003 U	0.00035 U	0.00036 U	
Trichlorofluoromethane	75-69-4	mg/kg	52	1200		0.0003 U	0.00035 U	0.00036 U	
Vinyl Acetate	108-05-4	mg/kg		910		0.0015 U	0.0018 U	0.0018 U	
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015	0.0003 U	0.00035 U	0.00036 U	
Xylene, o	95-47-6	mg/kg	1.4	650		0.00092 U	0.0011 U	0.0011 U	
Xylenes, m & p	179601-23-1	mg/kg	1.4	550		0.0012 U	0.0014 U	0.0014 U	
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1	0.00092 U	0.0011 U	0.0011 U	
SW8270SIM									
1-Methylnaphthalene	90-12-0	mg/kg		9.9		0.00071 U	0.00066 U	0.00066 U	
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88	0.0023 U	0.0021 U	0.0021 U	
Acenaphthene	83-32-9	mg/kg	0.25	3300	12	0.00067 U	0.00063 U	0.00063 U	

Table D-6. Copco No. 2 Former Mobile Oil Containment Building Analytical Soil Results

						Location	C2CB-13	C2CB-14	C2CB-14
						Sample Date	5/11/2022	5/10/2022	5/10/2022
						Depth Interval	20 - 23	0 - 5	5 - 10
						Sample Type	N	N	N
Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater				
Acenaphthylene	208-96-8	mg/kg	120		6.4	0.00056 U	0.00052 U	0.00052 U	
Anthracene	120-12-7	mg/kg	6.8	17000	1.9	0.00067 U	0.00063 U	0.00063 U	
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10	0.002 U	0.0019 U	0.0019 U	
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7	0.00094 U	0.00088 U	0.0021 J	
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4	0.0013 U	0.0012 U	0.0063	
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27	0.00056 U	0.00052 U	0.0026 J	
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8	0.00067 U	0.00063 U	0.00063 U	
Chrysene	218-01-9	mg/kg	3.1	110	2.2	0.0017 U	0.0065	0.0037 J	
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29	0.00081 U	0.00075 U	0.00075 U	
Fluoranthene	206-44-0	mg/kg	10	2400	86	0.0016 U	0.0015 U	0.0021 J	
Fluorene	86-73-7	mg/kg	3.7	2300	6	0.00056 U	0.00052 U	0.00052 U	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16	0.00067 U	0.00063 U	0.0041 J	
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.0018 U	0.0017 U	0.0017 U	
Phenanthrene	85-01-8	mg/kg	5.5		11	0.0018 U	0.0017 U	0.0017 U	
Pyrene	129-00-0	mg/kg	10	1800	45	0.0011 U	0.001 U	0.0017 J	

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

mg/kg = milligram(s) per kilogram

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-7. Copco No. 2 Former Mobile Oil Containment Building Analytical Groundwater Results

				Location	C2CB-08	C2CB-10	C2CB-10
				Sample Date	5/11/2022	5/11/2022	5/11/2022
				Sample Type	N	N	FD
Analyte	CAS	Unit	Groundwater Screening Level				
CALC							
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	µg/L		0 U	0 U	0 U	
CATFH							
Gasoline Range Organics	GRO	mg/L	0.76	--	--	--	
SW8011							
1,2,3-Trichloropropane	96-18-4	µg/L	0.0002	0.005 U	0.0049 U	0.005 U	
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.0003	0.002 U	0.002 U	0.002 U	
1,2-Dibromoethane	106-93-4	µg/L	0.0075	0.002 U	0.002 U	0.002 U	
SW8015-E							
Diesel Range Organics	DRO	µg/L	200	290	94 U	190	
Extended Range Organics	ERO	µg/L	60000	200 J	190 UJ	190 UJ	
SW8015-P							
Gasoline Range Organics	GRO	µg/L	760	20 U	20 U	20 U	
SW8082							
Aroclor 1016	12674-11-2	µg/L	0.22	--	--	--	
Aroclor 1221	11104-28-2	µg/L	0.0047	--	--	--	
Aroclor 1232	11141-16-5	µg/L	0.0047	--	--	--	
Aroclor 1242	53469-21-9	µg/L	0.0078	--	--	--	
Aroclor 1248	12672-29-6	µg/L	0.0078	--	--	--	
Aroclor 1254	11097-69-1	µg/L	0.0079	--	--	--	
Aroclor 1260	11096-82-5	µg/L	0.0078	--	--	--	
Aroclor 1262	37324-23-5	µg/L	0.0078	--	--	--	
Aroclor 1268	11100-14-4	µg/L	0.0078	--	--	--	
SW8260B							
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	0.57	0.038 U	0.038 U	0.038 U	
1,1,1-Trichloroethane	71-55-6	µg/L	200	0.025 U	0.025 U	0.025 U	
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	0.076	0.056 U	0.056 U	0.056 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	µg/L	1200	0.088 U	0.088 U	0.088 U	
1,1,2-Trichloroethane	79-00-5	µg/L	0.28	0.07 U	0.07 U	0.07 U	
1,1-Dichloroethane	75-34-3	µg/L	2.8	0.025 U	0.025 U	0.025 U	
1,1-Dichloroethene	75-35-4	µg/L	6	0.035 U	0.035 U	0.035 U	
1,1-Dichloropropene	563-58-6	µg/L	0.47	0.084 U	0.084 U	0.084 U	
1,2,3-Trichlorobenzene	87-61-6	µg/L	3.4	0.15 U	0.15 U	0.15 U	
1,2,3-Trichloropropane	96-18-4	µg/L	0.0002	0.05 U	0.05 U	0.05 U	
1,2,4-Trichlorobenzene	120-82-1	µg/L	0.46	0.17 U	0.17 U	0.17 U	
1,2,4-Trimethylbenzene	95-63-6	µg/L	56	0.2 U	0.2 U	0.2 U	
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.0003	0.17 U	0.17 U	0.17 U	
1,2-Dibromoethane	106-93-4	µg/L	0.0075	0.025 U	0.025 U	0.025 U	
1,2-Dichlorobenzene	95-50-1	µg/L	300	0.038 U	0.038 U	0.038 U	
1,2-Dichloroethane	107-06-2	µg/L	0.17	0.043 U	0.043 U	0.043 U	
1,2-Dichloropropane	78-87-5	µg/L	0.85	0.06 U	0.06 U	0.06 U	
1,3,5-Trimethylbenzene	108-67-8	µg/L	60	0.15 U	0.15 U	0.15 U	
1,3-Dichlorobenzene	541-73-1	µg/L	300	0.05 U	0.05 U	0.05 U	
1,3-Dichloropropane	142-28-9	µg/L	110	0.025 U	0.025 U	0.025 U	
1,4-Dichlorobenzene	106-46-7	µg/L	0.48	0.05 U	0.05 U	0.05 U	
2,2-Dichloropropane	594-20-7	µg/L	0.85	0.06 U	0.06 U	0.06 U	

Table D-7. Copco No. 2 Former Mobile Oil Containment Building Analytical Groundwater Results

Analyte	CAS	Unit	Location	C2CB-08	C2CB-10	C2CB-10
			Sample Date	5/11/2022	5/11/2022	5/11/2022
			Sample Type	N	N	FD
			Groundwater Screening Level			
2-Butanone	78-93-3	µg/L	5600	2.5 U	2.5 U	2.5 U
2-Chlorotoluene	95-49-8	µg/L	98	0.12 U	0.12 U	0.12 U
2-Hexanone	591-78-6	µg/L	38	0.94 U	0.94 U	0.94 U
4-Chlorotoluene	106-43-4	µg/L	100	0.12 U	0.12 U	0.12 U
4-Methyl-2-Pentanone	108-10-1	µg/L	6300	1.7 U	1.7 U	1.7 U
Acetone	67-64-1	µg/L	14000	3.1 U	3.1 U	3.1 U
Benzene	71-43-2	µg/L	0.15	0.03 U	0.03 U	0.03 U
Bromobenzene	108-86-1	µg/L	62	0.038 U	0.038 U	0.038 U
Bromochloromethane	74-97-5	µg/L	83	0.05 U	0.05 U	0.05 U
Bromodichloromethane	75-27-4	µg/L	0.13	0.06 U	0.06 U	0.06 U
Bromoform	75-25-2	µg/L	3.3	0.16 U	0.16 U	0.16 U
Bromomethane	74-83-9	µg/L	7.5	0.13 U	0.13 U	0.13 U
Carbon Disulfide	75-15-0	µg/L	810	0.083 U	0.083 U	0.083 U
Carbon tetrachloride	56-23-5	µg/L	0.45	0.025 U	0.025 U	0.025 U
Chlorobenzene	108-90-7	µg/L	70	0.06 U	0.06 U	0.06 U
Chlorodibromomethane	124-48-1	µg/L	0.2	0.055 U	0.055 U	0.055 U
Chloroethane	75-00-3	µg/L	21000	0.096 U	0.096 U	0.096 U
Chloroform	67-66-3	µg/L	0.22	0.14 U	0.03 U	0.03 U
Chloromethane	74-87-3	µg/L	190	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	156-59-2	µg/L	6	0.055 U	0.055 U	0.055 U
cis-1,3-Dichloropropene	10061-01-5	µg/L	0.47	0.09 U	0.09 U	0.09 U
Dibromomethane	74-95-3	µg/L	8.3	0.062 U	0.062 U	0.062 U
Dichlorodifluoromethane	75-71-8	µg/L	200	0.13 U	0.13 U	0.13 U
Dichloromethane	75-09-2	µg/L	1.7	1.2 U	1.2 U	1.2 U
Ethylbenzene	100-41-4	µg/L	1.5	0.03 U	0.03 U	0.03 U
Hexachlorobutadiene	87-68-3	µg/L	0.14	0.067 U	0.095 J	0.067 U
Isopropylbenzene	98-82-8	µg/L	450	0.19 U	0.19 U	0.19 U
Methyl tert-butyl ether (MTBE)	1634-04-4	µg/L	13	0.07 U	0.07 U	0.07 U
Naphthalene	91-20-3	µg/L	0.12	0.22 U	0.22 U	0.22 U
n-Butylbenzene	104-51-8	µg/L	290	0.23 U	0.23 U	0.23 U
n-Propylbenzene	103-65-1	µg/L	660	0.091 U	0.091 U	0.091 U
p-Isopropyltoluene	99-87-6	µg/L	410	0.15 U	0.15 U	0.15 U
sec-Butylbenzene	135-98-8	µg/L	590	0.17 U	0.17 U	0.17 U
Styrene	100-42-5	µg/L	100	0.19 U	0.19 U	0.19 U
tert-Butylbenzene	98-06-6	µg/L	380	0.26 U	0.26 U	0.26 U
Tetrachloroethene	127-18-4	µg/L	0.084	0.084 U	0.084 U	0.084 U
Toluene	108-88-3	µg/L	150	0.062 U	0.098 J	0.13 U
trans-1,2-Dichloroethene	156-60-5	µg/L	10	0.033 U	0.033 U	0.033 U
trans-1,3-Dichloropropene	10061-02-6	µg/L	0.47	0.092 U	0.092 U	0.092 U
Trichloroethylene	79-01-6	µg/L	0.49	0.066 U	0.066 U	0.066 U
Trichlorofluoromethane	75-69-4	µg/L	150	0.12 U	0.12 U	0.12 U
Vinyl Acetate	108-05-4	µg/L	410	0.44 U	0.44 U	0.44 U
Vinyl Chloride	75-01-4	µg/L	0.0098	0.013 U	0.013 U	0.013 U
Xylene, o	95-47-6	µg/L	190	0.15 U	0.15 U	0.15 U
Xylenes, m & p	179601-23-1	µg/L	190	0.12 U	0.12 U	0.12 U
Xylenes, Total	1330-20-7	µg/L	190	0.15 U	0.15 U	0.15 U

Table D-7. Copco No. 2 Former Mobile Oil Containment Building Analytical Groundwater Results

				Location	C2CB-08	C2CB-10	C2CB-10
				Sample Date	5/11/2022	5/11/2022	5/11/2022
				Sample Type	N	N	FD
Analyte	CAS	Unit	Groundwater Screening Level				
SW8270SIM							
1-Methylnaphthalene	90-12-0	µg/L	0.46	0.035 U	0.035 U	0.035 U	
2-Methylnaphthalene	91-57-6	µg/L	17	0.041 U	0.041 U	0.042 U	
Acenaphthene	83-32-9	µg/L	260	0.015 U	0.015 U	0.015 U	
Acenaphthylene	208-96-8	µg/L	81	0.0095 U	0.0095 U	0.0097 U	
Anthracene	120-12-7	µg/L	1000	0.023 U	0.023 U	0.024 U	
Benzo(a)anthracene	56-55-3	µg/L	0.017	0.015 U	0.015 U	0.015 U	
Benzo(a)pyrene	50-32-8	µg/L	0.025	0.023 U	0.023 U	0.024 U	
Benzo(b)fluoranthene	205-99-2	µg/L	0.25	0.023 U	0.023 U	0.024 U	
Benzo(g,h,i)perylene	191-24-2	µg/L	81	0.013 U	0.013 U	0.013 U	
Benzo(k)fluoranthene	207-08-9	µg/L	2.5	0.013 U	0.013 U	0.013 U	
Chrysene	218-01-9	µg/L	25	0.039 U	0.039 U	0.04 U	
Dibenzo(a,h)anthracene	53-70-3	µg/L	0.0061	0.016 U	0.016 U	0.016 U	
Fluoranthene	206-44-0	µg/L	800	0.057 U	0.057 U	0.058 U	
Fluorene	86-73-7	µg/L	160	0.018 U	0.018 U	0.018 U	
Indeno(1,2,3-cd)pyrene	193-39-5	µg/L	0.25	0.015 U	0.015 U	0.015 U	
Naphthalene	91-20-3	µg/L	0.12	0.17 U	0.17 U	0.18 U	
Phenanthrene	85-01-8	µg/L	81	0.033 U	0.033 U	0.033 U	
Pyrene	129-00-0	µg/L	81	0.035 U	0.035 U	0.035 U	

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

µg/L = microgram(s) per liter

mg/L = milligram(s) per liter

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-8. Copco No. 2 Underground Storage Tanks Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2UT-02	C2UT-02	C2UT-02	C2UT-10	C2UT-10	C2UT-10	C2UT-10	C2UT-11	C2UT-11	C2UT-12	C2UT-12	C2UT-12	C2UT-12	
						Sample Date	3/8/2022	3/8/2022	3/8/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022
						Depth Interval	11.5 - 12	15 - 16	17 - 18	0 - 5	5 - 10	10 - 15	15 - 17	0 - 5	5 - 10	0 - 5	5 - 10	10 - 15	15 - 20	
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
CALC																				
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0.0007178	0.0008069	0 U	0 U	0 U	0 U	0.0004369	0 U	0 U	0 U	0 U	0.0002436	0 U	
CATFH																				
Gasoline Range Organics	GRO	mg/kg		430	1100		1.9 U	1.7 U	1.9 U	--	--	--	--	--	--	--	--	--	--	
SW8011																				
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		8.6E-05 UJ	8.1E-05 UJ	8.1E-05 UJ	7.9E-05 U	6.2E-05 U	7.8E-05 U	8.5E-05 U	6.8E-05 U	7.5E-05 U	6.8E-05 U	7.8E-05 U	8.2E-05 U	6.9E-05 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		1.3E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 U	9.3E-06 U	1.2E-05 U	1.3E-05 U	1E-05 U	1.1E-05 U	1E-05 U	1.2E-05 U	1.2E-05 U	1E-05 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		1.6E-05 UJ	1.5E-05 UJ	1.5E-05 UJ	1.4E-05 U	1.1E-05 U	1.4E-05 U	1.5E-05 U	1.2E-05 U	1.4E-05 U	1.2E-05 U	1.4E-05 U	1.5E-05 U	1.3E-05 U	
SW8015-E																				
Diesel Range Organics	DRO	mg/kg		260	1100		15 J	12 U	12 U	17 J	10 U	12 U	23 J	12 J	11 U	12 U	12 U	13 J	13 U	
Extended Range Organics	ERO	mg/kg		12000			36 J	24 U	25 U	62	21 U	23 U	93	54	22 U	24 U	24 J	48 J	25 U	
SW8015-P																				
Gasoline Range Organics	GRO	mg/kg		430	1100		--	--	--	2 U	1.7 U	1.7 U	2.3 U	1.4 U	1.7 U	1.6 U	2.2 U	1.9 U	2.3 U	
SW8260B																				
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017		0.00071 U	0.00064 UJ	0.00057 U	0.00081 U	0.00073 U	0.00054 U	0.00091 U	0.00079 U	0.00086 U	0.00059 U	0.00072 U	0.00087 U	0.0009 U	
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7		0.00036 U	0.00032 UJ	0.00029 U	0.00041 U	0.00037 U	0.00027 U	0.00046 U	0.0004 U	0.00044 U	0.0003 U	0.00037 U	0.00044 U	0.00046 U	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018		0.0011 U	0.00097 UJ	0.00087 U	0.0012 U	0.0011 U	0.00082 U	0.0014 U	0.0012 U	0.0013 U	0.0009 U	0.0011 U	0.0013 U	0.0014 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700			0.00062 U	0.00056 UJ	0.0005 U	0.00072 U	0.00064 U	0.00047 U	0.0008 U	0.0007 U	0.00076 U	0.00052 U	0.00064 U	0.00077 U	0.00079 U	
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076		0.0003 U	0.00027 UJ	0.00024 U	0.00073 U	0.00065 U	0.00048 U	0.00081 U	0.00071 U	0.00077 U	0.00053 U	0.00065 U	0.00079 U	0.00081 U	
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2		0.00023 U	0.00021 UJ	0.00018 U	0.00026 U	0.00023 U	0.00017 U	0.00029 U	0.00025 U	0.00028 U	0.00019 U	0.00023 U	0.00028 U	0.00029 U	
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54		0.0013 U	0.0012 UJ	0.0011 U	0.0015 U	0.0014 U	0.001 U	0.0017 U	0.0015 U	0.0016 U	0.0011 U	0.0013 U	0.0016 U	0.0017 U	
1,1-Dichloropropene	563-58-6	mg/kg					0.00036 U	0.00032 UJ	0.00029 U	0.00041 U	0.00037 U	0.00027 U	0.00046 U	0.0004 U	0.00044 U	0.0003 U	0.00037 U	0.00044 U	0.00046 U	
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40			0.00072 U	0.00065 UJ	0.00058 U	0.00083 U	0.00074 U	0.00054 U	0.00092 U	0.0008 U	0.00088 U	0.0006 U	0.00073 U	0.00089 U	0.00091 U	
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		0.0012 U	0.0011 UJ	0.00097 U	0.0014 U	0.0012 U	0.00091 U	0.0015 U	0.0013 U	0.0015 U	0.001 U	0.0012 U	0.0015 U	0.0015 U	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.0005 U	0.00045 UJ	0.00041 U	0.00058 U	0.00052 U	0.00038 U	0.00065 U	0.00056 U	0.00061 U	0.00042 U	0.00051 U	0.00062 U	0.00064 U	
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300			0.0014 U	0.0013 UJ	0.0012 U	0.0017 U	0.0015 U	0.0011 U	0.0018 U	0.0016 U	0.0018 U	0.0012 U	0.0015 U	0.0018 U	0.0018 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		0.0019 U	0.0017 UJ	0.0015 U	0.0022 U	0.002 U	0.0015 U	0.0025 U	0.0021 U	0.0023 U	0.0016 U	0.002 U	0.0024 U	0.0024 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		0.00024 U	0.00022 UJ	0.00019 U	0.00028 U	0.00025 U	0.00018 U	0.00031 U	0.00027 U	0.00029 U	0.0002 U	0.00024 U	0.0003 U	0.0003 U	
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0016 U	0.0014 UJ	0.0013 U	0.0018 U	0.0016 U	0.0012 U	0.002 U	0.0017 U	0.0019 U	0.0013 U	0.0016 U	0.0019 U	0.002 U	
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.00024 U	0.00022 UJ	0.00019 U	0.00028 U	0.00025 U	0.00018 U	0.00031 U	0.00027 U	0.00029 U	0.0002 U	0.00024 U	0.0003 U	0.0003 U	
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.00048 U	0.00043 UJ	0.00039 U	0.00055 U	0.00049 U	0.00036 U	0.00061 U	0.00054 U	0.00058 U	0.0004 U	0.00049 U	0.00059 U	0.00061 U	
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.00097 U	0.00088 UJ	0.00078 U	0.0011 U	0.001 U	0.00074 U	0.0012 U	0.0011 U	0.0012 U	0.00081 U	0.00099 U	0.0012 U	0.0012 U	
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0013 U	0.0012 UJ	0.0011 U	0.0015 U	0.0014 U	0.001 U	0.0017 U	0.0015 U	0.0016 U	0.0011 U	0.0013 U	0.0016 U	0.0017 U	
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00028 U	0.00025 UJ	0.00022 U	0.00032 U	0.00028 U	0.00021 U	0.00035 U	0.00031 U	0.00034 U	0.00023 U	0.00028 U	0.00034 U	0.00035 U	
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0012 U	0.0011 UJ	0.00095 U	0.0013 U	0.0012 U	0.00089 U	0.0015 U	0.0013 U	0.0014 U	0.00098 U	0.0012 U	0.0015 U	0.0015 U	
2,2-Dichloropropane	594-20-7	mg/kg					0.0004 U	0.00036 UJ	0.00032 U	0.0011 U	0.00095 U	0.0007 U	0.0012 U	0.001 U	0.0011 U	0.00077 U	0.00094 U	0.0011 U	0.0012 U	
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.018 J	0.0096 UJ	0.0086 U	0.012 U	0.011 U	0.0081 U	0.014 U	0.012 U	0.013 U	0.0089 U	0.011 U	0.029 J	0.014 U	
2-Chlorotoluene	95-49-8	mg/kg		470			0.0011 U	0.001 UJ	0.0009 U	0.0013 U	0.0011 U	0.00084 U	0.0014 U	0.0012 U	0.0014 U	0.00093 U	0.0011 U	0.0014 U	0.0014 U	
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0047 U	0.0042 UJ	0.0038 U	0.0054 U	0.0048 U	0.0035 U	0.006 U	0.0052 U	0.0057 U	0.0039 U	0.0048 U	0.0058 U	0.0059 U	
4-Chlorotoluene	106-43-4	mg/kg		440			0.0012 U	0.0011 UJ	0.00097 U	0.0014 U	0.0012 U	0.00091 U	0.0015 U	0.0013 U	0.0015 U	0.001 U	0.0012 U	0.0015 U	0.0015 U	
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.0072 U	0.0065 UJ	0.0058 U	0.0083 U	0.0074 U	0.0054 U	0.0092 U	0.008 U	0.0088 U	0.006 U	0.0073 U	0.0089 U	0.0091 U	
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.1 J	0.044 J	0.0083 U	0.012 U	0.011 U	0.0078 U	0.15 J	0.012 U	0.013 U	0.0086 U	0.011 U	0.16 J	0.098 J	
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00047 U	0.00042 UJ	0.00038 U	0.00054 U	0.00048 U	0.00035 U	0.0006 U	0.00052 U	0.00057 U	0.00039 U	0.00048 U	0.00058 U	0.00059 U	

Table D-8. Copco No. 2 Underground Storage Tanks Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2UT-02	C2UT-02	C2UT-02	C2UT-10	C2UT-10	C2UT-10	C2UT-10	C2UT-11	C2UT-11	C2UT-12	C2UT-12	C2UT-12	C2UT-12
						Sample Date	3/8/2022	3/8/2022	3/8/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022
Depth Interval						11.5 - 12	15 - 16	17 - 18	0 - 5	5 - 10	10 - 15	15 - 17	0 - 5	5 - 10	0 - 5	5 - 10	10 - 15	15 - 20	
Sample Type						N	N	N	N	N	N	N	N	N	N	N	N	N	N
Bromobenzene	108-86-1	mg/kg		290			0.0012 U	0.0011 UJ	0.00097 U	0.0014 U	0.0012 U	0.00091 U	0.0015 U	0.0013 U	0.0015 U	0.001 U	0.0012 U	0.0015 U	0.0015 U
Bromochloromethane	74-97-5	mg/kg		150			0.0003 U	0.00027 UJ	0.00024 U	0.00034 U	0.00031 U	0.00023 U	0.00038 U	0.00034 U	0.00036 U	0.00025 U	0.00031 U	0.00037 U	0.00038 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00022 U	0.00019 UJ	0.00017 U	0.00025 U	0.00022 U	0.00016 U	0.00028 U	0.00024 U	0.00026 U	0.00018 U	0.00022 U	0.00027 U	0.00027 U
Bromoform	75-25-2	mg/kg		19	0.69		0.001 U	0.00091 UJ	0.00081 U	0.0012 U	0.001 U	0.00076 U	0.0013 U	0.0011 U	0.0012 U	0.00084 U	0.001 U	0.0012 U	0.0013 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00025 U	0.00023 UJ	0.0002 U	0.00029 U	0.00026 U	0.00019 U	0.00032 U	0.00028 U	0.00031 U	0.00021 U	0.00026 U	0.00031 U	0.00032 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00024 U	0.00022 UJ	0.00019 U	0.00028 U	0.00025 U	0.00018 U	0.00031 U	0.00027 U	0.00029 U	0.0002 U	0.00024 U	0.0003 U	0.0003 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.00036 U	0.00032 UJ	0.00029 U	0.00041 U	0.00037 U	0.00027 U	0.00046 U	0.0004 U	0.00044 U	0.0003 U	0.00037 U	0.00044 U	0.00046 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.0003 U	0.00027 UJ	0.00024 U	0.00034 U	0.00031 U	0.00023 U	0.00038 U	0.00034 U	0.00036 U	0.00025 U	0.00031 U	0.00037 U	0.00038 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00032 U	0.00029 UJ	0.00026 U	0.00077 U	0.00069 U	0.00051 U	0.00086 U	0.00075 U	0.00082 U	0.00056 U	0.00069 U	0.00083 U	0.00085 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.0009 U	0.00081 UJ	0.00073 U	0.001 U	0.00092 U	0.00068 U	0.0012 U	0.001 U	0.0011 U	0.00075 U	0.00092 U	0.0011 U	0.0011 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.00036 U	0.00032 UJ	0.00029 U	0.00041 U	0.00037 U	0.00027 U	0.00046 U	0.0004 U	0.00044 U	0.0003 U	0.00037 U	0.00044 U	0.00046 U
Chloromethane	74-87-3	mg/kg		110	11		0.0011 U	0.001 UJ	0.0009 U	0.0013 U	0.0011 U	0.00084 U	0.0014 U	0.0012 U	0.0014 U	0.00093 U	0.0011 U	0.0014 U	0.0014 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.00072 U	0.00065 UJ	0.00058 U	0.00083 U	0.00074 U	0.00054 U	0.00092 U	0.0008 U	0.00088 U	0.0006 U	0.00073 U	0.00089 U	0.00091 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00024 U	0.00022 UJ	0.00019 U	0.00028 U	0.00025 U	0.00018 U	0.00031 U	0.00027 U	0.00029 U	0.0002 U	0.00024 U	0.0003 U	0.0003 U
Dibromomethane	74-95-3	mg/kg		24			0.0002 U	0.00018 UJ	0.00016 U	0.00058 U	0.00052 U	0.00038 U	0.00065 U	0.00056 U	0.00061 U	0.00042 U	0.00051 U	0.00062 U	0.00064 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00059 U	0.00053 UJ	0.00047 U	0.00067 U	0.0006 U	0.00045 U	0.00075 U	0.00066 U	0.00072 U	0.00049 U	0.0006 U	0.00073 U	0.00074 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.012 U	0.011 UJ	0.0096 U	0.014 U	0.012 U	0.009 U	0.015 U	0.013 U	0.014 U	0.0099 U	0.012 U	0.015 U	0.015 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00049 U	0.00044 UJ	0.0004 U	0.00056 U	0.0005 U	0.00037 U	0.00063 U	0.00055 U	0.0006 U	0.00041 U	0.0005 U	0.00061 U	0.00062 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.00072 U	0.00065 UJ	0.00058 U	0.00083 U	0.00074 U	0.00054 U	0.00092 U	0.0008 U	0.00088 U	0.0006 U	0.00073 U	0.00089 U	0.00091 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00055 UJ	0.0005 UJ	0.00044 UJ	0.00063 U	0.00057 U	0.00042 U	0.00071 U	0.00062 U	0.00067 U	0.00046 U	0.00056 U	0.00068 U	0.0007 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.00036 U	0.00032 UJ	0.00029 U	0.00041 U	0.00037 U	0.00027 U	0.00046 U	0.0004 U	0.00044 U	0.0003 U	0.00037 U	0.00044 U	0.00046 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0022 U	0.0019 UJ	0.0017 U	0.0025 U	0.0022 U	0.0016 U	0.0028 U	0.0024 U	0.0026 U	0.0018 U	0.0022 U	0.0027 U	0.0027 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.00075 U	0.00068 UJ	0.00061 U	0.00087 U	0.00078 U	0.00057 U	0.00097 U	0.00085 U	0.00092 U	0.00063 U	0.00077 U	0.00093 U	0.00096 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.00091 U	0.00082 UJ	0.00073 U	0.001 U	0.00094 U	0.00069 U	0.0012 U	0.001 U	0.0011 U	0.00076 U	0.00093 U	0.0011 U	0.0012 U
p-Isopropyltoluene	99-87-6	mg/kg					0.00048 U	0.00043 UJ	0.00039 U	0.00055 U	0.00049 U	0.00036 U	0.00061 U	0.00054 U	0.00058 U	0.0004 U	0.00049 U	0.00059 U	0.00061 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.0008 U	0.00073 UJ	0.00065 U	0.00092 U	0.00082 U	0.00061 U	0.001 U	0.0009 U	0.00098 U	0.00067 U	0.00082 U	0.00099 U	0.001 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.00089 U	0.0008 UJ	0.00072 U	0.001 U	0.00091 U	0.00067 U	0.0011 U	0.00099 U	0.0011 U	0.00074 U	0.00091 U	0.0011 U	0.0011 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00079 U	0.00071 UJ	0.00064 U	0.00091 U	0.00081 U	0.0006 U	0.001 U	0.00089 U	0.00096 U	0.00066 U	0.00081 U	0.00098 U	0.001 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00048 U	0.00043 UJ	0.00039 U	0.00055 U	0.00049 U	0.00036 U	0.00061 U	0.00054 U	0.00058 U	0.0004 U	0.00049 U	0.00059 U	0.00061 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0016 U	0.0014 UJ	0.0013 U	0.0018 U	0.0016 U	0.0012 U	0.002 U	0.0017 U	0.0019 U	0.0013 U	0.0016 U	0.0019 U	0.002 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00048 U	0.00043 UJ	0.00039 U	0.00055 U	0.00049 U	0.00036 U	0.00061 U	0.00054 U	0.00058 U	0.0004 U	0.00049 U	0.00059 U	0.00061 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.00072 U	0.00065 UJ	0.00058 U	0.00083 U	0.00074 U	0.00054 U	0.00092 U	0.0008 U	0.00088 U	0.0006 U	0.00073 U	0.00089 U	0.00091 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.00036 U	0.00032 UJ	0.00029 U	0.00041 U	0.00037 U	0.00027 U	0.00046 U	0.0004 U	0.00044 U	0.0003 U	0.00037 U	0.00044 U	0.00046 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.00036 U	0.00032 UJ	0.00029 U	0.00041 U	0.00037 U	0.00027 U	0.00046 U	0.0004 U	0.00044 U	0.0003 U	0.00037 U	0.00044 U	0.00046 U
Vinyl Acetate	108-05-4	mg/kg		910			0.0018 U	0.0016 UJ	0.0015 U	0.0021 U	0.0018 U	0.0014 U	0.0023 U	0.002 U	0.0022 U	0.0015 U	0.0018 U	0.0022 U	0.0023 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00036 U	0.00032 UJ	0.00029 U	0.00041 U	0.00037 U	0.00027 U	0.00046 U	0.0004 U	0.00044 U	0.0003 U	0.00037 U	0.00044 U	0.00046 U
Xylene, o	95-47-6	mg/kg	1.4	650			0.0011 U	0.001 UJ	0.00089 U	0.0013 U	0.0011 U	0.00084 U	0.0014 U	0.0012 U	0.0013 U	0.00092 U	0.0011 U	0.0014 U	0.0014 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00067 U	0.00061 UJ	0.00054 U	0.0016 U	0.0014 U	0.0011 U	0.0018 U	0.0016 U	0.0017 U	0.0012 U	0.0014 U	0.0017 U	0.0018 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0011 U	0.001 UJ	0.00089 U	0.0013 U	0.0011 U	0.00084 U	0.0014 U	0.0012 U	0.0013 U	0.00092 U	0.0011 U	0.0014 U	0.0014 U
SW8270SIM																			
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.0026 J	0.00088 J	0.0016 J	0.00072 U	0.00061 U	0.00077 U	0.0013 J	0.00064 U	0.00066 U	0.00096 J	0.00077 U	0.00078 U	0.00081 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.0066	0.0029 J	0.0026 U	0.0023 U	0.002 U	0.0025 U	0.0046 J	0.0021 U	0.0021 U	0.0024 U	0.0025 U	0.0026 U	0.0026 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00069 U	0.00061 U	0.00076 U	0.00069 U	0.00058 U	0.00073 U	0.00072 U	0.0006 U	0.00063 U	0.0007 U	0.00073 U	0.00075 U	0.00077 U

Table D-8. Copco No. 2 Underground Storage Tanks Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2UT-02	C2UT-02	C2UT-02	C2UT-10	C2UT-10	C2UT-10	C2UT-10	C2UT-11	C2UT-11	C2UT-12	C2UT-12	C2UT-12	C2UT-12	
						Sample Date	3/8/2022	3/8/2022	3/8/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022
						Depth Interval	11.5 - 12	15 - 16	17 - 18	0 - 5	5 - 10	10 - 15	15 - 17	0 - 5	5 - 10	0 - 5	5 - 10	10 - 15	15 - 20	
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.00057 U	0.00051 U	0.00064 U	0.00057 U	0.00048 U	0.00061 U	0.0006 U	0.0005 U	0.00052 U	0.00058 U	0.00061 U	0.00062 U	0.00064 U	
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.00069 U	0.00061 U	0.00076 U	0.0011 J	0.00088 J	0.0011 J	0.0016 J	0.0006 U	0.001 J	0.00095 J	0.00073 U	0.00075 U	0.00077 U	
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.002 U	0.0018 U	0.0023 U	0.002 U	0.0017 U	0.0022 U	0.0021 U	0.0018 U	0.0019 U	0.0021 U	0.0022 U	0.0022 U	0.0023 U	
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.00096 U	0.00086 U	0.0011 U	0.00096 U	0.00081 U	0.001 U	0.001 U	0.00085 U	0.00088 U	0.00098 U	0.001 U	0.001 U	0.0011 U	
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.0051 J	0.006	0.0015 U	0.0013 U	0.0011 U	0.0014 U	0.0034 J	0.0012 U	0.0012 U	0.0014 U	0.0014 U	0.0024 J	0.0015 U	
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.00057 U	0.00053 J	0.00064 U	0.0021 J	0.00048 U	0.00061 U	0.0006 U	0.0093	0.00052 U	0.00058 U	0.00061 U	0.00088 J	0.00064 U	
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.00069 U	0.00061 U	0.00076 U	0.00069 U	0.00058 U	0.00073 U	0.00072 U	0.0006 U	0.00063 U	0.0007 U	0.00073 U	0.00075 U	0.00077 U	
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0078	0.0069	0.0019 U	0.0017 U	0.0014 U	0.0018 U	0.0049 J	0.0015 U	0.0016 U	0.0018 U	0.0018 U	0.0036 J	0.0019 U	
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.00082 U	0.00073 U	0.00092 U	0.00082 U	0.0007 U	0.00088 U	0.00086 U	0.00073 U	0.00075 U	0.00084 U	0.00088 U	0.0009 U	0.00092 U	
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0043 J	0.0024 J	0.0018 U	0.0022 J	0.0014 U	0.0017 U	0.0045 J	0.0021 J	0.0015 U	0.0016 U	0.0017 U	0.0044 J	0.0018 U	
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.0024 U	0.0013 U	0.00064 U	0.00057 U	0.00048 U	0.00061 U	0.0033 J	0.0005 U	0.00052 U	0.00058 U	0.00061 U	0.0019 J	0.00064 U	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.002 J	0.002 J	0.00076 U	0.00069 U	0.00058 U	0.00073 U	0.00092 J	0.0006 U	0.00063 U	0.0007 U	0.00073 U	0.00075 U	0.00077 U	
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.007	0.0032 J	0.0022 J	0.0019 U	0.0016 U	0.002 U	0.0034 J	0.0016 U	0.0017 U	0.0029 J	0.002 U	0.0022 J	0.0021 U	
Phenanthrene	85-01-8	mg/kg	5.5		11		0.0073	0.0027 J	0.0021 U	0.0019 U	0.0016 U	0.002 U	0.0053 J	0.0016 U	0.0017 U	0.0019 U	0.002 U	0.0042 J	0.0021 U	
Pyrene	129-00-0	mg/kg	10	1800	45		0.0022 J	0.0012 J	0.0012 U	0.0016 J	0.00094 U	0.0012 U	0.003 J	0.0032 J	0.0013 J	0.0013 J	0.0012 U	0.0029 J	0.0012 U	

Table D-8. Copco No. 2 Underground Storage Tanks Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2UT-12	C2UT-12	C2UT-13	C2UT-13	C2UT-13	C2UT-13	C2UT-13	C2UT-14	C2UT-14	C2UT-14	C2UT-14	C2UT-14
						Sample Date	5/9/2022	5/9/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022
						Depth Interval	15 - 20	20 - 21	0 - 5	5 - 10	15 - 20	20 - 25	10 - 15	0 - 5	5 - 10	10 - 15	15 - 20	20 - 23
						Sample Type	FD	N	N	N	N	N	N	N	N	N	N	N
CALC																		
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0.000172	0 U	0.00063	0 U	0 U	0 U	0 U	0.0122923	0 U	0 U	0 U	0 U
CATFH																		
Gasoline Range Organics	GRO	mg/kg		430	1100	--	--	--	--	--	--	--	--	--	--	--	--	--
SW8011																		
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	0.00065	8E-05 U	7.2E-05 U	7.5E-05 U	7.8E-05 U	7.8E-05 U	7.5E-05 U	8.2E-05 U	7.7E-05 U	7.3E-05 U	7.6E-05 U	7.3E-05 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	1.2E-05 U	1.2E-05 U	1.1E-05 U	1.1E-05 U	1.2E-05 U	1.2E-05 U	1.1E-05 U	1.2E-05 U	1.2E-05 U	1.1E-05 U	1.2E-05 U	1.1E-05 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	1.5E-05 U	1.5E-05 U	1.3E-05 U	1.4E-05 U	1.4E-05 U	1.4E-05 U	1.4E-05 U	1.5E-05 U	1.4E-05 U	1.3E-05 U	1.4E-05 U	1.3E-05 U	
SW8015-E																		
Diesel Range Organics	DRO	mg/kg		260	1100	11 U	12 U	14 J	13 J	18 J	14 U	13 J	14 J	12 U	11 U	12 U	11 U	
Extended Range Organics	ERO	mg/kg		12000		23 U	24 U	60	34 J	43 J	29 J	32 J	48 J	25 U	22 U	24 U	23 U	
SW8015-P																		
Gasoline Range Organics	GRO	mg/kg		430	1100	1.8 U	1.9 U	1.7 U	1.9 U	2.7 U	2.3 U	1.8 U	1.8 U	2 U	1.7 U	2 U	1.8 U	
SW8260B																		
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017	0.00062 U	0.00083 U	0.00071 U	0.00071 U	0.00082 UJ	0.00069 UJ	0.00061 U	0.00071 UJ	0.00071 UJ	0.00064 UJ	0.00099 UJ	0.00075 UJ	
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7	0.00031 U	0.00042 U	0.00036 U	0.00036 U	0.00042 U	0.00035 UJ	0.00031 U	0.00036 U	0.00036 U	0.00033 U	0.0005 UJ	0.00038 U	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018	0.00094 U	0.0013 U	0.0011 U	0.0011 U	0.0013 U	0.0011 UJ	0.00094 U	0.0011 U	0.0011 U	0.00098 U	0.0015 UJ	0.0011 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700		0.00054 U	0.00073 U	0.00063 U	0.00063 U	0.00073 U	0.00061 UJ	0.00054 U	0.00063 U	0.00063 U	0.00056 U	0.00087 UJ	0.00066 U	
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076	0.00055 U	0.00075 U	0.00064 U	0.00064 U	0.00074 U	0.00062 UJ	0.00055 U	0.00064 U	0.00064 U	0.00057 U	0.00089 UJ	0.00067 U	
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2	0.0002 U	0.00027 U	0.00023 U	0.00023 U	0.00027 U	0.00022 UJ	0.0002 U	0.00023 U	0.00023 U	0.00021 U	0.00032 UJ	0.00024 U	
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54	0.0012 U	0.0016 U	0.0013 U	0.0013 U	0.0015 U	0.0013 UJ	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.0019 UJ	0.0014 U	
1,1-Dichloropropene	563-58-6	mg/kg				0.00031 U	0.00042 U	0.00036 U	0.00036 U	0.00042 U	0.00035 UJ	0.00031 U	0.00036 U	0.00036 U	0.00033 U	0.0005 UJ	0.00038 U	
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40		0.00063 U	0.00085 U	0.00072 U	0.00072 U	0.00084 U	0.00071 UJ	0.00062 U	0.00073 U	0.00073 U	0.00065 U	0.001 UJ	0.00076 U	
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	0.001 U	0.0014 U	0.0012 U	0.0012 U	0.0014 U	0.0012 UJ	0.001 U	0.0012 U	0.0012 U	0.0011 U	0.0017 UJ	0.0013 U	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	0.00044 U	0.00059 U	0.00051 U	0.00051 U	0.00059 U	0.00049 UJ	0.00044 U	0.00051 U	0.00051 U	0.00046 U	0.00071 UJ	0.00053 U	
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300		0.0013 U	0.0017 U	0.0014 U	0.0014 U	0.0017 U	0.0014 UJ	0.0012 U	0.0015 U	0.0015 U	0.0013 U	0.002 UJ	0.0015 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	0.0017 U	0.0023 U	0.0019 U	0.0019 U	0.0022 U	0.0019 U	0.0017 U	0.0019 U	0.0019 U	0.0017 U	0.0027 U	0.002 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	0.00021 U	0.00028 U	0.00024 U	0.00024 U	0.00028 U	0.00024 UJ	0.00021 U	0.00024 U	0.00024 U	0.00022 U	0.00034 UJ	0.00025 U	
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1	0.0014 U	0.0018 U	0.0016 U	0.0016 U	0.0018 U	0.0015 UJ	0.0014 U	0.0016 U	0.0016 U	0.0014 U	0.0022 UJ	0.0016 U	
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007	0.00021 U	0.00028 U	0.00024 U	0.00024 U	0.00028 U	0.00024 UJ	0.00021 UJ	0.00024 U	0.00024 U	0.00022 U	0.00034 UJ	0.00025 U	
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065	0.00042 U	0.00057 U	0.00048 U	0.00048 U	0.00056 U	0.00047 UJ	0.00042 U	0.00048 U	0.00048 U	0.00043 U	0.00067 UJ	0.00051 U	
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270		0.00085 U	0.0011 U	0.00097 U	0.00097 U	0.0011 U	0.00095 UJ	0.00084 U	0.00098 U	0.00098 U	0.00088 U	0.0014 UJ	0.001 U	
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4	0.0012 U	0.0016 U	0.0013 U	0.0013 U	0.0015 U	0.0013 UJ	0.0011 U	0.0013 U	0.0013 U	0.0012 U	0.0019 UJ	0.0014 U	
1,3-Dichloropropane	142-28-9	mg/kg		410		0.00024 U	0.00033 U	0.00028 U	0.00028 U	0.00032 U	0.00027 UJ	0.00024 U	0.00028 U	0.00028 U	0.00025 U	0.00039 UJ	0.00029 U	
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2	0.001 U	0.0014 U	0.0012 U	0.0012 U	0.0014 U	0.0012 UJ	0.001 U	0.0012 U	0.0012 U	0.0011 U	0.0016 UJ	0.0012 U	
2,2-Dichloropropane	594-20-7	mg/kg				0.00081 U	0.0011 U	0.00093 U	0.00093 U	0.0011 U	0.00091 UJ	0.0008 U	0.00093 U	0.00093 U	0.00084 U	0.0013 UJ	0.00097 U	
2-Butanone	78-93-3	mg/kg	350	27000	6.1	0.02 J	0.013 U	0.011 U	0.011 U	0.012 U	0.01 UJ	0.0093 U	0.011 U	0.011 U	0.0097 U	0.015 UJ	0.011 U	
2-Chlorotoluene	95-49-8	mg/kg		470		0.00097 U	0.0013 U	0.0011 U	0.0011 U	0.0013 U	0.0011 UJ	0.00097 U	0.0011 U	0.0011 U	0.001 U	0.0016 UJ	0.0012 U	
2-Hexanone	591-78-6	mg/kg	0.36	200		0.0041 U	0.0055 U	0.0047 U	0.0047 U	0.0054 U	0.0046 UJ	0.0041 U	0.0047 U	0.0047 U	0.0042 U	0.0066 UJ	0.0049 U	
4-Chlorotoluene	106-43-4	mg/kg		440		0.001 U	0.0014 U	0.0012 U	0.0012 U	0.0014 U	0.0012 UJ	0.001 U	0.0012 U	0.0012 U	0.0011 U	0.0017 U	0.0013 U	
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36	0.0063 U	0.0085 U	0.0072 U	0.0072 U	0.0084 U	0.0071 UJ	0.0062 U	0.0073 U	0.0073 U	0.0065 U	0.01 U	0.0076 U	
Acetone	67-64-1	mg/kg	1.2	61000	0.92	0.14 J	0.012 U	0.01 U	0.01 U	0.078 J	0.01 U	0.009 U	0.01 U	0.01 U	0.0094 U	0.015 U	0.011 U	
Benzene	71-43-2	mg/kg	24	0.33	0.025	0.00041 U	0.00055 U	0.00047 U	0.00047 U	0.00054 U	0.00046 UJ	0.00041 U	0.00047 U	0.00047 U	0.00042 U	0.00066 UJ	0.00049 U	

Table D-8. Copco No. 2 Underground Storage Tanks Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2UT-12	C2UT-12	C2UT-13	C2UT-13	C2UT-13	C2UT-13	C2UT-13	C2UT-14	C2UT-14	C2UT-14	C2UT-14	C2UT-14
						Sample Date	5/9/2022	5/9/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022
						Depth Interval	15 - 20	20 - 21	0 - 5	5 - 10	15 - 20	20 - 25	10 - 15	0 - 5	5 - 10	10 - 15	15 - 20	20 - 23
						Sample Type	FD	N	N	N	N	N	N	N	N	N	N	N
Bromobenzene	108-86-1	mg/kg		290			0.001 U	0.0014 U	0.0012 U	0.0012 U	0.0014 U	0.0012 UJ	0.001 U	0.0012 U	0.0012 U	0.0011 U	0.0017 UJ	0.0013 U
Bromochloromethane	74-97-5	mg/kg		150			0.00026 U	0.00035 U	0.0003 U	0.0003 U	0.00035 U	0.00029 UJ	0.00026 U	0.0003 U	0.0003 U	0.00027 U	0.00042 UJ	0.00032 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00019 U	0.00025 U	0.00022 U	0.00022 U	0.00025 U	0.00021 UJ	0.00019 U	0.00022 U	0.00022 U	0.0002 U	0.0003 UJ	0.00023 U
Bromoform	75-25-2	mg/kg		19	0.69		0.00088 U	0.0012 U	0.001 U	0.001 U	0.0012 U	0.00099 UJ	0.00087 U	0.001 U	0.001 U	0.00091 U	0.0014 UJ	0.0011 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00022 U	0.0003 U	0.00025 U	0.00025 U	0.00029 U	0.00025 UJ	0.0006 J	0.00025 U	0.00025 U	0.00023 U	0.00035 U	0.00027 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00021 U	0.00028 U	0.00024 U	0.00024 U	0.00028 U	0.00024 UJ	0.00021 U	0.00024 U	0.00024 U	0.00022 U	0.00034 UJ	0.00025 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.00031 U	0.00042 U	0.00036 U	0.00036 U	0.00042 U	0.00035 UJ	0.00031 U	0.00036 U	0.00036 U	0.00033 U	0.0005 UJ	0.00038 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.00026 U	0.00035 U	0.0003 U	0.0003 U	0.00035 U	0.00029 UJ	0.00026 U	0.0003 U	0.0003 U	0.00027 U	0.00042 UJ	0.00032 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00059 U	0.00079 U	0.00067 U	0.00067 U	0.00078 U	0.00066 UJ	0.00058 U	0.00068 U	0.00068 U	0.00061 U	0.00094 UJ	0.00071 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.00078 U	0.0011 U	0.0009 U	0.0009 U	0.001 U	0.00088 U	0.00078 U	0.00091 U	0.00091 U	0.00081 U	0.0013 U	0.00095 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.00031 U	0.00042 U	0.00036 U	0.00036 U	0.00042 U	0.00035 UJ	0.00031 U	0.00036 U	0.00036 U	0.00033 U	0.0005 UJ	0.00038 U
Chloromethane	74-87-3	mg/kg		110	11		0.00097 U	0.0013 U	0.0011 U	0.0011 U	0.0013 U	0.0011 U	0.00097 U	0.0011 U	0.0011 U	0.001 U	0.0016 U	0.0012 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.00063 U	0.00085 U	0.00072 U	0.00072 U	0.00084 U	0.00071 UJ	0.00062 U	0.00073 U	0.00073 U	0.00065 U	0.001 UJ	0.00076 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00021 U	0.00028 U	0.00024 U	0.00024 U	0.00028 U	0.00024 UJ	0.00021 UJ	0.00024 U	0.00024 U	0.00022 U	0.00034 UJ	0.00025 U
Dibromomethane	74-95-3	mg/kg		24			0.00044 U	0.00059 U	0.00051 U	0.00051 U	0.00059 U	0.00049 UJ	0.00044 U	0.00051 U	0.00051 U	0.00046 U	0.00071 UJ	0.00053 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00051 U	0.00069 U	0.00059 U	0.00059 U	0.00068 U	0.00058 U	0.00051 U	0.00059 U	0.00059 U	0.00053 U	0.00082 U	0.00062 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.01 U	0.014 U	0.012 U	0.012 U	0.014 U	0.012 UJ	0.01 UJ	0.012 U	0.012 U	0.011 U	0.017 UJ	0.013 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00043 U	0.00058 U	0.00049 U	0.00049 U	0.00057 UJ	0.00048 UJ	0.00043 U	0.0005 UJ	0.0005 UJ	0.00044 UJ	0.00069 UJ	0.00052 UJ
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.00063 U	0.00085 U	0.00072 U	0.00072 U	0.00084 U	0.00071 UJ	0.00062 U	0.00073 U	0.00073 U	0.00065 U	0.001 UJ	0.00076 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00048 U	0.00065 U	0.00055 U	0.00055 U	0.00064 UJ	0.00054 UJ	0.00048 U	0.00056 UJ	0.00056 UJ	0.0005 UJ	0.00077 UJ	0.00058 UJ
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.00031 U	0.00042 U	0.00036 U	0.00036 U	0.00042 U	0.00035 UJ	0.00031 U	0.00036 U	0.00036 U	0.00033 U	0.0005 UJ	0.00038 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0019 U	0.0025 U	0.0022 U	0.0022 U	0.0025 U	0.0021 UJ	0.0019 U	0.0022 U	0.0022 U	0.002 U	0.003 U	0.0023 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.00066 U	0.00089 U	0.00076 U	0.00076 U	0.00088 U	0.00074 UJ	0.00066 U	0.00076 U	0.00076 U	0.00068 U	0.0011 UJ	0.0008 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.00079 U	0.0011 U	0.00091 U	0.00091 U	0.0011 U	0.00089 UJ	0.00079 U	0.00092 U	0.00092 U	0.00082 U	0.0013 UJ	0.00096 U
p-Isopropyltoluene	99-87-6	mg/kg					0.00042 U	0.00057 U	0.00048 U	0.00048 U	0.00056 U	0.00047 UJ	0.00042 U	0.00048 U	0.00048 U	0.00043 U	0.00067 UJ	0.00051 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.0007 U	0.00095 U	0.00081 U	0.00081 U	0.00094 U	0.00079 UJ	0.0007 U	0.00081 U	0.00081 U	0.00073 U	0.0011 UJ	0.00085 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.00077 U	0.001 U	0.00089 U	0.00089 U	0.001 U	0.00087 UJ	0.00077 U	0.00089 U	0.0009 U	0.0008 U	0.0012 UJ	0.00094 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00069 U	0.00093 U	0.00079 U	0.00079 U	0.00092 U	0.00078 UJ	0.00069 U	0.0008 U	0.0008 U	0.00072 U	0.0011 UJ	0.00084 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00042 U	0.00057 U	0.00048 U	0.00048 U	0.00056 U	0.00047 UJ	0.00042 U	0.00048 U	0.00048 U	0.00043 U	0.00067 UJ	0.00051 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0014 U	0.0018 U	0.0016 U	0.0016 U	0.0018 U	0.0015 UJ	0.0014 U	0.0016 U	0.0016 U	0.0014 U	0.0022 UJ	0.0016 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00042 U	0.00057 U	0.00048 U	0.00048 U	0.00056 U	0.00047 UJ	0.00042 U	0.00048 U	0.00048 U	0.00043 U	0.00067 UJ	0.00051 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.00063 U	0.00085 U	0.00072 U	0.00072 U	0.00084 U	0.00071 UJ	0.00062 UJ	0.00073 U	0.00073 U	0.00065 U	0.001 UJ	0.00076 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.00031 U	0.00042 U	0.00036 U	0.00036 U	0.00042 U	0.00035 UJ	0.00031 U	0.00036 U	0.00036 U	0.00033 U	0.0005 UJ	0.00038 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.00031 U	0.00042 U	0.00036 U	0.00036 U	0.00042 U	0.00035 UJ	0.00031 U	0.00036 U	0.00036 U	0.00033 U	0.0005 U	0.00038 U
Vinyl Acetate	108-05-4	mg/kg		910			0.0016 U	0.0021 U	0.0018 U	0.0018 U	0.0021 U	0.0018 UJ	0.0016 U	0.0018 U	0.0018 U	0.0016 U	0.0025 UJ	0.0019 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00031 U	0.00042 U	0.00036 U	0.00036 U	0.00042 U	0.00035 U	0.00031 UJ	0.00036 U	0.00036 U	0.00033 U	0.0005 U	0.00038 U
Xylene, o	95-47-6	mg/kg	1.4	650			0.00096 U	0.0013 U	0.0011 U	0.0011 U	0.0013 UJ	0.0011 UJ	0.00096 U	0.0011 UJ	0.0011 UJ	0.001 UJ	0.0015 UJ	0.0012 UJ
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.0012 U	0.0017 U	0.0014 U	0.0014 U	0.0016 UJ	0.0014 UJ	0.0012 U	0.0014 UJ	0.0014 UJ	0.0013 UJ	0.002 UJ	0.0015 UJ
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.00096 U	0.0013 U	0.0011 U	0.0011 U	0.0013 UJ	0.0011 UJ	0.00096 U	0.0011 UJ	0.0011 UJ	0.001 UJ	0.0015 UJ	0.0012 UJ
SW8270SIM																		
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.00078 U	0.00078 U	0.0023 J	0.00074 U	0.00073 U	0.00086 U	0.00077 U	0.00082 U	0.00076 U	0.00065 U	0.00073 U	0.00071 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.0025 U	0.0025 U	0.0048 J	0.0024 U	0.0024 U	0.0028 U	0.0025 U	0.0027 U	0.0025 U	0.0021 U	0.0024 U	0.0023 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00075 U	0.00075 U	0.00065 J	0.0007 U	0.0007 U	0.00082 U	0.00073 U	0.00078 U	0.00073 U	0.00062 U	0.0007 U	0.00068 U

Table D-8. Copco No. 2 Underground Storage Tanks Analytical Soil Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2UT-12	C2UT-12	C2UT-13	C2UT-13	C2UT-13	C2UT-13	C2UT-13	C2UT-14	C2UT-14	C2UT-14	C2UT-14	C2UT-14	
						Sample Date	5/9/2022	5/9/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/10/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022	5/9/2022
						Depth Interval	15 - 20	20 - 21	0 - 5	5 - 10	15 - 20	20 - 25	10 - 15	0 - 5	5 - 10	10 - 15	15 - 20	20 - 23	
						Sample Type	FD	N	N	N	N	N	N	N	N	N	N	N	N
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.00062 U	0.00062 U	0.0031 J	0.00059 U	0.00058 U	0.00068 U	0.00061 U	0.00065 U	0.00061 U	0.00051 U	0.00058 U	0.00057 U	
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.00075 U	0.00075 U	0.00091 J	0.0007 U	0.0007 U	0.00082 U	0.00073 U	0.0018 J	0.00073 U	0.00062 U	0.0007 U	0.00083 J	
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0022 U	0.0022 U	0.0018 U	0.0021 U	0.0021 U	0.0024 U	0.0022 U	0.0051 J	0.0022 U	0.0018 U	0.0021 U	0.002 U	
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.001 U	0.001 U	0.00087 U	0.00098 U	0.00098 U	0.0011 U	0.001 U	0.0054 J	0.001 U	0.00086 U	0.00097 U	0.00095 U	
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.0017 J	0.0014 U	0.0034 J	0.0014 U	0.0014 U	0.0016 U	0.0014 U	0.012	0.0014 U	0.0012 U	0.0013 U	0.0013 U	
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.00062 U	0.00062 U	0.004 J	0.00059 U	0.00058 U	0.00068 U	0.00061 U	0.0061 J	0.00061 U	0.00051 U	0.00058 U	0.00057 U	
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.00075 U	0.00075 U	0.00062 U	0.0007 U	0.0007 U	0.00082 U	0.00073 U	0.0043 J	0.00073 U	0.00062 U	0.0007 U	0.00068 U	
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.002 J	0.0019 U	0.0016 U	0.0018 U	0.0017 U	0.002 U	0.0018 U	0.0093	0.0018 U	0.0015 U	0.0017 U	0.0017 U	
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.00089 U	0.0009 U	0.00075 U	0.00084 U	0.00084 U	0.00098 U	0.00088 U	0.0044 J	0.00087 U	0.00074 U	0.00083 U	0.00082 U	
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0017 U	0.0017 U	0.006	0.0016 U	0.0016 U	0.0019 U	0.0017 U	0.01	0.0017 U	0.0014 U	0.0016 U	0.0016 U	
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.00062 U	0.00062 U	0.0022 J	0.00059 U	0.0016 J	0.00068 U	0.00061 U	0.00065 U	0.00061 U	0.00051 U	0.00058 U	0.00057 U	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.00075 U	0.00075 U	0.0029 J	0.0007 U	0.0007 U	0.00082 U	0.00073 U	0.0073	0.00073 U	0.00062 U	0.0007 U	0.00068 U	
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.002 U	0.002 U	0.02	0.0019 U	0.0019 J	0.0022 U	0.002 U	0.0021 U	0.0028 J	0.0017 U	0.0019 U	0.0018 U	
Phenanthrene	85-01-8	mg/kg	5.5		11		0.002 U	0.002 U	0.0073	0.0019 U	0.0019 U	0.0022 U	0.002 U	0.0048 J	0.002 U	0.0017 U	0.0019 U	0.0018 U	
Pyrene	129-00-0	mg/kg	10	1800	45		0.0014 J	0.0012 U	0.0057	0.0011 U	0.0011 U	0.0013 U	0.0012 U	0.009	0.0012 U	0.001 U	0.0011 U	0.0011 U	

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

mg/kg = milligram(s) per kilogram

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-9. Copco No. 2 Underground Storage Tanks Analytical Groundwater Results

				Location	C2UT-02W	C2UT-02W	C2UT-10	C2UT-12	C2UT-12	C2UT-13	C2UT-14
				Sample Date	3/9/2022	3/9/2022	5/10/2022	5/10/2022	5/10/2022	5/11/2022	5/9/2022
				Sample Type	N	FD	N	N	FD	N	N
Analyte	CAS	Unit	Groundwater Screening Level								
CALC											
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	µg/L		0 U	0 U	0 U	1.5444	0.0015	--		0 U
CATFH											
Gasoline Range Organics	GRO	mg/L	0.76	0.031 U	0.031 U	--	--	--	--	--	--
SW8011											
1,2,3-Trichloropropane	96-18-4	µg/L	0.0002	0.005 UJ	--	0.005 U	0.005 U	0.0051 U	--		0.0051 U
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.0003	0.002 UJ	--	0.002 U	0.002 U	0.002 U	--		0.002 U
1,2-Dibromoethane	106-93-4	µg/L	0.0075	0.002 UJ	--	0.002 U	0.002 U	0.002 U	--		0.002 U
SW8015-E											
Diesel Range Organics	DRO	µg/L	200	420 J	360 U	100 U	100 U	93 U	240		450 J
Extended Range Organics	ERO	µg/L	60000	350 J	300 J	200 U	210 U	190 U	200 UJ		210 UJ
SW8015-P											
Gasoline Range Organics	GRO	µg/L	760	--	--	20 U	20 U	20 U	--		20 U
SW8260B											
1,1,1,2-Tetrachloroethane	630-20-6	µg/L	0.57	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	--		0.038 U
1,1,1-Trichloroethane	71-55-6	µg/L	200	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--		0.025 U
1,1,2,2-Tetrachloroethane	79-34-5	µg/L	0.076	0.056 U	0.056 U	0.056 U	0.056 U	0.056 U	--		0.056 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	µg/L	1200	0.033 U	0.033 U	0.088 U	0.088 U	0.088 U	--		0.088 U
1,1,2-Trichloroethane	79-00-5	µg/L	0.28	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	--		0.07 U
1,1-Dichloroethane	75-34-3	µg/L	2.8	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--		0.025 U
1,1-Dichloroethene	75-35-4	µg/L	6	0.035 U	0.035 U	0.035 U	0.035 U	0.035 U	--		0.035 U
1,1-Dichloropropene	563-58-6	µg/L	0.47	0.036 U	0.036 U	0.084 U	0.084 U	0.084 U	--		0.084 U
1,2,3-Trichlorobenzene	87-61-6	µg/L	3.4	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	--		0.15 U
1,2,3-Trichloropropane	96-18-4	µg/L	0.0002	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--		0.05 U
1,2,4-Trichlorobenzene	120-82-1	µg/L	0.46	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	--		0.17 U
1,2,4-Trimethylbenzene	95-63-6	µg/L	56	0.072 U	0.072 U	0.2 U	0.2 U	0.2 U	--		0.2 U
1,2-Dibromo-3-chloropropane	96-12-8	µg/L	0.0003	0.44 U	0.44 U	0.17 U	0.17 U	0.17 U	--		0.17 U
1,2-Dibromoethane	106-93-4	µg/L	0.0075	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--		0.025 U
1,2-Dichlorobenzene	95-50-1	µg/L	300	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	--		0.038 U
1,2-Dichloroethane	107-06-2	µg/L	0.17	0.043 U	0.043 U	0.043 U	0.043 U	0.043 U	--		0.043 U
1,2-Dichloropropane	78-87-5	µg/L	0.85	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	--		0.06 U
1,3,5-Trimethylbenzene	108-67-8	µg/L	60	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	--		0.15 U
1,3-Dichlorobenzene	541-73-1	µg/L	300	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--		0.05 U
1,3-Dichloropropane	142-28-9	µg/L	110	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--		0.025 U
1,4-Dichlorobenzene	106-46-7	µg/L	0.48	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--		0.05 U
2,2-Dichloropropane	594-20-7	µg/L	0.85	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	--		0.06 U
2-Butanone	78-93-3	µg/L	5600	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	--		2.5 U
2-Chlorotoluene	95-49-8	µg/L	98	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	--		0.12 U
2-Hexanone	591-78-6	µg/L	38	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	--		0.94 U
4-Chlorotoluene	106-43-4	µg/L	100	0.05 U	0.05 U	0.12 U	0.12 U	0.12 U	--		0.12 U
4-Methyl-2-Pentanone	108-10-1	µg/L	6300	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	--		1.7 U
Acetone	67-64-1	µg/L	14000	4.1 U	3.1 U	3.1 U	3.1 U	3.1 U	--		3.1 U
Benzene	71-43-2	µg/L	0.15	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	--		0.068 J
Bromobenzene	108-86-1	µg/L	62	0.038 U	0.038 U	0.038 U	0.038 U	0.038 U	--		0.038 U
Bromochloromethane	74-97-5	µg/L	83	0.025 U	0.025 U	0.05 U	0.05 U	0.05 U	--		0.05 U
Bromodichloromethane	75-27-4	µg/L	0.13	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U	--		0.06 U

Table D-9. Copco No. 2 Underground Storage Tanks Analytical Groundwater Results

				Location	C2UT-02W	C2UT-02W	C2UT-10	C2UT-12	C2UT-12	C2UT-13	C2UT-14
				Sample Date	3/9/2022	3/9/2022	5/10/2022	5/10/2022	5/10/2022	5/11/2022	5/9/2022
				Sample Type	N	FD	N	N	FD	N	N
Analyte	CAS	Unit	Groundwater Screening Level								
Bromoform	75-25-2	µg/L	3.3	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	--	0.16 U	
Bromomethane	74-83-9	µg/L	7.5	0.062 U	0.062 U	0.13 U	0.13 U	0.13 U	--	0.13 U	
Carbon Disulfide	75-15-0	µg/L	810	0.36 U	0.31 U	0.083 U	0.083 U	0.083 U	--	0.083 U	
Carbon tetrachloride	56-23-5	µg/L	0.45	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	--	0.025 U	
Chlorobenzene	108-90-7	µg/L	70	0.025 U	0.025 U	0.06 U	0.06 U	0.06 U	--	0.06 U	
Chlorodibromomethane	124-48-1	µg/L	0.2	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	--	0.055 U	
Chloroethane	75-00-3	µg/L	21000	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	--	0.096 U	
Chloroform	67-66-3	µg/L	0.22	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	--	0.26	
Chloromethane	74-87-3	µg/L	190	0.068 U	0.068 U	0.14 U	0.14 U	0.14 U	--	0.14 U	
cis-1,2-Dichloroethene	156-59-2	µg/L	6	0.055 U	0.055 U	0.055 U	0.055 U	0.055 U	--	0.055 U	
cis-1,3-Dichloropropene	10061-01-5	µg/L	0.47	0.09 U	0.14 J	0.09 U	0.09 U	0.09 U	--	0.09 U	
Dibromomethane	74-95-3	µg/L	8.3	0.062 U	0.062 U	0.062 U	0.062 U	0.062 U	--	0.062 U	
Dichlorodifluoromethane	75-71-8	µg/L	200	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	--	0.13 U	
Dichloromethane	75-09-2	µg/L	1.7	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	--	1.2 U	
Ethylbenzene	100-41-4	µg/L	1.5	0.052 U	0.03 U	0.03 U	0.03 U	0.03 U	--	0.03 U	
Hexachlorobutadiene	87-68-3	µg/L	0.14	0.067 U	0.067 U	0.067 U	0.13 J	0.067 U	--	0.067 U	
Isopropylbenzene	98-82-8	µg/L	450	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	--	0.19 U	
Methyl tert-butyl ether (MTBE)	1634-04-4	µg/L	13	0.07 U	0.07 U	0.07 U	0.07 U	0.07 U	--	0.07 U	
Naphthalene	91-20-3	µg/L	0.12	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	--	0.22 U	
n-Butylbenzene	104-51-8	µg/L	290	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	--	0.23 U	
n-Propylbenzene	103-65-1	µg/L	660	0.091 U	0.091 U	0.091 U	0.091 U	0.091 U	--	0.091 U	
p-Isopropyltoluene	99-87-6	µg/L	410	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	--	0.15 U	
sec-Butylbenzene	135-98-8	µg/L	590	0.26 J	0.17 U	0.17 U	0.17 U	0.17 U	--	0.17 U	
Styrene	100-42-5	µg/L	100	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	--	0.19 U	
tert-Butylbenzene	98-06-6	µg/L	380	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	--	0.26 U	
Tetrachloroethene	127-18-4	µg/L	0.084	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U	--	0.084 U	
Toluene	108-88-3	µg/L	150	0.079 U	0.059 U	0.65	0.24	0.21	--	0.26	
trans-1,2-Dichloroethene	156-60-5	µg/L	10	0.033 U	0.033 U	0.033 U	0.033 U	0.033 U	--	0.033 U	
trans-1,3-Dichloropropene	10061-02-6	µg/L	0.47	0.092 U	0.092 U	0.092 U	0.092 U	0.092 U	--	0.092 U	
Trichloroethylene	79-01-6	µg/L	0.49	0.066 U	0.066 U	0.066 U	0.066 U	0.066 U	--	0.066 U	
Trichlorofluoromethane	75-69-4	µg/L	150	0.043 U	0.043 U	0.12 U	0.12 U	0.12 U	--	0.12 U	
Vinyl Acetate	108-05-4	µg/L	410	0.44 U	0.44 U	0.44 U	0.44 U	0.71 J	--	0.44 U	
Vinyl Chloride	75-01-4	µg/L	0.0098	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	--	0.013 U	
Xylene, o	95-47-6	µg/L	190	0.15 U	0.3 U	0.15 U	0.15 U	0.15 U	--	0.15 U	
Xylenes, m & p	179601-23-1	µg/L	190	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	--	0.12 U	
Xylenes, Total	1330-20-7	µg/L	190	0.15 U	0.3 U	0.15 U	0.15 U	0.15 U	--	0.15 U	
SW8270SIM											
1-Methylnaphthalene	90-12-0	µg/L	0.46	0.021 UJ	0.021 UJ	0.038 U	0.034 U	0.034 U	--	0.038 U	
2-Methylnaphthalene	91-57-6	µg/L	17	0.043 UJ	0.042 UJ	0.044 U	0.04 U	0.04 U	--	0.045 U	
Acenaphthene	83-32-9	µg/L	260	0.015 UJ	0.015 UJ	0.016 U	0.014 U	0.014 U	--	0.016 U	
Acenaphthylene	208-96-8	µg/L	81	0.0098 UJ	0.0097 UJ	0.01 U	0.023 J	0.0093 U	--	0.01 U	
Anthracene	120-12-7	µg/L	1000	0.024 UJ	0.024 UJ	0.025 U	0.3 J	0.023 UJ	--	0.026 U	
Benzo(a)anthracene	56-55-3	µg/L	0.017	0.015 UJ	0.015 UJ	0.016 U	1.5 J	0.015 J	--	0.016 U	
Benzo(a)pyrene	50-32-8	µg/L	0.025	0.012 UJ	0.012 UJ	0.025 U	1.1 J	0.023 UJ	--	0.026 UJ	
Benzo(b)fluoranthene	205-99-2	µg/L	0.25	0.012 UJ	0.012 UJ	0.025 U	0.69 J	0.023 UJ	--	0.026 U	
Benzo(g,h,i)perylene	191-24-2	µg/L	81	0.013 UJ	0.013 UJ	0.014 U	0.52 J	0.012 UJ	--	0.014 U	

Table D-9. Copco No. 2 Underground Storage Tanks Analytical Groundwater Results

				Location	C2UT-02W	C2UT-02W	C2UT-10	C2UT-12	C2UT-12	C2UT-13	C2UT-14
				Sample Date	3/9/2022	3/9/2022	5/10/2022	5/10/2022	5/10/2022	5/11/2022	5/9/2022
				Sample Type	N	FD	N	N	FD	N	N
Analyte	CAS	Unit	Groundwater Screening Level								
Benzo(k)fluoranthene	207-08-9	µg/L	2.5	0.013 UJ	0.013 UJ	0.014 U	0.12 J	0.012 UJ	--	0.014 U	
Chrysene	218-01-9	µg/L	25	0.018 UJ	0.017 UJ	0.042 U	2.2 J	0.038 UJ	--	0.043 U	
Dibenzo(a,h)anthracene	53-70-3	µg/L	0.0061	0.016 UJ	0.016 UJ	0.017 U	0.2	0.016 U	--	0.017 U	
Fluoranthene	206-44-0	µg/L	800	0.02 UJ	0.019 UJ	0.062 U	0.9 J	0.056 UJ	--	0.063 U	
Fluorene	86-73-7	µg/L	160	0.019 UJ	0.018 UJ	0.019 U	0.08 J	0.018 U	--	0.02 U	
Indeno(1,2,3-cd)pyrene	193-39-5	µg/L	0.25	0.015 UJ	0.015 UJ	0.016 U	0.22 J	0.014 UJ	--	0.016 U	
Naphthalene	91-20-3	µg/L	0.12	0.034 UJ	0.034 UJ	0.19 U	0.17 U	0.17 U	--	0.19 U	
Phenanthrene	85-01-8	µg/L	81	0.034 UJ	0.034 UJ	0.035 U	0.83 J	0.032 UJ	--	0.036 U	
Pyrene	129-00-0	µg/L	81	0.036 UJ	0.036 UJ	0.038 U	4.3 J	0.034 J	--	0.038 U	

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

µg/L = microgram(s) per liter

mg/L = milligram(s) per liter

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-01	C2BP-01	C2BP-01	C2BP-02	C2BP-02	C2BP-02	C2BP-02	C2BP-03	C2BP-03	C2BP-03	C2BP-04	C2BP-04
						Sample Date	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/10/2022	3/10/2022
						Depth Interval	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	N	FD	N	N	N	N	N	N
CALC																		
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	--
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	mg/kg				--	--	--	--	--	--	--	--	--	--	--	--	--
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0.0004139	0 U	0 U	0.0005144	0 U	0 U	0 U	0.027973	0 U	0 U	0.124542	0.00393	
CATFH																		
Gasoline Range Organics	GRO	mg/kg		430	1100	--	--	--	--	--	--	--	--	--	--	--	1.8 U	1.8 U
SW6010B																		
Boron	7440-42-8	mg/kg	2	16000		3.2 U	2.9 U	2.1 U	3.1 U	2.5 U	2.7 U	3 U	3.9 U	2.3 U	2.4 U	4.8 J	2.5 U	
SW6020																		
Antimony	7440-36-0	mg/kg	0.67	31		0.16 J	0.14 J	0.13 J	0.14 J	0.087 J	0.12 J	0.12 J	0.14 J	0.087 J	0.11 J	0.24 J	0.13 J	
Arsenic	7440-38-2	mg/kg	19	19		2.6	3.2	3.4	2.7	2.3 J	3 J	3	2.9	2.3	2.7	2.7	2.9	
Barium	7440-39-3	mg/kg	630	15000		210	210	230	220	200	230	240	270	190	240	210	180	
Beryllium	7440-41-7	mg/kg	2.5	16		0.4	0.65	0.61	0.38	0.54	0.55	0.61	0.49	0.51	0.54	0.39	0.48	
Cadmium	7440-43-9	mg/kg	0.54	71		0.14 J	0.13 J	0.13 J	0.18 J	0.16 J	0.17 J	0.14 J	0.17 J	0.15 J	0.19 J	2.1	0.19 J	
Chromium	7440-47-3	mg/kg	200	120000		25	31	30	24	27	28	31	29	27	31	29	28	
Cobalt	7440-48-4	mg/kg	13	23		20	21	21	22	20	23	24	22	19	25	20	18	
Copper	7440-50-8	mg/kg	73	3100		25	30	27	24	23	27	28	26	24	25	28	25	
Iron	7439-89-6	mg/kg		55000		34000	39000	36000	31000	30000	32000	35000	36000	30000	34000	39000	38000	
Lead	7439-92-1	mg/kg	34	80		8.9	6.2	6.2	7.5	5.7	6.2	6.1	6.9	5.3	6.6	15	5.4	
Manganese	7439-96-5	mg/kg	2100	2100		1100	1000	1000	1300	1000	1100	1100	1200	1100	1300	1300	970	
Molybdenum	7439-98-7	mg/kg	2	390		0.58	0.37	0.34	0.65	0.22 J	0.3	0.31	0.55	0.22	0.26	0.79	0.27	
Nickel	7440-02-0	mg/kg	110	820		12	16	18	13	16	16	17	15	15	19	14	14	
Selenium	7782-49-2	mg/kg	0.52	390		3.1	3.6	3.3	3.3	3.1	3.4	3.6	3.5	2.9	3.2	2.9	2.6	
Silver	7440-22-4	mg/kg	4.2	390		0.021 J	0.051 J	0.035 J	0.019 J	0.04 J	0.04 J	0.034 J	0.02 J	0.034 J	0.038 J	0.02 J	0.034 J	
Thallium	7440-28-0	mg/kg	2.8	2.8		0.13 J	0.18 J	0.18 J	0.14 J	0.15 J	0.17 J	0.19 J	0.16 J	0.16 J	0.18 J	0.12 J	0.14 J	
Vanadium	7440-62-2	mg/kg	280	390		140	130	120	130	90	110	110	150	93	110	130 J	100	
Zinc	7440-66-6	mg/kg	170	23000		68	62	57	62	45	52	50	69	48	52	78	47	
SW7471A																		
Mercury	7439-97-6	mg/kg	0.24	1		0.026 J	0.015 J	0.018 J	0.034	0.011 U	0.012 J	0.01 J	0.01 J	0.0089 U	0.011 U	0.017 J	0.011 U	
SW8011																		
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	7.3E-05 UJ	7.9E-05 UJ	7.3E-05 UJ	7.6E-05 UJ	8.3E-05 UJ	6.8E-05 UJ	6.6E-05 UJ	7.8E-05 UJ	8.1E-05 UJ	8E-05 UJ	7.6E-05 UJ	7.7E-05 UJ	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	1.1E-05 UJ	1.2E-05 UJ	1.1E-05 UJ	1.1E-05 UJ	1.3E-05 UJ	1E-05 UJ	1E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	3.7E-05 J	1.2E-05 UJ	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	1.3E-05 UJ	1.4E-05 UJ	1.3E-05 UJ	1.4E-05 UJ	1.5E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.4E-05 UJ	1.5E-05 UJ	1.5E-05 UJ	1.4E-05 UJ	1.4E-05 UJ	
SW8015-E																		
Diesel Range Organics	DRO	mg/kg		260	1100	--	--	--	--	--	--	--	--	--	--	--	59	12 U
Extended Range Organics	ERO	mg/kg		12000		--	--	--	--	--	--	--	--	--	--	--	200	24 U
SW8260B																		
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017	0.0007 U	0.00069 U	0.00086 U	0.00065 U	0.00064 U	0.00081 U	0.00084 U	0.00064 U	0.00072 U	0.00065 U	0.00061 U	0.00067 U	
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7	0.00035 U	0.00035 U	0.00044 U	0.00033 U	0.00032 U	0.00041 U	0.00043 U	0.00033 U	0.00037 U	0.00033 U	0.00031 U	0.00034 U	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018	0.0011 U	0.0011 U	0.0013 U	0.00099 U	0.00097 U	0.0012 U	0.0013 U	0.00098 U	0.0011 U	0.00099 U	0.00093 U	0.001 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700		0.00061 U	0.00061 U	0.00076 U	0.00057 U	0.00056 U	0.00071 U	0.00074 U	0.00057 U	0.00064 U	0.00057 U	0.00054 U	0.00059 U	
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076	0.00029 U	0.00029 U	0.00037 U	0.00027 U	0.00027 U	0.00034 U	0.00036 U	0.00027 U	0.00031 U	0.00027 U	0.00026 U	0.00028 U	
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2	0.00022 U	0.00022 U	0.00028 U	0.00021 U	0.00021 U	0.00026 U	0.00027 U	0.00021 U	0.00023 U	0.00021 U	0.0002 U	0.00022 U	
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54	0.0013 U	0.0013 U	0.0016 U	0.0012 U	0.0012 U	0.0015 U	0.0016 U	0.0012 U	0.0013 U	0.0012 U	0.0011 U	0.0012 U	
1,1-Dichloropropene	563-58-6	mg/kg				0.00035 U	0.00035 U	0.00044 U	0.00033 U	0.00032 U	0.00041 U	0.00043 U	0.00033 U	0.00037 U	0.00033 U	0.00031 U	0.00034 U	
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40		0.00071 U	0.0007 U	0.00088 U	0.00066 U	0.00065 U	0.00082 U	0.00085 U	0.00065 U	0.00074 U	0.00066 U	0.00062 U	0.00068 U	
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	0.0012 U	0.0012 U	0.0015 U	0.0011 U	0.0011 U	0.0014 U	0.0014 U	0.0011 U	0.0012 U	0.0011 U	0.001 U	0.0011 U	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	0.00049 U	0.00049 U	0.00062 U	0.00046 U	0.00045 U	0.00057 U	0.0006 U	0.00046 U	0.00051 U	0.00046 U	0.00043 U	0.00048 U	
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300		0.0014 U	0.0014 U	0.0018 U	0.0013 U	0.0013 U	0.0016 U	0.0017 U	0.0013 U	0.0015 U	0.0013 U	0.0012 U	0.0014 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	0.0019 U	0.0019 U	0.0023 U	0.0018 U	0.0017 U	0.0022 U	0.0023 U	0.0017 U	0.002 U	0.0018 U	0.0016 U	0.0018 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	0.00024 U	0.00023 U	0.00029 U	0.00022 U	0.00022 U	0.00027 U	0.00028 U	0.00022 U	0.00025 U	0.00022 U	0.00021 U	0.00023 U	

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-01	C2BP-01	C2BP-01	C2BP-02	C2BP-02	C2BP-02	C2BP-02	C2BP-03	C2BP-03	C2BP-03	C2BP-04	C2BP-04
						Sample Date	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/10/2022	3/10/2022
						Depth Interval	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	N	FD	N	N	N	N	N	N
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0015 U	0.0015 U	0.0019 U	0.0014 U	0.0014 U	0.0018 U	0.0018 U	0.0014 U	0.0016 U	0.0014 U	0.0013 U	0.0015 U
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.00024 U	0.00023 U	0.00029 U	0.00022 U	0.00022 U	0.00027 U	0.00028 U	0.00022 U	0.00025 U	0.00022 U	0.00021 U	0.00023 U
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.00047 U	0.00047 U	0.00059 U	0.00044 U	0.00043 U	0.00055 U	0.00057 U	0.00044 U	0.00049 U	0.00044 U	0.00041 U	0.00045 U
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.00095 U	0.00095 U	0.0012 U	0.00089 U	0.00088 U	0.0011 U	0.0012 U	0.00088 U	0.00099 U	0.00089 U	0.00084 U	0.00092 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0013 U	0.0013 U	0.0016 U	0.0012 U	0.0012 U	0.0015 U	0.0016 U	0.0012 U	0.0013 U	0.0012 U	0.0011 U	0.0012 U
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00027 U	0.00027 U	0.00034 U	0.00025 U	0.00025 U	0.00031 U	0.00033 U	0.00025 U	0.00028 U	0.00025 U	0.00024 U	0.00026 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0012 U	0.0011 U	0.0014 U	0.0011 U	0.0011 U	0.0013 U	0.0014 U	0.0011 U	0.0012 U	0.0011 U	0.001 U	0.0011 U
2,2-Dichloropropane	594-20-7	mg/kg					0.00039 U	0.00039 U	0.00048 U	0.00036 U	0.00036 U	0.00045 U	0.00047 U	0.00036 U	0.0004 U	0.00036 U	0.00034 U	0.00037 U
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.01 U	0.01 U	0.013 U	0.0097 U	0.0096 U	0.012 U	0.013 U	0.0097 U	0.011 U	0.0098 U	0.0092 U	0.01 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.0011 U	0.0011 U	0.0014 U	0.001 U	0.001 U	0.0013 U	0.0013 U	0.001 U	0.0011 U	0.001 U	0.00096 U	0.0011 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0046 U	0.0046 U	0.0057 U	0.0043 U	0.0042 U	0.0053 U	0.0055 U	0.0043 U	0.0048 U	0.0043 U	0.004 U	0.0044 U
4-Chlorotoluene	106-43-4	mg/kg		440			0.0012 U	0.0012 U	0.0015 U	0.0011 U	0.0011 U	0.0014 U	0.0014 U	0.0011 U	0.0012 U	0.0011 U	0.001 U	0.0011 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.0071 U	0.007 U	0.0088 U	0.0066 U	0.0065 U	0.0082 U	0.0085 U	0.0065 U	0.0074 U	0.0066 U	0.0062 U	0.0068 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.01 U	0.01 U	0.013 U	0.0095 U	0.0093 U	0.012 U	0.012 U	0.0094 U	0.011 U	0.0095 U	0.0089 U	0.0098 U
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00046 U	0.00046 U	0.00057 U	0.00043 U	0.00042 U	0.00053 U	0.00055 U	0.00043 U	0.00048 U	0.00043 U	0.0004 U	0.00044 U
Bromobenzene	108-86-1	mg/kg		290			0.0012 U	0.0012 U	0.0015 U	0.0011 U	0.0011 U	0.0014 U	0.0014 U	0.0011 U	0.0012 U	0.0011 U	0.001 U	0.0011 U
Bromochloromethane	74-97-5	mg/kg		150			0.00029 U	0.00029 U	0.00037 U	0.00027 U	0.00027 U	0.00034 U	0.00036 U	0.00027 U	0.00031 U	0.00027 U	0.00026 U	0.00028 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00021 U	0.00021 U	0.00026 U	0.0002 U	0.00019 U	0.00025 U	0.00026 U	0.0002 U	0.00022 U	0.0002 U	0.00019 U	0.0002 U
Bromoform	75-25-2	mg/kg		19	0.69		0.00099 U	0.00099 U	0.0012 U	0.00092 U	0.00091 U	0.0011 U	0.0012 U	0.00092 U	0.001 U	0.00092 U	0.00087 U	0.00095 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00025 U	0.00025 U	0.00031 U	0.00023 U	0.00023 U	0.00029 U	0.0003 U	0.00023 U	0.00026 U	0.00023 U	0.00022 U	0.00024 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00024 U	0.00023 U	0.00029 U	0.00022 U	0.00022 U	0.00027 U	0.00028 U	0.00022 U	0.00025 U	0.00022 U	0.00021 U	0.00023 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.00035 U	0.00035 U	0.00044 U	0.00033 U	0.00032 U	0.00041 U	0.00043 U	0.00033 U	0.00037 U	0.00033 U	0.00031 U	0.00034 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.00029 U	0.00029 U	0.00037 U	0.00027 U	0.00027 U	0.00034 U	0.00036 U	0.00027 U	0.00031 U	0.00027 U	0.00026 U	0.00028 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00032 U	0.00032 U	0.0004 U	0.0003 U	0.00029 U	0.00037 U	0.00038 U	0.00029 U	0.00033 U	0.0003 U	0.00028 U	0.00031 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.00088 U	0.00088 U	0.0011 U	0.00082 U	0.00081 U	0.001 U	0.0011 U	0.00082 U	0.00092 U	0.00082 U	0.00077 U	0.00085 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.00035 U	0.00035 U	0.00044 U	0.00033 U	0.00032 U	0.00041 U	0.00043 U	0.00033 U	0.00037 U	0.00033 U	0.00031 U	0.00034 U
Chloromethane	74-87-3	mg/kg		110	11		0.0011 U	0.0011 U	0.0014 U	0.001 U	0.001 U	0.0013 U	0.0013 U	0.001 U	0.0011 U	0.001 U	0.00096 U	0.0011 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.00071 U	0.0007 U	0.00088 U	0.00066 U	0.00065 U	0.00082 U	0.00085 U	0.00065 U	0.00074 U	0.00066 U	0.00062 U	0.00068 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00024 U	0.00023 U	0.00029 U	0.00022 U	0.00022 U	0.00027 U	0.00028 U	0.00022 U	0.00025 U	0.00022 U	0.00021 U	0.00023 U
Dibromomethane	74-95-3	mg/kg		24			0.0002 U	0.0002 U	0.00025 U	0.00019 U	0.00018 U	0.00023 U	0.00024 U	0.00019 U	0.00021 U	0.00019 U	0.00018 U	0.00019 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00058 U	0.00057 U	0.00072 U	0.00054 U	0.00053 U	0.00067 U	0.0007 U	0.00053 U	0.0006 U	0.00054 U	0.00051 U	0.00056 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.012 U	0.012 U	0.015 U	0.011 U	0.011 U	0.014 U	0.014 U	0.011 U	0.012 U	0.011 U	0.01 U	0.011 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00048 U	0.00048 U	0.0006 U	0.00045 U	0.00044 U	0.00056 U	0.00058 U	0.00045 U	0.0005 U	0.00045 U	0.00042 U	0.00047 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.00071 U	0.0007 U	0.00088 U	0.00066 U	0.00065 U	0.00082 U	0.00085 U	0.00065 U	0.00074 U	0.00066 U	0.00062 U	0.00068 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00054 U	0.00054 U	0.00067 U	0.0005 U	0.0005 U	0.00063 U	0.00065 U	0.0005 U	0.00056 U	0.00051 U	0.00047 U	0.00052 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.00035 U	0.00035 U	0.00044 U	0.00033 U	0.00032 U	0.00041 U	0.00043 U	0.00033 U	0.00037 U	0.00033 U	0.00031 U	0.00034 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0021 U	0.0021 U	0.0026 U	0.002 U	0.0019 U	0.0025 U	0.0026 U	0.002 U	0.0022 U	0.002 U	0.0019 U	0.002 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.00074 U	0.00074 U	0.00092 U	0.00069 U	0.00068 U	0.00086 U	0.0009 U	0.00069 U	0.00077 U	0.00069 U	0.00065 U	0.00071 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.0009 U	0.00089 U	0.0011 U	0.00083 U	0.00082 U	0.001 U	0.0011 U	0.00083 U	0.00093 U	0.00083 U	0.00078 U	0.00086 U
p-Isopropyltoluene	99-87-6	mg/kg					0.00047 U	0.00047 U	0.00059 U	0.00044 U	0.00043 U	0.00072 U	0.00057 U	0.00044 U	0.00049 U	0.00044 U	0.00041 U	0.00045 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.00079 U	0.00079 U	0.00098 U	0.00073 U	0.00072 U	0.00092 U	0.00095 U	0.00073 U	0.00082 U	0.00074 U	0.00069 U	0.00076 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.00087 U	0.00087 U	0.0011 U	0.00081 U	0.0008 U	0.001 U	0.0011 U	0.00081 U	0.00091 U	0.00081 U	0.00076 U	0.00084 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00078 U	0.00077 U	0.00097 U	0.00072 U	0.00071 U	0.0009 U	0.00094 U	0.00072 U	0.00081 U	0.00072 U	0.00068 U	0.00075 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00047 U	0.00047 U	0.00059 U	0.00044 U	0.00043 U	0.00055 U	0.00057 U	0.00044 U	0.00049 U	0.00044 U	0.00041 U	0.00045 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0015 U	0.0015 U	0.0019 U	0.0014 U	0.0014 U	0.0018 U	0.0018 U	0.0014 U	0.0016 U	0.0014 U	0.0013 U	0.0015 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00047 U	0.00047 U	0.00059 U	0.00044 U	0.00043 U	0.00055 U	0.00057 U	0.00044 U	0.00049 U	0.00044 U	0.00041 U	0.00045 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.00071 U	0.0007 U	0.00088 U	0.00066 U	0.00065 U	0.00082 U	0.00085 U	0.00065 U	0.00074 U	0.00066 U	0.00062 U	0.00068 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.00035 U	0.00035 U	0.00044 U	0.00033 U	0.00032 U	0.00041 U	0.00043 U	0.00033 U	0.00037 U	0.00033 U	0.00031 U	0.00034 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.00035 U	0.00035 U	0.00044 U	0.00033 U	0.00032 U	0.00041 U	0.00043 U	0.00033 U	0.00037 U	0.00033 U	0.00031 U	0.00034 U
Vinyl Acetate	108-05-4	mg/kg		910			0.0018 U	0.0018 U	0.0022 U	0.0016 U	0.0016 U	0.0021 U	0.0021 U	0.0016 U	0.0018 U	0.0016 U	0.0015 U	0.0017 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00035 U	0.00035 U	0.00044 U	0.00033 U	0.00032 U	0.00041 U	0.00043 U	0.00033 U	0.00037 U	0.00033 U	0.00031 U	0.00034 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-01	C2BP-01	C2BP-01	C2BP-02	C2BP-02	C2BP-02	C2BP-02	C2BP-03	C2BP-03	C2BP-03	C2BP-04	C2BP-04
						Sample Date	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022	3/10/2022	3/10/2022
						Depth Interval	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	N	FD	N	N	N	N	N	N
Xylene, o	95-47-6	mg/kg	1.4	650			0.0011 U	0.0011 U	0.0013 U	0.001 U	0.00099 U	0.0013 U	0.0013 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00066 U	0.00066 U	0.00082 U	0.00061 U	0.00061 U	0.00077 U	0.0008 U	0.00061 U	0.00069 U	0.00062 U	0.00058 U	0.00064 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0011 U	0.0011 U	0.0013 U	0.001 U	0.00099 U	0.0013 U	0.0013 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U
SW8270C																		
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.0006 U	0.00079 U	0.00064 U	0.00065 U	0.00073 U	0.00074 U	0.00069 U	0.00071 U	0.00068 U	0.00068 UJ	0.0007 U	0.00071 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0005 U	0.00065 U	0.00054 U	0.00054 U	0.00061 U	0.00061 U	0.00057 U	0.00059 U	0.00057 U	0.00057 UJ	0.00059 U	0.00059 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.00048 U	0.00063 U	0.00052 U	0.00052 U	0.00058 U	0.00059 U	0.00055 U	0.00057 U	0.00055 U	0.00054 UJ	0.00056 U	0.00057 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.00083 U	0.0011 U	0.00089 U	0.0009 U	0.001 U	0.001 U	0.00095 U	0.00098 U	0.00094 U	0.00094 UJ	0.00097 U	0.00099 U
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.0005 U	0.00065 U	0.00054 U	0.00054 U	0.00061 U	0.00061 U	0.00057 U	0.00059 U	0.00057 U	0.00057 UJ	0.00059 U	0.00059 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9		0.00081 U	0.0011 U	0.00087 U	0.00088 U	0.00099 U	0.00099 U	0.00093 U	0.00095 U	0.00092 U	--	0.00095 U	0.00096 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04		0.0013 U	0.0017 U	0.0014 U	0.0014 U	0.0016 U	0.0016 U	0.0015 U	0.0015 U	0.0015 U	--	0.0015 UJ	0.0015 UJ
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.0028 U	0.0037 U	0.003 U	0.003 U	0.0034 U	0.0034 U	0.0032 U	0.0033 U	0.0032 U	0.0032 UJ	0.0033 U	0.0033 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.006 U	0.0079 U	0.0064 U	0.0065 U	0.0073 U	0.0074 U	0.0069 U	0.0071 U	0.0068 U	0.0068 UJ	0.007 U	0.0071 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.058 U	0.077 U	0.063 U	0.063 U	0.071 U	0.072 U	0.067 U	0.069 U	0.066 U	--	0.069 U	0.07 U
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.0043 U	0.0056 U	0.0046 U	0.0046 U	0.0052 U	0.0053 U	0.0049 U	0.0051 U	0.0049 U	0.0049 UJ	0.005 U	0.0051 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.0015 U	0.002 U	0.0016 U	0.0016 U	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0017 U	0.0017 UJ	0.0018 U	0.0018 U
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.0005 U	0.00065 U	0.00054 U	0.00054 U	0.00061 U	0.00061 U	0.00057 U	0.00059 U	0.00057 U	0.00057 UJ	0.00059 U	0.00059 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.0004 U	0.00052 U	0.00043 U	0.00043 U	0.00049 U	0.00049 U	0.00046 U	0.00047 U	0.00045 U	0.00045 UJ	0.00047 U	0.00048 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.00088 U	0.0012 U	0.00094 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.00099 UJ	0.001 U	0.001 U
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.00098 U	0.0013 U	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0011 U	0.0012 U	0.0011 U	0.0011 UJ	0.0011 U	0.0012 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.0015 U	0.002 U	0.0016 U	0.0016 U	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0017 U	0.0017 UJ	0.0018 U	0.0018 U
2-Nitrophenol	88-75-5	mg/kg					0.00062 U	0.00081 U	0.00067 U	0.00067 U	0.00076 U	0.00076 U	0.00071 U	0.00073 U	0.0007 U	0.0007 UJ	0.00073 U	0.00074 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0015 U	0.002 U	0.0016 U	0.0016 U	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0017 U	0.0017 UJ	0.0018 U	0.0018 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.0084 U	0.011 U	0.009 U	0.0091 U	0.01 U	0.01 U	0.0097 U	0.0099 U	0.0095 U	0.0095 UJ	0.0098 U	0.01 U
3-Nitroaniline	99-09-2	mg/kg					0.01 U	0.013 U	0.011 U	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U	0.011 U	0.011 UJ	0.012 U	0.012 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.01 U	0.013 U	0.011 U	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U	0.011 U	--	0.012 U	0.012 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.00091 U	0.0012 U	0.00098 U	0.00098 U	0.0011 U	0.0011 U	0.001 U	0.0011 U	0.001 U	0.001 UJ	0.0011 U	0.0011 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0033 U	0.0043 U	0.0035 U	0.0036 U	0.004 U	0.004 U	0.0038 U	0.0039 U	0.0037 U	--	0.0039 U	0.0039 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.013 U	0.018 U	0.014 U	0.014 U	0.016 U	0.016 U	0.015 U	0.016 U	0.015 U	0.015 UJ	0.016 U	0.016 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.00063 U	0.00082 U	0.00068 U	0.00068 U	0.00077 U	0.00077 U	0.00072 U	0.00074 U	0.00072 U	0.00071 UJ	0.00074 U	0.00075 U
4-Nitroaniline	100-01-6	mg/kg		27			0.005 U	0.0065 U	0.0054 U	0.0054 U	0.0061 U	0.0061 U	0.0057 U	0.0059 U	0.0057 U	0.0057 UJ	0.0059 U	0.0059 U
4-Nitrophenol	100-02-7	mg/kg					0.017 U	0.023 U	0.018 U	0.019 U	0.021 U	0.021 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.02 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00046 U	0.0006 U	0.00049 U	0.0005 U	0.00056 U	0.00056 U	0.00053 U	0.00057 U	0.00052 U	0.00052 UJ	0.0011 J	0.00055 U
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.0005 U	0.00065 U	0.00054 U	0.00054 U	0.00061 U	0.00061 U	0.00057 U	0.00059 U	0.0013 J	0.00057 UJ	0.00059 U	0.00059 U
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0016 U	0.0021 U	0.0017 U	0.0017 U	0.0019 U	0.002 U	0.0018 U	0.0019 U	0.0018 U	0.0018 UJ	0.0019 U	0.0019 U
Azobenzene	103-33-3	mg/kg		5.6			0.0005 U	0.00065 U	0.00054 U	0.00054 U	0.00061 U	0.00061 U	0.00057 U	0.00059 U	0.00057 U	0.00057 UJ	0.00059 U	0.00059 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0041	0.0014 U	0.0012 U	0.0051	0.0013 U	0.0013 U	0.0013 U	0.011	0.0012 U	0.0012 UJ	0.012	0.0013 U
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0013 U	0.0017 U	0.0014 U	0.0014 U	0.0016 U	0.0016 U	0.0015 U	0.019	0.0015 U	0.0015 UJ	0.021 J	0.0015 J
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.001 U	0.0013 U	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0011 U	0.018	0.0011 U	0.0011 UJ	0.021	0.0012 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0018 U	0.0024 U	0.0019 U	0.0019 U	0.0022 U	0.0022 U	0.0021 U	0.0021 U	0.002 U	0.002 UJ	0.0099	0.0021 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0014 U	0.0018 U	0.0015 U	0.0015 U	0.0017 U	0.0017 U	0.0016 U	0.0062 J	0.0016 U	0.0016 UJ	0.0082	0.0017 U
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.12 U	0.16 U	0.13 U	0.13 U	0.15 U	0.15 U	0.14 U	0.14 U	0.14 U	0.14 UJ	--	--
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.005 U	0.0065 U	0.0054 U	0.0054 U	0.0061 U	0.0061 U	0.0057 UJ	0.0059 UJ	0.0057 UJ	0.0057 UJ	0.0059 UJ	0.0059 UJ
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051		0.00061 U	0.0008 U	0.00065 U	0.00066 U	0.00074 U	0.00075 U	0.0007 U	0.00072 U	0.00069 U	0.00069 UJ	0.00071 U	0.00073 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0018 U	0.0024 U	0.0019 U	0.0019 U	0.0022 U	0.0022 U	0.0021 U	0.0021 U	0.002 U	0.002 UJ	0.0021 U	0.0021 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.00077 U	0.001 U	0.00083 U	0.00083 U	0.00094 U	0.00094 U	0.00089 U	0.00091 U	0.00087 U	0.00087 UJ	0.0009 U	0.00092 U
Bis (2-ethylhexyl) phtalate	117-81-7	mg/kg	0.02	39	190		0.025 U	0.03 U	0.034 U	0.039 U	0.034 U	0.023 U	0.027 U	0.034 U	0.023 U	0.008 U	0.077 U	0.023 U
Butyl benzyl phtalate	85-68-7	mg/kg	90	290			0.0051 U	0.0079 U	0.0055 U	0.011 U	0.0062 U	0.0063 U	0.006 U	0.006 U	0.0058 U	0.0058 UJ	0.021 U	0.015 U
Carbazole	86-74-8	mg/kg	79				0.00073 U	0.00096 U	0.00078 U	0.00079 U	0.00089 U	0.0009 U	0.00084 U	0.00086 U	0.00083 U	0.00082 UJ	0.00085 U	0.00087 U
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0039 J	0.0017 U	0.0014 U	0.0044 J	0.0016 U	0.0016 U	0.0015 U	0.011	0.0015 U	0.0015 UJ	0.014	0.0015 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0012 U	0.0016 U	0.0013 U	0.0013 U	0.0015 U	0.0015 U	0.0014 U	0.0048 J	0.0014 U	0.0014 UJ	0.0045 J	0.0022 J

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-04	C2BP-05	C2BP-05	C2BP-05	C2BP-06	C2BP-06	C2BP-06	C2BP-07	C2BP-07	C2BP-07	C2BP-08	C2BP-08
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/9/2022	3/9/2022	3/9/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
						Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N
CALC																		
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	mg/kg				--	--	--	--	--	--	--	--	--	--	--	2.9825E-05	0.0001077704
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	mg/kg				--	--	--	--	--	--	--	--	--	--	--	2.6509E-05	9.59552E-05
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0 U	0 U	0 U	0 U	44.823	0 U	0.018883	0.0295095	0 U	2.8E-05	0.010647	0.049123	
CATFH																		
Gasoline Range Organics	GRO	mg/kg		430	1100	1.7 U	1.7 U	1.8 U	2.1 U	--	--	--	2 U	2.6 U	2.1 U	--	--	
SW6010B																		
Boron	7440-42-8	mg/kg	2	16000		2.2 J	3 J	2.6 U	2.3 U	3.1 U	3.8 U	1.4 U	2.5 U	2.6 U	2.8 U	23 J	22 J	
SW6020																		
Antimony	7440-36-0	mg/kg	0.67	31		0.12 J	0.11 J	0.11 J	0.14 J	0.16 J	0.089 J	0.069 J	0.13 J	0.072 J	0.094 J	0.99	0.22 J	
Arsenic	7440-38-2	mg/kg	19	19		2.9	1.8	2.4	3.1	3.3	2.9 J	2.8	2.3	2.6	2.7	43	74 J	
Barium	7440-39-3	mg/kg	630	15000		210	160	220	190	210	160 J	210	140	140	160	160	150 J	
Beryllium	7440-41-7	mg/kg	2.5	16		0.52	0.32	0.6	0.54	0.59	0.63	0.67	0.39	0.54	0.56	0.28	0.23	
Cadmium	7440-43-9	mg/kg	0.54	71		0.19 J	0.32 J	0.23 J	0.17 J	0.13 J	0.1 J	0.11 J	0.12 J	0.092 J	0.09 J	1.6	0.85	
Chromium	7440-47-3	mg/kg	200	120000		33	21	30	37	31	30 J	30	23	27	31	39	39 J	
Cobalt	7440-48-4	mg/kg	13	23		24	15	26	20	22	20 J	23	15	18	18	10	7.8 J	
Copper	7440-50-8	mg/kg	73	3100		26	20	25	26	30	27 J	28	22	26	25	85	130 J	
Iron	7439-89-6	mg/kg		55000		40000	27000	37000	46000	44000	41000	44000	36000	44000	45000	24000	11000 J	
Lead	7439-92-1	mg/kg	34	80		6	4.9	6	5.9	6	5.3	6.3	4.4	4.3	4.7	27	30 J	
Manganese	7439-96-5	mg/kg	2100	2100		1400	1000	1600	1100	1300	960	1100	1100	940	1000	700	580 J	
Molybdenum	7439-98-7	mg/kg	2	390		0.26	0.34	0.22 J	0.25	0.47	0.24	0.23	0.38	0.19 J	0.21 J	0.42	0.19 J	
Nickel	7440-02-0	mg/kg	110	820		20	11	21	22	15	15	18	11	15	17	22	9.8 J	
Selenium	7782-49-2	mg/kg	0.52	390		3	2.2	2.5	2.8	3.9	3.4 J	3.2	2.3	2.9	2.5	1.6	1.5	
Silver	7440-22-4	mg/kg	4.2	390		0.026 J	0.019 J	0.04 J	0.035 J	0.032 J	0.043 J	0.032 J	0.019 J	0.036 J	0.034 J	0.03 J	0.029 J	
Thallium	7440-28-0	mg/kg	2.8	2.8		0.16 J	0.097 J	0.19 J	0.16 J	0.18 J	0.17 J	0.18	0.11 J	0.14 J	0.14 J	0.071 J	0.055 J	
Vanadium	7440-62-2	mg/kg	280	390		110	95	93	110	160	130 J	130	110	100	110	82	35 J	
Zinc	7440-66-6	mg/kg	170	23000		50	57	45	56	75	59 J	63	82	55	52	310	230 J	
SW7471A																		
Mercury	7439-97-6	mg/kg	0.24	1		0.0094 U	0.0089 J	0.0094 U	0.011 U	0.016 J	0.012 J	0.0083 U	0.021 J	0.013 J	0.009 J	0.011 U	0.01 U	
SW8011																		
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	7.5E-05 UJ	7.6E-05 UJ	8.2E-05 UJ	7.7E-05 UJ	7.6E-05 UJ	6.9E-05 UJ	7.1E-05 UJ	7.6E-05 UJ	8.7E-05 UJ	7.8E-05 UJ	7.6E-05 UJ	7.6E-05 UJ	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	1.1E-05 UJ	2.6E-05 J	1.8E-05 J	1.7E-05 J	1.1E-05 UJ	1E-05 UJ	1.1E-05 UJ	1.2E-05 UJ	1.3E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.1E-05 UJ	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	1.4E-05 UJ	1.4E-05 UJ	1.5E-05 UJ	1.4E-05 UJ	1.4E-05 UJ	1.2E-05 UJ	1.3E-05 UJ	1.4E-05 UJ	1.6E-05 UJ	1.4E-05 UJ	1.4E-05 UJ	1.4E-05 UJ	
SW8015-E																		
Diesel Range Organics	DRO	mg/kg		260	1100	11 U	6700 J	59	88	--	--	--	11 U	12 U	11 U	--	--	
Extended Range Organics	ERO	mg/kg		12000		23 U	8100 J	69	100	--	--	--	22 U	24 U	23 U	--	--	
SW8260B																		
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017	0.00059 U	0.00061 U	0.00062 U	0.0007 U	0.00062 U	0.00066 U	0.00077 U	0.00061 U	0.00079 U	0.0007 U	0.00082 U	0.00094 U	
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7	0.0003 U	0.00031 U	0.00032 U	0.00036 U	0.00031 U	0.00033 U	0.00039 U	0.00031 U	0.0004 U	0.00035 U	0.00042 U	0.00048 U	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018	0.0009 U	0.00093 U	0.00095 U	0.0011 U	0.00094 U	0.001 U	0.0012 U	0.00093 U	0.0012 U	0.0011 U	0.0012 U	0.0014 U	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700		0.00052 U	0.00054 U	0.00055 U	0.00062 U	0.00054 U	0.00058 UJ	0.00068 U	0.00054 U	0.0007 U	0.00061 U	0.00072 U	0.00083 U	
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076	0.00025 U	0.00026 U	0.00026 U	0.0003 U	0.00026 U	0.00028 U	0.00033 U	0.00026 U	0.00034 U	0.0003 U	0.00035 U	0.0004 U	
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2	0.00019 U	0.0002 U	0.0002 U	0.00023 U	0.0002 U	0.00021 UJ	0.00025 U	0.0002 U	0.00025 U	0.00022 U	0.00026 U	0.0003 U	
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54	0.0011 U	0.0011 U	0.0012 U	0.0013 U	0.0011 U	0.0012 UJ	0.0014 U	0.0011 U	0.0015 U	0.0013 U	0.0015 U	0.0017 U	
1,1-Dichloropropene	563-58-6	mg/kg				0.0003 U	0.00031 U	0.00032 U	0.00036 U	0.00031 U	0.00033 UJ	0.00039 U	0.00031 U	0.0004 U	0.00035 U	0.00042 U	0.00048 U	
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40		0.0006 U	0.00062 U	0.00063 U	0.00071 U	0.00063 U	0.00067 UJ	0.00078 U	0.00062 U	0.0008 U	0.00071 U	0.00083 U	0.00095 U	
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	0.001 U	0.001 U	0.0011 U	0.0012 U	0.001 U	0.0011 U	0.0013 U	0.001 U	0.0013 U	0.0012 U	0.0014 U	0.0016 U	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	0.00042 U	0.00043 U	0.00044 U	0.0005 U	0.00044 U	0.00047 UJ	0.00055 U	0.00043 U	0.00056 U	0.0005 U	0.00058 U	0.00067 U	
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300		0.0012 U	0.0012 U	0.0013 U	0.0014 U	0.0013 U	0.0013 UJ	0.0016 U	0.0012 U	0.0016 U	0.0014 U	0.0017 U	0.0019 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	0.0016 U	0.0016 U	0.0017 U	0.0019 U	0.0017 U	0.0018 U	0.0021 U	0.0016 U	0.0021 U	0.0019 U	0.0022 U	0.0025 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	0.0002 U	0.00021 U	0.00021 U	0.00024 U	0.00021 U	0.00022 U	0.00026 U	0.00021 U	0.00027 U	0.00024 U	0.00028 U	0.00032 U	

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-04	C2BP-05	C2BP-05	C2BP-05	C2BP-06	C2BP-06	C2BP-06	C2BP-07	C2BP-07	C2BP-07	C2BP-08	C2BP-08
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/9/2022	3/9/2022	3/9/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
						Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0013 U	0.0013 U	0.0014 U	0.0015 U	0.0014 U	0.0014 UJ	0.0017 U	0.0013 U	0.0017 U	0.0015 U	0.0018 U	0.0021 U
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.0002 U	0.00021 U	0.00021 U	0.00024 U	0.00021 U	0.00022 U	0.00026 U	0.00021 U	0.00027 U	0.00024 U	0.00028 U	0.00032 U
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.0004 U	0.00041 U	0.00042 U	0.00047 U	0.00042 U	0.00045 U	0.00052 U	0.00041 U	0.00054 U	0.00047 U	0.00055 U	0.00064 U
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.00081 U	0.00083 U	0.00086 U	0.00096 U	0.00085 U	0.0009 UJ	0.0011 U	0.00083 U	0.0011 U	0.00096 U	0.0011 U	0.0013 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0011 U	0.0011 U	0.0012 U	0.0013 U	0.0011 U	0.0012 UJ	0.0014 U	0.0011 U	0.0015 U	0.0013 U	0.0015 U	0.0017 U
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00023 U	0.00024 U	0.00024 U	0.00027 U	0.00024 U	0.00026 U	0.0003 U	0.00024 U	0.00031 U	0.00027 U	0.00032 U	0.00037 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.00098 U	0.001 U	0.001 U	0.0012 U	0.001 U	0.0011 UJ	0.0013 U	0.001 U	0.0013 U	0.0012 U	0.0014 U	0.0016 U
2,2-Dichloropropane	594-20-7	mg/kg					0.00033 U	0.00034 U	0.00035 U	0.00039 U	0.00034 U	0.00037 U	0.00043 U	0.00034 U	0.00044 U	0.00039 U	0.00046 U	0.00052 U
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.0089 U	0.0092 U	0.0094 U	0.011 U	0.0093 U	0.0099 U	0.012 U	0.0092 U	0.012 U	0.011 U	0.012 U	0.014 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.00093 U	0.00096 U	0.00098 U	0.0011 U	0.00097 U	0.001 UJ	0.0012 U	0.00096 U	0.0012 U	0.0011 U	0.0013 U	0.0015 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0039 U	0.004 U	0.0041 U	0.0046 U	0.0041 U	0.0043 UJ	0.0051 U	0.004 U	0.0052 U	0.0046 U	0.0054 U	0.0062 U
4-Chlorotoluene	106-43-4	mg/kg		440			0.001 U	0.001 U	0.0011 U	0.0012 U	0.001 U	0.0011 UJ	0.0013 U	0.001 U	0.0013 U	0.0012 U	0.0014 U	0.0016 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.006 U	0.0062 U	0.0063 U	0.0071 U	0.0063 U	0.0067 U	0.0078 U	0.0062 U	0.008 U	0.0071 U	0.0083 U	0.0095 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.0087 U	0.0089 U	0.0091 U	0.01 U	0.009 U	0.0096 U	0.011 U	0.039 J	0.012 U	0.01 U	0.012 U	0.014 U
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00039 U	0.0004 U	0.00041 U	0.00046 U	0.00041 U	0.00043 UJ	0.00051 U	0.0004 U	0.00052 U	0.00046 U	0.00054 U	0.00062 U
Bromobenzene	108-86-1	mg/kg		290			0.001 U	0.001 U	0.0011 U	0.0012 U	0.001 U	0.0011 UJ	0.0013 U	0.001 U	0.0013 U	0.0012 U	0.0014 U	0.0016 U
Bromochloromethane	74-97-5	mg/kg		150			0.00025 U	0.00026 U	0.00026 U	0.0003 U	0.00026 U	0.00028 U	0.00033 U	0.00026 U	0.00034 U	0.0003 U	0.00035 U	0.0004 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00018 U	0.00019 U	0.00019 U	0.00021 U	0.00019 U	0.0002 U	0.00023 U	0.00019 U	0.00024 U	0.00021 U	0.00025 U	0.00029 U
Bromoform	75-25-2	mg/kg		19	0.69		0.00084 U	0.00086 U	0.00089 U	0.001 U	0.00088 U	0.00093 U	0.0011 U	0.00086 U	0.0011 U	0.00099 U	0.0012 U	0.0013 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00021 U	0.00022 U	0.00022 U	0.00025 U	0.00022 U	0.00023 U	0.00027 U	0.00022 U	0.00028 U	0.00025 U	0.00029 U	0.00033 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.0002 U	0.00021 U	0.00021 U	0.00024 U	0.00021 U	0.00022 UJ	0.00026 U	0.00021 U	0.00027 U	0.00024 U	0.00028 U	0.00032 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.0003 U	0.00031 U	0.00032 U	0.00036 U	0.00031 U	0.00033 U	0.00039 U	0.00031 U	0.0004 U	0.00035 U	0.00042 U	0.00048 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.00025 U	0.00026 U	0.00026 U	0.0003 U	0.00026 U	0.00028 UJ	0.00033 U	0.00026 U	0.00034 U	0.0003 U	0.00035 U	0.0004 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00027 U	0.00028 U	0.00029 U	0.00032 U	0.00028 U	0.0003 U	0.00035 U	0.00028 U	0.00036 U	0.00032 U	0.00037 U	0.00043 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.00075 U	0.00077 U	0.00079 U	0.00089 U	0.00078 U	0.00083 U	0.00098 U	0.00077 U	0.001 U	0.00089 U	0.001 U	0.0012 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.0003 U	0.00031 U	0.00032 U	0.00036 U	0.00031 U	0.00033 U	0.00039 U	0.00031 U	0.0004 U	0.00035 U	0.00042 U	0.00048 U
Chloromethane	74-87-3	mg/kg		110	11		0.00093 U	0.00096 U	0.00098 U	0.0011 U	0.00097 U	0.001 U	0.0012 U	0.00096 U	0.0012 U	0.0011 U	0.0013 U	0.0015 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.0006 U	0.00062 U	0.00063 U	0.00071 U	0.00063 U	0.00067 U	0.00078 U	0.00062 U	0.0008 U	0.00071 U	0.00083 U	0.00095 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.0002 U	0.00021 U	0.00021 U	0.00024 U	0.00021 U	0.00022 UJ	0.00026 U	0.00021 U	0.00027 U	0.00024 U	0.00028 U	0.00032 U
Dibromomethane	74-95-3	mg/kg		24			0.00017 U	0.00017 U	0.00018 U	0.0002 U	0.00018 U	0.00019 U	0.00022 U	0.00017 U	0.00023 U	0.0002 U	0.00024 U	0.00027 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00049 U	0.0005 U	0.00052 U	0.00058 U	0.00051 U	0.00055 U	0.00064 U	0.0005 U	0.00066 U	0.00058 U	0.00068 U	0.00078 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.0099 U	0.01 U	0.01 U	0.012 U	0.01 U	0.011 U	0.013 U	0.01 U	0.013 U	0.012 U	0.014 U	0.016 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00041 U	0.0063 J	0.00043 U	0.00049 U	0.00043 U	0.00046 UJ	0.00053 U	0.00042 U	0.00055 U	0.00048 U	0.00057 U	0.00065 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0006 U	0.00062 U	0.00063 U	0.00071 U	0.00063 U	0.00067 UJ	0.00078 U	0.00062 U	0.0008 U	0.00071 U	0.00083 U	0.00095 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00046 U	0.00047 U	0.00049 U	0.00055 U	0.00048 U	0.00051 UJ	0.0006 U	0.00047 U	0.00062 U	0.00054 U	0.00064 U	0.00073 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.0003 U	0.00031 U	0.00032 U	0.00036 U	0.00031 U	0.00033 U	0.00039 U	0.00031 U	0.0004 U	0.00035 U	0.00042 U	0.00048 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0018 U	0.0019 U	0.0019 U	0.0021 U	0.0019 U	0.002 UJ	0.0023 U	0.0019 U	0.0024 U	0.0021 U	0.0025 U	0.0029 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.00063 U	0.00065 U	0.00067 U	0.00075 U	0.00066 U	0.0007 UJ	0.00082 U	0.00065 U	0.00084 U	0.00074 U	0.00087 U	0.001 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.00076 U	0.00078 U	0.0008 U	0.0009 U	0.00079 U	0.00085 UJ	0.00099 U	0.00078 U	0.001 U	0.0009 U	0.0011 U	0.0012 U
p-Isopropyltoluene	99-87-6	mg/kg					0.0004 U	0.00041 U	0.00042 U	0.00047 U	0.00042 U	0.00045 UJ	0.00052 U	0.00041 U	0.00054 U	0.00047 U	0.00055 U	0.00064 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.00067 U	0.00069 U	0.00071 U	0.00079 U	0.0007 U	0.00075 UJ	0.00087 U	0.00069 U	0.0009 U	0.00079 U	0.00093 U	0.0011 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.00074 U	0.00076 U	0.00078 U	0.00088 U	0.00077 U	0.00082 UJ	0.00096 U	0.00076 U	0.00099 U	0.00087 U	0.001 U	0.0012 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00066 U	0.00068 U	0.0007 U	0.00078 U	0.00069 U	0.00073 UJ	0.00086 U	0.00068 U	0.00088 U	0.00078 U	0.00091 U	0.001 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.0004 U	0.00041 U	0.00042 U	0.00047 U	0.00042 U	0.00045 UJ	0.00052 U	0.00041 U	0.00054 U	0.00047 U	0.00055 U	0.00064 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0013 U	0.0074 J	0.0014 U	0.0015 U	0.0014 U	0.0014 UJ	0.0017 U	0.0013 U	0.0017 U	0.0015 U	0.0018 U	0.0021 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.0004 U	0.00041 U	0.00042 U	0.00047 U	0.00042 U	0.00045 U	0.00052 U	0.00041 U	0.00054 U	0.00047 U	0.00055 U	0.00064 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.0006 U	0.00062 U	0.00063 U	0.00071 U	0.00063 U	0.00067 UJ	0.00078 U	0.00062 U	0.0008 U	0.00071 U	0.00083 U	0.00095 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.0003 U	0.00031 U	0.00032 U	0.00036 U	0.00031 U	0.00033 UJ	0.00039 U	0.00031 U	0.0004 U	0.00035 U	0.00042 U	0.00048 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.0003 U	0.00031 U	0.00032 U	0.00036 U	0.00031 U	0.00033 UJ	0.00039 U	0.00031 U	0.0004 U	0.00035 U	0.00042 U	0.00048 U
Vinyl Acetate	108-05-4	mg/kg		910			0.0015 U	0.0015 U	0.0016 U	0.0018 U	0.0016 U	0.0017 UJ	0.002 U	0.0015 U	0.002 U	0.0018 U	0.0021 U	0.0024 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.0003 U	0.00031 U	0.00032 U	0.00036 U	0.00031 U	0.00033 U	0.00039 U	0.00031 U	0.0004 U	0.00035 U	0.00042 U	0.00048 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-04	C2BP-05	C2BP-05	C2BP-05	C2BP-06	C2BP-06	C2BP-06	C2BP-07	C2BP-07	C2BP-07	C2BP-08	C2BP-08
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/9/2022	3/9/2022	3/9/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
						Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N
Xylene, o	95-47-6	mg/kg	1.4	650			0.00092 U	0.016 J	0.00097 U	0.0011 U	0.00096 U	0.001 UJ	0.0012 U	0.00095 U	0.0012 U	0.0011 U	0.0013 U	0.0015 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00056 U	0.0093 J	0.00059 U	0.00066 U	0.00058 U	0.00062 UJ	0.00073 U	0.00058 U	0.00075 U	0.00066 U	0.00078 U	0.00089 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.00092 U	0.025 J	0.00097 U	0.0011 U	0.00096 U	0.001 UJ	0.0012 U	0.00095 U	0.0012 U	0.0011 U	0.0013 U	0.0015 U
SW8270C																		
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00071 U	0.0041 U	0.00078 U	0.00067 U	0.035 UJ	0.00071 U	0.00069 U	0.0021 U	0.00079 U	0.00072 U	0.0042 J	0.024
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.00059 U	0.0034 U	0.00065 U	0.00056 U	0.029 UJ	0.00059 U	0.00058 U	0.0018 U	0.00066 U	0.0006 U	0.0033 J	0.064 J
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.00057 U	0.0032 U	0.00062 U	0.00054 U	0.028 UJ	0.00057 U	0.00055 U	0.0017 U	0.00063 U	0.00058 U	0.0037 J	0.082 J
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.00098 U	0.0056 U	0.0011 U	0.00093 U	0.049 UJ	0.00098 U	0.00096 U	0.0029 U	0.0011 U	0.001 U	0.0025 J	0.037 J
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.00059 U	0.019 J	0.00065 U	0.00056 U	0.12 J	0.00059 U	0.00058 U	0.0018 U	0.00066 U	0.0006 U	0.026	0.058 J
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9		0.00096 U	0.0055 U	0.0011 U	0.00091 U	--	0.00096 U	0.00093 U	0.0029 U	0.0011 U	0.00097 U	0.00093 UJ	0.00097 UJ
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04		0.0015 UJ	0.0088 UJ	0.0017 UJ	0.0015 UJ	--	0.0015 U	0.0015 U	0.0046 UJ	0.0017 UJ	0.0016 UJ	0.0015 UJ	0.0016 UJ
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.0033 U	0.019 U	0.0036 U	0.0031 U	0.16 U	0.0033 U	0.0032 U	0.0099 U	0.0037 U	0.0034 U	0.0032 UJ	0.0034 UJ
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.0071 U	0.041 U	0.0078 U	0.0067 U	0.35 U	0.0071 U	0.0069 U	0.021 U	0.0079 U	0.0072 U	0.0069 UJ	0.0072 UJ
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.069 U	0.4 U	0.076 U	0.066 U	--	0.069 U	0.067 U	0.21 U	0.077 U	0.07 U	0.067 UJ	0.07 UJ
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.0051 U	0.029 U	0.0056 U	0.0048 U	0.25 UJ	0.0051 U	0.005 U	0.015 U	0.0057 U	0.0052 U	0.0049 U	0.0052 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.0018 U	0.01 U	0.0019 U	0.0017 U	0.088 UJ	0.0018 U	0.0017 U	0.0053 U	0.002 U	0.0018 U	0.0017 U	0.0018 U
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.00059 U	0.0034 U	0.00065 U	0.00056 U	0.029 UJ	0.00059 U	0.00058 U	0.0018 U	0.00066 U	0.0006 U	0.00057 U	0.0065 J
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.00047 U	0.0027 U	0.00052 U	0.00045 U	0.023 U	0.00047 U	0.00046 U	0.0014 U	0.00053 U	0.00048 U	0.00046 UJ	0.00048 UJ
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.001 U	0.018 J	0.0011 U	0.00099 U	0.16 J	0.001 U	0.001 U	0.0031 U	0.0012 U	0.0011 U	0.0039	0.082 J
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.0012 U	0.0066 U	0.0013 U	0.0011 U	0.057 U	0.0012 U	0.0011 U	0.0035 U	0.0013 U	0.0012 U	0.0011 UJ	0.0012 UJ
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.0018 U	0.01 U	0.0019 U	0.0017 U	0.088 UJ	0.0018 U	0.0017 U	0.0053 U	0.002 U	0.0018 U	0.0017 U	0.0018 U
2-Nitrophenol	88-75-5	mg/kg					0.00074 U	0.0042 U	0.0008 U	0.0007 U	0.036 U	0.00073 U	0.00071 U	0.0022 U	0.00082 U	0.00075 U	0.00071 UJ	0.00074 UJ
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0018 U	0.01 U	0.0019 U	0.0017 U	0.088 U	0.0018 U	0.0017 U	0.0053 U	0.002 U	0.0018 U	0.024 J	0.026 J
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.01 U	0.47 U	0.011 U	0.0094 U	0.49 UJ	0.0099 U	0.0097 U	0.03 U	0.011 U	0.01 U	0.0096 U	0.01 U
3-Nitroaniline	99-09-2	mg/kg					0.012 U	0.068 U	0.013 U	0.011 U	0.59 UJ	0.012 U	0.012 U	0.035 U	0.013 U	0.012 U	0.011 U	0.012 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.012 U	0.56 U	0.013 U	0.011 U	--	0.012 U	0.012 U	0.035 U	0.013 U	0.012 U	0.011 UJ	0.012 UJ
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.0011 U	0.051 U	0.0012 U	0.001 U	0.053 UJ	0.0011 U	0.001 U	0.0032 U	0.0012 U	0.0011 U	0.001 U	0.0011 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0039 U	0.022 U	0.0043 U	0.0037 U	--	0.0039 U	0.0038 U	0.012 U	0.0044 U	0.004 U	0.0038 UJ	0.004 UJ
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.016 U	0.091 U	0.017 U	0.015 U	0.79 UJ	0.016 U	0.015 U	0.047 U	0.018 U	0.016 U	0.015 U	0.016 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.00075 U	0.0043 U	0.00082 U	0.00071 U	0.037 UJ	0.00074 U	0.00073 U	0.0022 U	0.00083 U	0.00076 U	0.00072 U	0.00076 U
4-Nitroaniline	100-01-6	mg/kg		27			0.0059 U	0.034 U	0.0065 U	0.0056 U	0.29 UJ	0.0059 U	0.0058 U	0.018 U	0.0066 U	0.006 U	0.0057 U	0.006 U
4-Nitrophenol	100-02-7	mg/kg					0.02 U	0.12 U	0.022 U	0.019 U	--	0.02 U	0.02 U	0.061 U	0.023 U	0.021 U	0.02 UJ	0.021 UJ
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00055 U	0.0031 U	0.0006 U	0.00052 U	0.56	0.00054 U	0.00053 U	0.0016 U	0.00061 U	0.00055 U	0.0026 J	0.00055 U
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.00059 U	0.0034 U	0.00065 U	0.00056 U	0.029 U	0.00059 U	0.00058 U	0.0018 U	0.00066 U	0.0006 U	0.015	0.15 J
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0019 U	0.09 U	0.0021 U	0.0018 U	0.61	0.0019 U	0.0018 U	0.0057 U	0.0021 U	0.0019 U	0.017	0.028
Azobenzene	103-33-3	mg/kg		5.6			0.00059 U	0.028 U	0.00065 U	0.00056 U	0.029 UJ	0.00059 U	0.00058 U	0.0018 U	0.00066 U	0.0014 U	0.019 J	0.0006 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0013 U	0.062 U	0.0014 U	0.0012 U	20	0.0013 U	0.0013 U	0.013 J	0.0015 U	0.0013 U	0.012	0.021
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0015 U	0.0088 U	0.0017 U	0.0015 U	35	0.0015 U	0.01	0.024 J	0.0017 U	0.0016 U	0.0072 J	0.039 J
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.0012 U	0.0068 U	0.0013 U	0.0011 U	32	0.0012 U	0.042	0.025	0.0013 U	0.0012 U	0.015	0.047 J
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0021 U	0.012 U	0.0023 U	0.002 U	19	0.0021 U	0.0077	0.0064 U	0.0024 U	0.0022 U	0.0071	0.026
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0017 U	0.0095 U	0.0018 U	0.0016 U	0.082 U	0.0017 U	0.015	0.0049 U	0.0018 U	0.0017 U	0.0064 J	0.019
Benzoic Acid	65-85-0	mg/kg	0.01	250000			--	--	--	--	7.1 U	--	0.14 U	--	--	--	0.14 UJ	0.15 UJ
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0059 UJ	0.034 UJ	0.0065 UJ	0.0056 UJ	0.29 UJ	0.0059 UJ	0.0058 U	0.018 UJ	0.0066 UJ	0.006 UJ	0.0057 U	0.006 U
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051		0.00072 U	0.0041 U	0.00079 U	0.00068 U	0.036 UJ	0.00072 U	0.0007 U	0.0022 U	0.00081 U	0.00073 U	0.0007 U	0.00073 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0021 U	0.012 U	0.0023 U	0.002 U	0.11 UJ	0.0021 U	0.0021 U	0.0064 U	0.0024 U	0.0022 U	0.0021 U	0.0022 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.00091 U	0.0052 U	0.001 U	0.00086 U	0.045 UJ	0.00091 U	0.00089 U	0.0027 U	0.001 U	0.00093 U	0.00088 U	0.00092 U
Bis (2-ethylhexyl) phtalate	117-81-7	mg/kg	0.02	39	190		0.012 U	24	0.12 U	0.4 U	0.42 UJ	0.036 U	0.016 U	0.025 U	0.02 U	0.017 U	0.048 U	0.055 U
Butyl benzyl phtalate	85-68-7	mg/kg	90	290			0.0071 U	4.8 U	0.0066 U	0.049 U	0.3 UJ	0.006 U	0.0066 U	0.018 U	0.013 U	0.0078 U	0.0099 J	0.0061 U
Carbazole	86-74-8	mg/kg	79				0.00087 U	0.041 U	0.00095 U	0.00082 U	0.34 J	0.00086 U	0.0022 J	0.0026 U	0.00096 U	0.00088 U	0.0095 J	0.0076 J
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0015 U	0.073 U	0.0017 U	0.0015 U	23	0.0015 U	0.033	0.0095 J	0.0017 U	0.0016 U	0.023	0.033
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0014 U	0.0081 U	0.0016 U	0.0013 U	2.1 J	0.0014 U	0.0034 J	0.0042 U	0.0016 U	0.0014 U	0.0014 U	0.0014 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-04	C2BP-05	C2BP-05	C2BP-05	C2BP-06	C2BP-06	C2BP-06	C2BP-07	C2BP-07	C2BP-07	C2BP-08	C2BP-08
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/9/2022	3/9/2022	3/9/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
						Depth Interval	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.0007 U	0.004 U	0.00077 U	0.00066 U	0.15 J	0.0007 U	0.00068 U	0.0021 U	0.00078 U	0.00071 U	0.11	0.13
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.0056 J	0.015 U	0.0031 J	0.0071 J	0.13 UJ	0.0041 J	0.0041 J	0.027 J	0.0041 J	0.0057 J	0.0025 U	0.0026 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00059 U	0.0034 U	0.00065 U	0.00056 U	0.029 UJ	0.00059 U	0.00058 U	0.0018 U	0.00066 U	0.0006 U	0.00057 U	0.0006 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.0032 U	0.15 U	0.0035 U	0.003 U	0.16 UJ	0.0049 U	0.0031 U	0.0095 U	0.0036 U	0.0033 U	0.011 U	0.014 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0014 U	0.0081 U	0.0016 U	0.0013 U	0.07 UJ	0.0014 U	0.0014 U	0.0042 U	0.0016 U	0.0014 U	0.0014 U	0.0014 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0014 U	0.068 U	0.0016 U	0.0013 U	8.3	0.0014 U	0.026	0.0062 J	0.0016 U	0.0014 U	0.0014 U	0.0014 U
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.00059 U	0.0034 U	0.00065 U	0.00056 U	0.2	0.00059 U	0.00058 U	0.0018 U	0.00066 U	0.0006 U	0.0067	0.016
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0018 U	0.085 U	0.0019 U	0.0017 U	0.088 UJ	0.0018 U	0.0017 U	0.0053 U	0.002 U	0.0018 U	0.0017 U	0.0018 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0018 U	0.01 U	0.0019 U	0.0017 U	0.088 UJ	0.0018 U	0.0017 U	0.0053 U	0.002 U	0.0018 U	0.0017 U	0.0018 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.00091 U	0.0052 U	0.001 U	0.00086 U	0.045 UJ	0.00091 UJ	0.00089 U	0.0027 U	0.001 U	0.00093 U	0.00088 U	0.00092 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.00051 U	0.0029 U	0.00056 U	0.00048 U	0.025 UJ	0.00051 U	0.0005 U	0.0015 U	0.00057 U	0.00052 U	0.00049 U	0.00052 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.0014 U	0.0081 U	0.0016 U	0.0013 U	25	0.0014 U	0.011	0.017	0.0016 U	0.0014 U	0.0066	0.031 J
Isophorone	78-59-1	mg/kg		570			0.001 U	0.0057 U	0.0011 U	0.00094 U	0.049 UJ	0.00099 U	0.00097 U	0.003 U	0.0011 U	0.001 U	0.00096 U	0.001 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.00059 U	0.0034 U	0.00065 U	0.00056 U	0.85	0.00059 U	0.00058 U	0.0018 U	0.00066 U	0.0006 U	0.16	0.42 J
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.0024 U	0.014 U	0.0026 U	0.0022 U	0.12 UJ	0.0024 U	0.0023 U	0.0071 U	0.0026 U	0.0024 U	0.0023 U	0.0024 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.0026 U	0.015 U	0.0029 U	0.0025 U	0.13 UJ	0.0026 U	0.0025 U	0.0078 U	0.0029 U	0.0026 U	0.0025 U	0.0026 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.00095 U	0.45	0.001 U	0.0009 U	0.047 UJ	0.00094 UJ	0.00092 U	0.0028 U	0.0011 U	0.00096 U	0.00092 U	0.00096 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		0.0075 UJ	0.36 UJ	0.0082 UJ	0.0071 UJ	--	0.0074 U	0.0073 U	0.022 UJ	0.0083 UJ	0.0076 UJ	0.026 J	0.0076 UJ
Phenanthrene	85-01-8	mg/kg	5.5		11		0.00069 U	0.033 U	0.00075 U	0.0026 J	1.9	0.00068 U	0.0041 J	0.0021 U	0.00077 U	0.0007 U	0.12	0.23 J
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.0027 U	0.016 U	0.003 U	0.0026 U	0.13 U	0.0027 U	0.0027 U	0.0081 U	0.003 U	0.0028 U	0.011 J	0.036 J
Pyrene	129-00-0	mg/kg	10	1800	45		0.0015 U	0.073 U	0.0017 U	0.0015 U	14	0.0015 U	0.024	0.0066 J	0.0017 U	0.0016 U	0.039	0.066
Pyridine	110-86-1	mg/kg		58			0.019 U	0.11 U	0.021 U	0.018 U	0.93 U	--	0.018 U	0.056 U	0.021 U	0.019 U	0.018 U	0.022 J
SW8270SIM																		
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.00062 U	0.011	0.00069 U	0.00063 U	--	--	--	0.0011 J	0.0033 J	0.00065 U	--	--
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.002 U	0.0076	0.0022 U	0.002 U	--	--	--	0.0022 U	0.0032 J	0.0021 U	--	--
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.0006 U	0.00062 U	0.00066 U	0.0006 U	--	--	--	0.0011 J	0.00072 U	0.00062 U	--	--
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.0005 U	0.00052 U	0.00055 U	0.0005 U	--	--	--	0.00054 U	0.0006 U	0.00052 U	--	--
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0006 U	0.00062 U	0.00066 U	0.0006 U	--	--	--	0.0009 J	0.00072 U	0.00062 U	--	--
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0018 U	0.0018 U	0.002 U	0.0018 U	--	--	--	0.0019 U	0.0021 U	0.0031 U	--	--
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.00083 U	0.00087 U	0.00092 U	0.00084 U	--	--	--	0.0009 U	0.001 U	0.0067 U	--	--
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.0012 U	0.0012 U	0.0013 U	0.0012 U	--	--	--	0.0012 U	0.0014 U	0.0074 U	--	--
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0005 U	0.00052 U	0.00055 U	0.0005 U	--	--	--	0.00054 U	0.0006 U	0.0041 U	--	--
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0006 U	0.00062 U	0.00066 U	0.0006 U	--	--	--	0.00064 U	0.00072 U	0.0028 J	--	--
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0015 U	0.0015 U	0.0016 U	0.0015 U	--	--	--	0.0027 U	0.0018 U	0.0041 U	--	--
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.00071 U	0.00074 U	0.00079 U	0.00072 U	--	--	--	0.00077 U	0.00086 U	0.00074 U	--	--
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0014 U	0.0014 U	0.0015 U	0.0014 U	--	--	--	0.0029 U	0.0017 U	0.0027 U	--	--
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.0005 U	0.00052 U	0.00055 U	0.0005 U	--	--	--	0.00054 U	0.0006 U	0.00052 U	--	--
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.0006 U	0.00062 U	0.00066 U	0.0006 U	--	--	--	0.00064 U	0.00072 U	0.0059 U	--	--
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0016 U	0.0017 U	0.0018 U	0.0016 U	--	--	--	0.0059	0.008	0.0017 U	--	--
Phenanthrene	85-01-8	mg/kg	5.5		11		0.0016 U	0.0017 U	0.0018 U	0.0016 U	--	--	--	0.004 J	0.0019 U	0.0017 U	--	--
Pyrene	129-00-0	mg/kg	10	1800	45		0.00096 U	0.001 U	0.0011 U	0.00097 U	--	--	--	0.0041 U	0.0012 U	0.0037 U	--	--
SW8290																		
1,2,3,4,6,7,8-HpCDD	35822-46-9	mg/kg	2.9E-05	0.00048			--	--	--	--	--	--	--	--	--	--	0.00019	0.00039 J
1,2,3,4,6,7,8-HpCDF	67562-39-4	mg/kg	2.9E-05	0.00048			--	--	--	--	--	--	--	--	--	--	4E-05 UJ	6.1E-05 UJ
1,2,3,4,7,8,9-HpCDF	55673-89-7	mg/kg	2.9E-05	0.00048			--	--	--	--	--	--	--	--	--	--	2.3E-06 J	4.3E-06 J
1,2,3,4,7,8-HxCDD	39227-28-6	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--	--	--	4.6E-06 U	1.2E-05
1,2,3,4,7,8-HxCDF	70648-26-9	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--	--	--	7.2E-06	1.9E-05
1,2,3,6,7,8-HxCDD	57653-85-7	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--	--	--	1.1E-05	3E-05
1,2,3,6,7,8-HxCDF	57117-44-9	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--	--	--	7.4E-06	1.6E-05
1,2,3,7,8,9-HxCDD	19408-74-3	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--	--	--	1E-05	3.1E-05 J
1,2,3,7,8,9-HxCDF	72918-21-9	mg/kg	2.9E-06	4.8E-05			--	--	--	--	--	--	--	--	--	--	5.6E-07 U	1.1E-06 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location		C2BP-04	C2BP-05	C2BP-05	C2BP-05	C2BP-06	C2BP-06	C2BP-06	C2BP-07	C2BP-07	C2BP-07	C2BP-08	C2BP-08
						Sample Date	Depth Interval	Sample Type	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/9/2022	3/9/2022	3/9/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
								2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	1 - 1.5
								N	N	N	N	N	N	N	N	N	N	N	N
1,2,3,7,8-PeCDD	40321-76-4	mg/kg	2.9E-07	4.8E-06		--	--	--	--	--	--	--	--	--	--	--	--	4.2E-06 J	1.9E-05
1,2,3,7,8-PeCDF	57117-41-6	mg/kg	9.7E-06	0.00016		--	--	--	--	--	--	--	--	--	--	--	--	6E-06	2E-05
2,3,4,6,7,8-HxCDF	60851-34-5	mg/kg	2.9E-06	4.8E-05		--	--	--	--	--	--	--	--	--	--	--	--	8.7E-06	1.7E-05
2,3,4,7,8-PeCDF	57117-31-4	mg/kg	9.7E-07	1.6E-05		--	--	--	--	--	--	--	--	--	--	--	--	8.2E-06	2.5E-05
2,3,7,8-TCDD	1746-01-6	mg/kg	2.9E-07	4.8E-06	0.3	--	--	--	--	--	--	--	--	--	--	--	--	2.1E-06	1E-05
2,3,7,8-TCDF	51207-31-9	mg/kg	2.9E-06	4.8E-05		--	--	--	--	--	--	--	--	--	--	--	--	1.1E-05	4.2E-05
OCDD	3268-87-9	mg/kg	0.00097	0.016		--	--	--	--	--	--	--	--	--	--	--	--	0.00068	0.0013 J
OCDF	39001-02-0	mg/kg	0.00097	0.016		--	--	--	--	--	--	--	--	--	--	--	--	4E-05	7.4E-05 J

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-08	C2BP-08	C2BP-08	C2BP-09	C2BP-09	C2BP-09	C2BP-09	C2BP-10	C2BP-10	C2BP-10	C2BP-10
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
						Depth Interval	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	0 - 0.5	1 - 1.5	3 - 3.5
						Sample Type	FD	N	N	N	N	N	N	N	FD	N	N
CALC																	
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	mg/kg					0.00011444	1.2399E-05	8.4729E-06	7.51E-08	1.66E-08	5.64E-08	4.76E-08	2.2753E-06	3.6849E-06	1.266E-07	7.2E-09
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	mg/kg					0.000114724	1.1652E-05	5.0516E-06	4.956E-07	1.338E-07	1.573E-07	3.877E-07	3.3753E-06	5.3801E-06	3.049E-07	5.66E-08
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0.002803	0.0003668	0.010478	0 U	0 U	0 U	0 U	0.003055	0.000794	0 U	0 U
CATFH																	
Gasoline Range Organics	GRO	mg/kg		430	1100	--	--	--	--	--	--	--	--	--	--	--	--
SW6010B																	
Boron	7440-42-8	mg/kg	2	16000			29 J	23 J	19 J	4.4 J	2.7 U	2.6 U	2.8 U	5.2 J	7.9 J	2.9 J	2.6 U
SW6020																	
Antimony	7440-36-0	mg/kg	0.67	31			2.6 J	0.96	0.57	0.13 J	0.11 J	0.14 J	0.13 J	0.15 J	0.2 J	0.15 J	0.14 J
Arsenic	7440-38-2	mg/kg	19	19			110 J	45	21	2.5	2.8	3.1	3.2	5.1 J	7.2 J	3.7	3.5
Barium	7440-39-3	mg/kg	630	15000			250 J	190	190	210	170	180	170	170	180	170	160
Beryllium	7440-41-7	mg/kg	2.5	16			0.33	0.28	0.38	0.42	0.56	0.59	0.48	0.34	0.36	0.42	0.46
Cadmium	7440-43-9	mg/kg	0.54	71			1.5	0.37 J	0.66	0.2 J	0.15 J	0.16 J	0.16 J	0.19 J	0.21 J	0.19 J	0.16 J
Chromium	7440-47-3	mg/kg	200	120000			72 J	46	34	27	38	36	34	23	23	26	31
Cobalt	7440-48-4	mg/kg	13	23			14 J	15	14	24	19	20	20	18	18	18	18
Copper	7440-50-8	mg/kg	73	3100			180 J	97	53	26	30	27	27	24 J	30 J	25	23
Iron	7439-89-6	mg/kg		55000			50000 J	29000	38000	37000	46000	44000	45000	33000	34000	34000	38000
Lead	7439-92-1	mg/kg	34	80			48 J	38	99	6.4	5.3	5.6	5.3	6.8 J	9.4 J	9.6	4.9
Manganese	7439-96-5	mg/kg	2100	2100			1300 J	1300	1100	1400	1000	1100	1000	1300	1200	1200	950
Molybdenum	7439-98-7	mg/kg	2	390			1.4 J	0.79	0.82	0.36	0.23 J	0.25	0.27	0.55	0.64	0.38	0.32
Nickel	7440-02-0	mg/kg	110	820			19 J	17	15	16	19	22	22	13	13	14	16
Selenium	7782-49-2	mg/kg	0.52	390			1.7	2.3	2.9	2.8	2.6	2.7	2.6	2.4	2.3	2.5	2.2
Silver	7440-22-4	mg/kg	4.2	390			0.058 J	0.031 J	0.026 J	0.02 J	0.049 J	0.046 J	0.039 J	0.021 J	0.018 J	0.02 J	0.028 J
Thallium	7440-28-0	mg/kg	2.8	2.8			0.077 J	0.08 J	0.092 J	0.14 J	0.14 J	0.14 J	0.14 J	0.1 J	0.11 J	0.1 J	0.12 J
Vanadium	7440-62-2	mg/kg	280	390			96 J	100	120	120	120	110	110	100	110	110	110
Zinc	7440-66-6	mg/kg	170	23000			420 J	250	180	58	55	51	50	70	73	63	48
SW7471A																	
Mercury	7439-97-6	mg/kg	0.24	1			0.01 U	0.0096 U	0.0089 U	0.01 U	0.011 U	0.011 U	0.0098 U	0.014 J	0.01 U	0.0098 U	0.01 U
SW8011																	
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		7.2E-05 UJ	7.7E-05 UJ	7.4E-05 UJ	7.5E-05 UJ	8.5E-05 UJ	8.5E-05 UJ	8.3E-05 UJ	7.2E-05 UJ	7.7E-05 UJ	7.7E-05 UJ	8.3E-05 UJ
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		1.1E-05 UJ	1.2E-05 UJ	1.1E-05 UJ	1.1E-05 UJ	1.5E-05 J	1.3E-05 UJ	1.3E-05 UJ	1.1E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.3E-05 UJ
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		1.3E-05 UJ	1.4E-05 UJ	1.3E-05 UJ	1.4E-05 UJ	1.6E-05 UJ	1.6E-05 UJ	1.5E-05 UJ	1.3E-05 UJ	1.4E-05 UJ	1.4E-05 UJ	1.5E-05 UJ
SW8015-E																	
Diesel Range Organics	DRO	mg/kg		260	1100	--	--	--	--	--	--	--	--	--	--	--	--
Extended Range Organics	ERO	mg/kg		12000			--	--	--	--	--	--	--	--	--	--	--
SW8260B																	
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017		0.00093 U	0.00083 U	0.00066 U	0.00059 U	0.00072 U	0.00072 U	0.00082 U	0.00069 U	0.00068 U	0.00064 U	0.00065 U
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7		0.00047 U	0.00042 U	0.00034 U	0.0003 U	0.00037 U	0.00037 U	0.00042 U	0.00035 U	0.00034 U	0.00032 U	0.00033 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018		0.0014 U	0.0013 U	0.001 U	0.00091 U	0.0011 U	0.0011 U	0.0013 U	0.001 U	0.001 U	0.00097 U	0.00099 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700			0.00082 U	0.00073 U	0.00059 U	0.00052 U	0.00063 U	0.00064 U	0.00072 U	0.00061 U	0.0006 U	0.00056 U	0.00057 U
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076		0.0004 U	0.00035 U	0.00028 U	0.00025 U	0.00031 U	0.00031 U	0.00035 U	0.00029 U	0.00029 U	0.00027 U	0.00027 U
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2		0.0003 U	0.00027 U	0.00021 U	0.00019 U	0.00023 U	0.00023 U	0.00026 U	0.00022 U	0.00022 U	0.00021 U	0.00021 U
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54		0.0017 U	0.0015 U	0.0012 U	0.0011 U	0.0013 U	0.0013 U	0.0015 U	0.0013 U	0.0013 U	0.0012 U	0.0012 U
1,1-Dichloropropene	563-58-6	mg/kg					0.00047 U	0.00042 U	0.00034 U	0.0003 U	0.00037 U	0.00037 U	0.00042 U	0.00035 U	0.00034 U	0.00032 U	0.00033 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40			0.00095 U	0.00084 U	0.00068 U	0.0006 U	0.00073 U	0.00074 U	0.00083 U	0.0007 U	0.00069 U	0.00065 U	0.00066 U
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		0.0016 U	0.0014 U	0.0011 U	0.001 U	0.0012 U	0.0012 U	0.0014 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00066 U	0.00059 U	0.00047 U	0.00042 U	0.00051 U	0.00051 U	0.00058 U	0.00049 U	0.00048 U	0.00045 U	0.00046 U
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300			0.0019 U	0.0017 U	0.0014 U	0.0012 U	0.0015 U	0.0015 U	0.0017 U	0.0014 U	0.0014 U	0.0013 U	0.0013 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		0.0025 U	0.0022 U	0.0018 U	0.0016 U	0.002 U	0.002 U	0.0022 U	0.0019 U	0.0018 U	0.0017 U	0.0018 U
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		0.00032 U	0.00028 U	0.00023 U	0.0002 U	0.00024 U	0.00025 U	0.00028 U	0.00023 U	0.00023 U	0.00022 U	0.00022 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-08	C2BP-08	C2BP-08	C2BP-09	C2BP-09	C2BP-09	C2BP-09	C2BP-10	C2BP-10	C2BP-10	C2BP-10
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
						Depth Interval	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	0 - 0.5	1 - 1.5	3 - 3.5
						Sample Type	FD	N	N	N	N	N	N	N	FD	N	N
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0021 U	0.0018 U	0.0015 U	0.0013 U	0.0016 U	0.0016 U	0.0018 U	0.0015 U	0.0015 U	0.0014 U	0.0014 U
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.00032 U	0.00028 U	0.00023 U	0.0002 U	0.00024 U	0.00025 U	0.00028 U	0.00023 U	0.00023 U	0.00022 U	0.00022 U
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.00063 U	0.00056 U	0.00045 U	0.0004 U	0.00049 U	0.00049 U	0.00056 U	0.00047 U	0.00046 U	0.00043 U	0.00044 U
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.0013 U	0.0011 U	0.00091 U	0.00082 U	0.00099 U	0.00099 U	0.0011 U	0.00094 U	0.00093 U	0.00087 U	0.00089 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0017 U	0.0015 U	0.0012 U	0.0011 U	0.0013 U	0.0013 U	0.0015 U	0.0013 U	0.0013 U	0.0012 U	0.0012 U
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00036 U	0.00032 U	0.00026 U	0.00023 U	0.00028 U	0.00028 U	0.00032 U	0.00027 U	0.00026 U	0.00025 U	0.00025 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0016 U	0.0014 U	0.0011 U	0.00099 U	0.0012 U	0.0012 U	0.0014 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U
2,2-Dichloropropane	594-20-7	mg/kg					0.00052 U	0.00046 U	0.00037 U	0.00033 U	0.0004 U	0.0004 U	0.00046 U	0.00038 U	0.00038 U	0.00036 U	0.00036 U
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.014 U	0.013 U	0.01 U	0.009 U	0.011 U	0.011 U	0.012 U	0.01 U	0.01 U	0.0096 U	0.0098 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.0015 U	0.0013 U	0.001 U	0.00094 U	0.0011 U	0.0011 U	0.0013 U	0.0011 U	0.0011 U	0.001 U	0.001 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0062 U	0.0055 U	0.0044 U	0.0039 U	0.0048 U	0.0048 U	0.0054 U	0.0045 U	0.0045 U	0.0042 U	0.0043 U
4-Chlorotoluene	106-43-4	mg/kg		440			0.0016 U	0.0014 U	0.0011 U	0.001 U	0.0012 U	0.0012 U	0.0014 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.0095 U	0.0084 U	0.0068 U	0.006 U	0.0073 U	0.0074 U	0.0083 U	0.007 U	0.0069 U	0.0065 U	0.0066 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.014 U	0.012 U	0.0097 U	0.0087 U	0.011 U	0.011 U	0.012 U	0.01 U	0.039 J	0.0093 U	0.012 J
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00062 U	0.00055 U	0.00044 U	0.00039 U	0.00048 U	0.00048 U	0.00054 U	0.00045 U	0.00045 U	0.00042 U	0.00043 U
Bromobenzene	108-86-1	mg/kg		290			0.0016 U	0.0014 U	0.0011 U	0.001 U	0.0012 U	0.0012 U	0.0014 U	0.0012 U	0.0011 U	0.0011 U	0.0011 U
Bromochloromethane	74-97-5	mg/kg		150			0.0004 U	0.00035 U	0.00028 U	0.00025 U	0.00031 U	0.00031 U	0.00035 U	0.00029 U	0.00029 U	0.00027 U	0.00027 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00028 U	0.00025 U	0.0002 U	0.00018 U	0.00022 U	0.00022 U	0.00025 U	0.00021 U	0.00021 U	0.00019 U	0.0002 U
Bromoform	75-25-2	mg/kg		19	0.69		0.0013 U	0.0012 U	0.00095 U	0.00085 U	0.001 U	0.001 U	0.0012 U	0.00098 U	0.00096 U	0.00091 U	0.00092 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00033 U	0.0003 U	0.00024 U	0.00021 U	0.00026 U	0.00026 U	0.00029 U	0.00024 U	0.00024 U	0.00023 U	0.00023 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00032 U	0.00028 U	0.00023 U	0.0002 U	0.00024 U	0.00025 U	0.00028 U	0.00023 U	0.00023 U	0.00022 U	0.00022 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.00047 U	0.00042 U	0.00034 U	0.0003 U	0.00037 U	0.00037 U	0.00042 U	0.00035 U	0.00034 U	0.00032 U	0.00033 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.0004 U	0.00035 U	0.00028 U	0.00025 U	0.00031 U	0.00031 U	0.00035 U	0.00029 U	0.00029 U	0.00027 U	0.00027 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00043 U	0.00038 U	0.0003 U	0.00027 U	0.00033 U	0.00033 U	0.00038 U	0.00031 U	0.00031 U	0.00029 U	0.0003 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.0012 U	0.0011 U	0.00084 U	0.00076 U	0.00092 U	0.00092 U	0.001 U	0.00087 U	0.00086 U	0.00081 U	0.00082 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.00047 U	0.00042 U	0.00034 U	0.0003 U	0.00037 U	0.00037 U	0.00042 U	0.00035 U	0.00034 U	0.00032 U	0.00033 U
Chloromethane	74-87-3	mg/kg		110	11		0.0015 U	0.0013 U	0.001 U	0.00094 U	0.0011 U	0.0011 U	0.0013 U	0.0011 U	0.0011 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.00095 U	0.00084 U	0.00068 U	0.0006 U	0.00073 U	0.00074 U	0.00083 U	0.0007 U	0.00069 U	0.00065 U	0.00066 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00032 U	0.00028 U	0.00023 U	0.0002 U	0.00024 U	0.00025 U	0.00028 U	0.00023 U	0.00023 U	0.00022 U	0.00022 U
Dibromomethane	74-95-3	mg/kg		24			0.00027 U	0.00024 U	0.00019 U	0.00017 U	0.00021 U	0.00021 U	0.00024 U	0.0002 U	0.0002 U	0.00018 U	0.00019 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00078 U	0.00069 U	0.00055 U	0.00049 U	0.0006 U	0.0006 U	0.00068 U	0.00057 U	0.00056 U	0.00053 U	0.00054 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.016 U	0.014 U	0.011 U	0.01 U	0.012 U	0.012 U	0.014 U	0.012 U	0.011 U	0.011 U	0.011 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00065 U	0.00058 U	0.00046 U	0.00041 U	0.0005 U	0.0005 U	0.00057 U	0.00048 U	0.00047 U	0.00044 U	0.00045 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.00095 U	0.00084 U	0.00068 U	0.0006 U	0.00073 U	0.00074 U	0.00083 U	0.0007 U	0.00069 U	0.00065 U	0.00066 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00073 U	0.00065 U	0.00052 U	0.00046 U	0.00056 U	0.00056 U	0.00064 U	0.00054 U	0.00053 U	0.0005 U	0.00051 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.00047 U	0.00042 U	0.00034 U	0.0003 U	0.00037 U	0.00037 U	0.00042 U	0.00035 U	0.00034 U	0.00032 U	0.00033 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0028 U	0.0025 U	0.002 U	0.0018 U	0.0022 U	0.0022 U	0.0025 U	0.0021 U	0.0021 U	0.0019 U	0.002 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.001 U	0.00089 U	0.00071 U	0.00064 U	0.00077 U	0.00077 U	0.00088 U	0.00073 U	0.00072 U	0.00068 U	0.00069 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.0012 U	0.0011 U	0.00086 U	0.00077 U	0.00093 U	0.00093 U	0.0011 U	0.00088 U	0.00087 U	0.00082 U	0.00083 U
p-Isopropyltoluene	99-87-6	mg/kg					0.00063 U	0.00056 U	0.00045 U	0.0004 U	0.00049 U	0.00049 U	0.00056 U	0.00047 U	0.00046 U	0.00043 U	0.00044 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.0011 U	0.00094 U	0.00075 U	0.00068 U	0.00082 U	0.00082 U	0.00093 U	0.00078 U	0.00077 U	0.00072 U	0.00074 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.0012 U	0.001 U	0.00083 U	0.00075 U	0.0009 U	0.00091 U	0.001 U	0.00086 U	0.00085 U	0.0008 U	0.00081 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.001 U	0.00093 U	0.00074 U	0.00067 U	0.00081 U	0.00081 U	0.00092 U	0.00077 U	0.00076 U	0.00071 U	0.00072 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00063 U	0.00056 U	0.00045 U	0.0004 U	0.00049 U	0.00049 U	0.00056 U	0.00047 U	0.00046 U	0.00043 U	0.00044 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0021 U	0.0018 U	0.0015 U	0.0013 U	0.0016 U	0.0016 U	0.0018 U	0.0015 U	0.0015 U	0.0014 U	0.0014 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00063 U	0.00056 U	0.00045 U	0.0004 U	0.00049 U	0.00049 U	0.00056 U	0.00047 U	0.00046 U	0.00043 U	0.00044 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.00095 U	0.00084 U	0.00068 U	0.0006 U	0.00073 U	0.00074 U	0.00083 U	0.0007 U	0.00069 U	0.00065 U	0.00066 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.00047 U	0.00042 U	0.00034 U	0.0003 U	0.00037 U	0.00037 U	0.00042 U	0.00035 U	0.00034 U	0.00032 U	0.00033 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.00047 U	0.00042 U	0.00034 U	0.0003 U	0.00037 U	0.00037 U	0.00042 U	0.00035 U	0.00034 U	0.00032 U	0.00033 U
Vinyl Acetate	108-05-4	mg/kg		910			0.0024 U	0.0021 U	0.0017 U	0.0015 U	0.0018 U	0.0018 U	0.0021 U	0.0017 U	0.0017 U	0.0016 U	0.0016 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.00047 U	0.00042 U	0.00034 U	0.0003 U	0.00037 U	0.00037 U	0.00042 U	0.00035 U	0.00034 U	0.00032 U	0.00033 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-08	C2BP-08	C2BP-08	C2BP-09	C2BP-09	C2BP-09	C2BP-09	C2BP-10	C2BP-10	C2BP-10	C2BP-10
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
						Depth Interval	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	0 - 0.5	1 - 1.5	3 - 3.5
						Sample Type	FD	N	N	N	N	N	N	N	FD	N	N
Xylene, o	95-47-6	mg/kg	1.4	650			0.0015 U	0.0013 U	0.001 U	0.00093 U	0.0011 U	0.0011 U	0.0013 U	0.0011 U	0.0011 U	0.00099 U	0.001 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00089 U	0.00079 U	0.00063 U	0.00056 U	0.00068 U	0.00069 U	0.00078 U	0.00065 U	0.00064 U	0.0006 U	0.00062 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0015 U	0.0013 U	0.001 U	0.00093 U	0.0011 U	0.0011 U	0.0013 U	0.0011 U	0.0011 U	0.00099 U	0.001 U
SW8270C																	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.0017 J	0.00071 U	0.00068 U	0.00069 U	0.00075 U	0.00076 U	0.00076 U	0.00065 U	0.00069 U	0.00069 U	0.00075 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0036 J	0.00059 U	0.00056 U	0.00057 U	0.00063 U	0.00063 U	0.00063 U	0.00054 U	0.00058 U	0.00057 U	0.00062 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0034 J	0.00056 U	0.00054 U	0.00055 U	0.0006 U	0.0006 U	0.00061 U	0.00052 U	0.00055 U	0.00055 U	0.0006 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.002 J	0.00098 U	0.00093 U	0.00095 U	0.001 U	0.001 U	0.001 U	0.0009 U	0.00096 U	0.00095 U	0.001 U
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.025 J	0.0037	0.013	0.00057 U	0.00063 U	0.00063 U	0.00063 U	0.013	0.0098	0.0025 J	0.00062 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9		0.00099 U	0.00095 U	0.00091 U	0.00093 U	0.001 U	0.001 U	0.001 U	0.00088 U	0.00093 U	0.00093 U	0.001 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04		0.0016 U	0.0015 U	0.0015 U	0.0015 U	0.0016 UJ	0.0016 UJ	0.0016 UJ	0.0014 U	0.0015 U	0.0015 U	0.0016 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.0034 U	0.0033 U	0.0032 U	0.0032 U	0.0035 U	0.0035 U	0.0035 U	0.003 U	0.0032 U	0.0032 U	0.0035 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.0073 U	0.0071 U	0.0068 U	0.0069 U	0.0075 U	0.0076 U	0.0076 U	0.0095 J	0.0069 U	0.0069 U	0.0075 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.072 U	0.069 U	0.066 U	0.067 U	0.073 U	0.074 U	0.074 U	0.063 U	0.067 U	0.067 U	0.073 U
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.0053 U	0.0051 U	0.0048 U	0.0049 U	0.0054 U	0.0054 U	0.0054 U	0.0047 U	0.0049 U	0.0049 U	0.0053 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.0018 U	0.0018 U	0.0017 U	0.0017 U	0.0019 U	0.0019 U	0.0019 U	0.0016 U	0.0017 U	0.0017 U	0.0019 U
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.00061 UJ	0.00059 U	0.00056 U	0.00057 U	0.00063 U	0.00063 U	0.00063 U	0.00054 U	0.00058 U	0.00057 U	0.00062 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.00049 U	0.00047 U	0.00045 U	0.00046 U	0.0005 U	0.0005 U	0.00051 U	0.00043 U	0.00046 U	0.00046 U	0.0005 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.036 J	0.0058 J	0.021	0.0011 J	0.0011 U	0.0011 U	0.0011 U	0.022	0.013	0.0032 J	0.0011 U
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.0012 U	0.0012 U	0.0038 J	0.0011 U	0.0012 U	0.0012 U	0.0012 U	0.023	0.0011 U	0.0011 U	0.0012 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.0018 U	0.0018 U	0.0017 U	0.0017 U	0.0019 U	0.0019 U	0.0019 U	0.0016 U	0.0017 U	0.0017 U	0.0019 U
2-Nitrophenol	88-75-5	mg/kg					0.00076 U	0.00073 U	0.0007 U	0.00071 U	0.00078 U	0.00078 U	0.00078 U	0.00067 U	0.00071 U	0.00071 U	0.00077 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0096 J	0.0018 U	0.014 J	0.0017 U	0.0019 U	0.0019 U	0.0019 U	0.1 J	0.03	0.0049 J	0.0019 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.01 U	0.0099 U	0.0095 U	0.0096 U	0.011 U	0.011 U	0.011 U	0.0091 UJ	0.0097 U	0.0097 U	0.01 U
3-Nitroaniline	99-09-2	mg/kg					0.012 U	0.012 U	0.011 U	0.011 U	0.013 U	0.013 U	0.013 U	0.011 U	0.012 U	0.011 U	0.012 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.012 U	0.012 U	0.011 U	0.011 U	0.013 U	0.013 U	0.013 U	0.011 U	0.012 U	0.011 U	0.012 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.0011 U	0.0011 U	0.001 U	0.001 U	0.0011 U	0.0011 U	0.0012 U	0.00099 U	0.001 U	0.001 U	0.0011 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.004 U	0.0039 U	0.0037 U	0.0038 U	0.0041 U	0.0042 U	0.0042 U	0.0036 U	0.0038 U	0.0038 U	0.0041 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.016 U	0.016 U	0.015 U	0.015 U	0.017 U	0.017 U	0.017 U	0.015 U	0.015 U	0.015 U	0.017 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.00077 U	0.00074 U	0.00071 U	0.00072 U	0.00079 U	0.00079 U	0.0008 U	0.00068 U	0.00072 U	0.00072 U	0.00078 U
4-Nitroaniline	100-01-6	mg/kg		27			0.0061 U	0.0059 U	0.0056 U	0.0057 U	0.0063 U	0.0063 U	0.0063 U	0.0054 UJ	0.0058 U	0.0057 U	0.0062 U
4-Nitrophenol	100-02-7	mg/kg					0.021 U	0.02 U	0.019 U	0.02 U	0.022 U	0.022 U	0.022 U	0.019 U	0.02 U	0.02 U	0.021 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00056 U	0.00054 U	0.0026 J	0.00053 U	0.00058 U	0.00058 U	0.00058 U	0.0005 U	0.00053 U	0.00053 U	0.00057 U
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.026 J	0.0019 J	0.012	0.00057 U	0.00063 U	0.00063 U	0.00063 U	0.0028	0.00058 U	0.00057 U	0.00062 U
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.012	0.003 J	0.011	0.0018 U	0.002 U	0.002 U	0.002 U	0.0028 J	0.0019 J	0.0018 U	0.002 U
Azobenzene	103-33-3	mg/kg		5.6			0.01 J	0.00059 U	0.00056 U	0.00057 U	0.00063 U	0.00063 U	0.00063 U	0.00054 U	0.00058 U	0.00057 U	0.00062 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.013	0.0036 J	0.012	0.0013 U	0.0014 U	0.0014 U	0.0014 U	0.0025 J	0.0013 U	0.0013 U	0.0014 U
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0016 UJ	0.0015 U	0.0069 J	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.002 J	0.0015 U	0.0015 U	0.0016 U
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.014 J	0.0012 U	0.017	0.0011 U	0.0013 U	0.0013 U	0.0013 U	0.005	0.0048	0.0011 U	0.0012 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0022 U	0.0034 J	0.0051 J	0.0021 U	0.0023 U	0.0023 U	0.0023 U	0.0027 J	0.0026 J	0.0021 U	0.0022 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0078	0.0016 U	0.0016 U	0.0016 U	0.0018 U	0.0018 U	0.0018 U	0.0015 U	0.0016 U	0.0016 U	0.0017 U
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.15 U	0.14 U	0.14 U	0.14 U	--	--	--	--	0.14 U	0.14 U	0.15 U
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0061 U	0.0059 U	0.0056 U	0.0057 U	0.0063 UJ	0.0063 UJ	0.0063 UJ	0.0054 U	0.0058 U	0.0057 U	0.0081 J
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051		0.00075 U	0.00072 U	0.00069 U	0.0007 U	0.00076 U	0.00077 U	0.00077 U	0.00066 U	0.0007 U	0.0007 U	0.00076 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0022 U	0.0021 U	0.002 U	0.0021 U	0.0023 U	0.0023 U	0.0023 U	0.002 U	0.0021 U	0.0021 U	0.0022 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.00094 U	0.00091 U	0.00087 U	0.00088 U	0.00096 U	0.00097 U	0.00097 U	0.00084 U	0.00089 U	0.00088 U	0.00096 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.084 U	0.025 U	0.037 U	0.022 U	0.013 U	0.022 U	0.022 U	0.034 U	0.031 U	0.02 U	0.029 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.0062 U	0.006 U	0.0057 U	0.0061 J	0.011 U	0.014 U	0.014 U	0.0068 J	0.0093 J	0.0059 U	0.0063 U
Carbazole	86-74-8	mg/kg	79				0.0071 J	0.00086 U	0.0063 J	0.00084 U	0.00091 U	0.00092 U	0.00092 U	0.00079 U	0.00084 U	0.00084 U	0.00091 U
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.025	0.0068 J	0.018	0.0015 U	0.0016 U	0.0016 U	0.0016 U	0.005 J	0.004 J	0.0015 U	0.0016 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0015 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0013 U	0.0014 U	0.0014 U	0.0015 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-08	C2BP-08	C2BP-08	C2BP-09	C2BP-09	C2BP-09	C2BP-09	C2BP-10	C2BP-10	C2BP-10	C2BP-10
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022
						Depth Interval	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	0 - 0.5	1 - 1.5	3 - 3.5
						Sample Type	FD	N	N	N	N	N	N	N	FD	N	N
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.063	0.026	0.065	0.00068 U	0.00074 U	0.00074 U	0.00075 U	0.036 J	0.02	0.0023 J	0.00073 U
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.0027 U	0.0026 U	0.0025 U	0.0025 U	0.0065 J	0.0053 J	0.0069 J	0.0024 U	0.0025 U	0.0025 U	0.0027 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00061 U	0.00059 U	0.00056 U	0.00057 U	0.00063 U	0.00063 U	0.00063 U	0.00054 U	0.00058 U	0.00057 U	0.00062 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.011 U	0.0076 U	0.01 U	0.0077 U	0.0034 U	0.0034 U	0.0034 U	0.01 U	0.0068 U	0.008 U	0.0094 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0015 U	0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0013 U	0.0014 U	0.0014 U	0.0015 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.054	0.013	0.038	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.0062	0.0043 J	0.0014 U	0.0015 U
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.0053	0.00059 U	0.0046	0.00057 U	0.00063 U	0.00063 U	0.00063 U	0.00054 U	0.00058 U	0.00057 U	0.00062 U
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0018 U	0.0018 U	0.0017 U	0.0017 U	0.0019 U	0.0019 U	0.0019 U	0.0016 U	0.0017 U	0.0017 U	0.0019 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0018 U	0.0018 U	0.0017 U	0.0017 U	0.0019 U	0.0019 U	0.0019 U	0.0016 U	0.0017 U	0.0017 U	0.0019 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.00094 U	0.00091 U	0.00087 U	0.00088 U	0.00096 U	0.00097 U	0.00097 U	0.00084 U	0.00089 U	0.00088 U	0.00096 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.00053 U	0.00051 U	0.00048 U	0.00049 U	0.00054 U	0.00054 U	0.00054 U	0.00047 U	0.00049 U	0.00049 U	0.00053 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.0015 UJ	0.0014 U	0.0066	0.0014 U	0.0015 U	0.0015 U	0.0015 U	0.003 J	0.0031 J	0.0014 U	0.0015 U
Isophorone	78-59-1	mg/kg		570			0.001 U	0.00099 U	0.00095 U	0.00096 U	0.0011 U	0.0011 U	0.0011 U	0.00091 U	0.00097 U	0.00097 U	0.001 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.14 J	0.04	0.12	0.0014 J	0.00063 U	0.00063 U	0.00063 U	0.063	0.082	0.011	0.00062 U
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.0024 U	0.0024 U	0.0023 U	0.0023 U	0.0025 U	0.0025 U	0.0025 U	0.0022 U	0.0023 U	0.0023 U	0.0025 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.0027 U	0.0026 U	0.0025 U	0.0025 U	0.0028 U	0.0028 U	0.0028 U	0.0024 U	0.0025 U	0.0025 U	0.0027 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.00098 U	0.00094 U	0.0009 U	0.00092 U	0.001 U	0.001 U	0.001 U	0.00087 U	0.00092 U	0.00092 U	0.00099 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		0.0077 UJ	0.0074 U	0.0071 U	0.075	0.031 J	0.027 J	0.008 UJ	0.031 J	0.031 J	0.027 J	0.027 J
Phenanthrene	85-01-8	mg/kg	5.5		11		0.086 J	0.031	0.074	0.0012 J	0.00073 U	0.00073 U	0.00073 U	0.019	0.011	0.0019 J	0.00072 U
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.012 J	0.0036 J	0.019	0.0026 U	0.0029 U	0.0029 U	0.0029 U	0.11 J	0.0026 UJ	0.0075 J	0.0029 U
Pyrene	129-00-0	mg/kg	10	1800	45		0.042	0.0099	0.028	0.0015 J	0.0016 U	0.0016 U	0.0016 U	0.0048 J	0.0034 J	0.0015 U	0.0016 U
Pyridine	110-86-1	mg/kg		58			0.019 U	0.019 U	0.018 U	0.018 U	0.02 U	0.02 U	0.02 U	0.094 J	0.018 U	0.018 U	0.02 U
SW8270SIM																	
1-Methylnaphthalene	90-12-0	mg/kg		9.9			--	--	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		--	--	--	--	--	--	--	--	--	--	--
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		--	--	--	--	--	--	--	--	--	--	--
Acenaphthylene	208-96-8	mg/kg	120		6.4		--	--	--	--	--	--	--	--	--	--	--
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		--	--	--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		--	--	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		--	--	--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		--	--	--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		--	--	--	--	--	--	--	--	--	--	--
Chrysene	218-01-9	mg/kg	3.1	110	2.2		--	--	--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		--	--	--	--	--	--	--	--	--	--	--
Fluoranthene	206-44-0	mg/kg	10	2400	86		--	--	--	--	--	--	--	--	--	--	--
Fluorene	86-73-7	mg/kg	3.7	2300	6		--	--	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		--	--	--	--	--	--	--	--	--	--	--
Naphthalene	91-20-3	mg/kg	1	2	0.042		--	--	--	--	--	--	--	--	--	--	--
Phenanthrene	85-01-8	mg/kg	5.5		11		--	--	--	--	--	--	--	--	--	--	--
Pyrene	129-00-0	mg/kg	10	1800	45		--	--	--	--	--	--	--	--	--	--	--
SW8290																	
1,2,3,4,6,7,8-HpCDD	35822-46-9	mg/kg	2.9E-05	0.00048			0.0015 J	0.00011	4.7E-05	4.3E-05	1.2E-05	1E-05	3.5E-05	7.6E-05	0.00011	1.7E-05	5E-06 J
1,2,3,4,6,7,8-HpCDF	67562-39-4	mg/kg	2.9E-05	0.00048			7.1E-05 UJ	9.6E-06 UJ	8.7E-06 UJ	1.3E-06 J	5.9E-07 U	9.6E-07 UJ	1E-06 U	8.1E-06	1.3E-05	2.3E-06 U	4.9E-07 U
1,2,3,4,7,8,9-HpCDF	55673-89-7	mg/kg	2.9E-05	0.00048			5.9E-06 J	8E-07 J	9E-07 J	2.3E-07 J	2.4E-07 UJ	1.8E-07 U	1.5E-07 UJ	4.8E-07 J	7.8E-07 J	1.9E-07 J	7.1E-08 U
1,2,3,4,7,8-HxCDD	39227-28-6	mg/kg	2.9E-06	4.8E-05			3.3E-05	2.6E-06 U	1.6E-06 U	2.2E-07 UJ	3.3E-07 U	5.5E-07 U	3.8E-07 U	1.2E-06 UJ	1.9E-06 J	5.1E-07 U	7.7E-08 U
1,2,3,4,7,8-HxCDF	70648-26-9	mg/kg	2.9E-06	4.8E-05			1.2E-05	1.6E-06 J	2.4E-06 J	6E-08 U	6.4E-08 U	5E-08 U	4.9E-08 U	6.8E-07 J	4.7E-07 J	2E-07 J	5.2E-08 U
1,2,3,6,7,8-HxCDD	57653-85-7	mg/kg	2.9E-06	4.8E-05			6.7E-05	5.5E-06 J	3.1E-06 U	1.2E-06 U	3.5E-07 U	4.3E-07 UJ	9.8E-07 U	3.9E-06 J	5.8E-06	9.6E-07 U	7.4E-08 U
1,2,3,6,7,8-HxCDF	57117-44-9	mg/kg	2.9E-06	4.8E-05			1.4E-05	1.3E-06 J	2.6E-06 J	5.4E-08 U	5.8E-08 U	4.5E-08 U	4.4E-08 U	7.2E-07 J	9.5E-07 J	1.3E-07 UJ	4.7E-08 U
1,2,3,7,8,9-HxCDD	19408-74-3	mg/kg	2.9E-06	4.8E-05			8.8E-05 J	5.2E-06 J	3.1E-06 J	5.4E-07 UJ	8.3E-08 U	4.1E-07 J	4.8E-07 UJ	3.5E-06 J	4.9E-06 J	7.5E-07 J	6.9E-08 U
1,2,3,7,8,9-HxCDF	72918-21-9	mg/kg	2.9E-06	4.8E-05			1E-06 J	2.4E-07 U	2.4E-07 U	6E-08 U	6.4E-08 U	4.1E-07 U	4.9E-08 U	1.3E-07 U	1.9E-07 U	1.6E-07 U	5.2E-08 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location				C2BP-09				C2BP-10					
						Sample Date	Depth Interval	Sample Type	C2BP-08	C2BP-08	C2BP-08	C2BP-09	C2BP-09	C2BP-09	C2BP-09	C2BP-10	C2BP-10	C2BP-10	C2BP-10
1,2,3,7,8-PeCDD	40321-76-4	mg/kg	2.9E-07	4.8E-06		3/10/2022	1 - 1.5	FD	C2BP-08	C2BP-08	C2BP-08	C2BP-09	C2BP-09	C2BP-09	C2BP-09	C2BP-10	C2BP-10	C2BP-10	C2BP-10
1,2,3,7,8-PeCDF	57117-41-6	mg/kg	9.7E-06	0.00016		3/10/2022	2 - 2.5	N	1.7E-05	2E-06 J	1.8E-06 J	1.4E-07 U	1.6E-07 U	1.6E-07 U	1.7E-07 U	1E-06 J	1.3E-06 J	1.2E-07 U	1.6E-07 U
2,3,4,6,7,8-HxCDF	60851-34-5	mg/kg	2.9E-06	4.8E-05		3/10/2022	3 - 3.5	N	1.9E-05	2.2E-06 J	4.4E-06 J	8.8E-08 U	1E-07 U	1.3E-07 U	1E-07 U	2.4E-07 UJ	1.3E-07 U	6.8E-08 U	8E-08 U
2,3,4,7,8-PeCDF	57117-31-4	mg/kg	9.7E-07	1.6E-05		3/10/2022	0 - 0.5	N	1.5E-05	1.5E-06 J	2.5E-06 J	5.8E-08 U	6.3E-08 U	4.9E-08 U	4.8E-08 U	4.2E-07 J	5.8E-07 J	5.2E-08 U	5E-08 U
2,3,7,8-TCDD	1746-01-6	mg/kg	2.9E-07	4.8E-06	0.3	3/10/2022	1 - 1.5	N	2.5E-05	3.1E-06 J	5.1E-06 J	9E-08 U	1.1E-07 U	1.3E-07 U	1E-07 U	1.1E-07 U	1.3E-07 U	6.9E-08 U	8.1E-08 U
2,3,7,8-TCDF	51207-31-9	mg/kg	2.9E-06	4.8E-05		3/10/2022	0 - 0.5	N	7.2E-06	1.3E-06	1.6E-06 UJ	2.3E-07 U	2.4E-07 U	2.4E-07 U	2.6E-07 U	1.5E-07 U	7.9E-07 J	1.2E-07 U	1.1E-07 U
OCDD	3268-87-9	mg/kg	0.00097	0.016		3/10/2022	1 - 1.5	N	4.3E-05	4.6E-06	8.7E-06 U	1E-07 U	1.2E-07 U	9.7E-08 U	1.2E-07 U	5.1E-07 J	4.6E-07 J	7.7E-08 U	9.5E-08 U
OCDF	39001-02-0	mg/kg	0.00097	0.016		3/10/2022	3 - 3.5	N	0.0045 J	0.00044	0.00016	0.00016	4.6E-05	4.9E-05	0.00012	0.00031	0.00042	0.00012	2.2E-05
						3/10/2022	0 - 0.5	N	0.00015 J	2E-05	8.5E-06 J	7.7E-06 J	2.4E-06 U	5.2E-06 J	5.5E-06 J	1.5E-05	2.1E-05	6.6E-06 J	1.8E-06 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-10	C2BP-11	C2BP-11	C2BP-11	C2BP-11	C2BP-12	C2BP-12	C2BP-12	C2BP-12
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022
						Depth Interval	5.5 - 6	0 - 0.5	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	1 - 1.5	2 - 2.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	N	N	FD
CALC															
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-B0	mg/kg					5.08E-08	8.66474E-05	1.5112E-06	4.306E-07	1.1557E-06	--	--	--	--
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-MO	mg/kg					1.049E-07	8.04242E-05	1.6466E-06	5.064E-07	1.2711E-06	--	--	--	--
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0 U	0.0028918	0.00022	0 U	0 U	0 U	0.00014	0 U	0 U
CATFH															
Gasoline Range Organics	GRO	mg/kg		430	1100		--	--	--	--	--	--	--	--	--
SW6010B															
Boron	7440-42-8	mg/kg	2	16000			2.5 J	12 J	2.1 U	2.4 U	2.7 U	6.9 J	5.3 J	4.3 J	4.6 J
SW6020															
Antimony	7440-36-0	mg/kg	0.67	31			0.13 J	0.19 J	0.11 J	0.098 J	0.14 J	0.13 J	0.089 J	0.1 J	0.084 J
Arsenic	7440-38-2	mg/kg	19	19			3.7	4.5	2.2	2.1	3	2.8	1.9	2.1 J	1.7 J
Barium	7440-39-3	mg/kg	630	15000			180	180 J	160	140	180	280 J	200	230	200
Beryllium	7440-41-7	mg/kg	2.5	16			0.56	0.29	0.34	0.37	0.55	1 J	0.81	0.77	0.77
Cadmium	7440-43-9	mg/kg	0.54	71			0.11 J	0.15 J	0.15 J	0.16 J	0.18 J	0.32 J	0.23 J	0.26 J	0.23 J
Chromium	7440-47-3	mg/kg	200	120000			35	28	21	25	37	57 J	43	40	40
Cobalt	7440-48-4	mg/kg	13	23			18	15	18	18	21	26 J	20	22	19
Copper	7440-50-8	mg/kg	73	3100			27	25	20	21	27	41 J	31	30	30
Iron	7439-89-6	mg/kg		55000			46000	31000	31000	31000	43000	63000	48000	46000	45000
Lead	7439-92-1	mg/kg	34	80			5.1	7	4.4	4.1	6.1	7	8.3	7.4	7.5
Manganese	7439-96-5	mg/kg	2100	2100			960	970	1100	1100	1200	1400 J	870	1200 J	920 J
Molybdenum	7439-98-7	mg/kg	2	390			0.29	0.47	0.26	0.19 J	0.23 J	0.25 J	0.16	0.18 J	0.16
Nickel	7440-02-0	mg/kg	110	820			20	11	12	16	20	30	22	23	22
Selenium	7782-49-2	mg/kg	0.52	390			2	2.2	2.2	1.9	2.4	3.3 J	2.7	2.8	2.4
Silver	7440-22-4	mg/kg	4.2	390			0.018 J	0.028 J	0.015 J	0.022 J	0.025 J	0.065 J	0.05 J	0.052 J	0.048 J
Thallium	7440-28-0	mg/kg	2.8	2.8			0.14 J	0.1 J	0.099 J	0.11 J	0.14 J	0.29 J	0.22	0.25	0.23
Vanadium	7440-62-2	mg/kg	280	390			110	91 J	97	88	110	120 J	84	81	75
Zinc	7440-66-6	mg/kg	170	23000			57	79 J	49	41	90	100	79	77	76
SW7471A															
Mercury	7439-97-6	mg/kg	0.24	1			0.011 J	0.0092 U	0.0091 U	0.0087 U	0.012 U	0.014 U	0.01 U	0.0099 U	0.0077 U
SW8011															
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		7.5E-05 UJ	7.2E-05 UJ	7.3E-05 UJ	7.7E-05 UJ	8.1E-05 UJ	0.0001 UJ	9.4E-05 UJ	8.6E-05 UJ	9.1E-05 UJ
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		1.1E-05 UJ	1.1E-05 UJ	1.1E-05 UJ	1.2E-05 UJ	1.2E-05 UJ	1.5E-05 UJ	1.4E-05 UJ	1.3E-05 UJ	1.4E-05 UJ
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		1.4E-05 UJ	1.3E-05 UJ	1.3E-05 UJ	1.4E-05 UJ	1.5E-05 UJ	1.8E-05 UJ	1.7E-05 UJ	1.6E-05 UJ	1.7E-05 UJ
SW8015-E															
Diesel Range Organics	DRO	mg/kg		260	1100		--	--	--	--	--	--	--	--	--
Extended Range Organics	ERO	mg/kg		12000			--	--	--	--	--	--	--	--	--
SW8260B															
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017		0.0008 U	0.00063 U	0.0006 U	0.00063 U	0.00065 U	0.00082 UJ	0.00077 U	0.00075 U	0.00082 U
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7		0.0004 U	0.00032 U	0.0003 U	0.00032 U	0.00033 U	0.00042 UJ	0.00039 U	0.00038 U	0.00042 U
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018		0.0012 U	0.00096 U	0.00091 U	0.00096 U	0.00098 U	0.0013 UJ	0.0012 U	0.0011 U	0.0012 U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700			0.0007 U	0.00056 U	0.00053 U	0.00056 U	0.00057 U	0.00072 UJ	0.00067 U	0.00066 U	0.00072 U
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076		0.00034 U	0.00027 U	0.00025 U	0.00027 U	0.00027 U	0.00035 UJ	0.00032 U	0.00032 U	0.00035 U
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2		0.00026 U	0.0002 U	0.00019 U	0.0002 U	0.00021 U	0.00026 UJ	0.00025 U	0.00024 U	0.00026 U
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54		0.0015 U	0.0012 U	0.0011 U	0.0012 U	0.0012 U	0.0015 UJ	0.0014 U	0.0014 U	0.0015 U
1,1-Dichloropropene	563-58-6	mg/kg					0.0004 U	0.00032 U	0.0003 U	0.00032 U	0.00033 U	0.00042 UJ	0.00039 U	0.00038 U	0.00042 U
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40			0.00081 U	0.00064 U	0.00061 U	0.00064 U	0.00066 U	0.00084 UJ	0.00078 U	0.00076 U	0.00083 U
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011		0.0013 U	0.0011 U	0.001 U	0.0011 U	0.0011 U	0.0014 UJ	0.0013 U	0.0013 U	0.0014 U
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00057 U	0.00045 U	0.00043 U	0.00045 U	0.00046 U	0.00059 UJ	0.00054 U	0.00053 U	0.00058 U
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300			0.0016 U	0.0013 U	0.0012 U	0.0013 U	0.0013 U	0.0017 UJ	0.0016 U	0.0015 U	0.0017 U
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059		0.0022 U	0.0017 U	0.0016 U	0.0017 U	0.0018 U	0.0022 UJ	0.0021 U	0.002 U	0.0022 U
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053		0.00027 U	0.00021 U	0.0002 U	0.00021 U	0.00022 U	0.00028 UJ	0.00026 U	0.00025 U	0.00028 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-10	C2BP-11	C2BP-11	C2BP-11	C2BP-11	C2BP-12	C2BP-12	C2BP-12	C2BP-12
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022
						Depth Interval	5.5 - 6	0 - 0.5	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	1 - 1.5	2 - 2.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	N	N	FD
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0018 U	0.0014 U	0.0013 U	0.0014 U	0.0014 U	0.0018 UJ	0.0017 U	0.0016 U	0.0018 U
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007		0.00027 U	0.00021 U	0.0002 U	0.00021 U	0.00022 U	0.00028 UJ	0.00026 U	0.00025 U	0.00028 U
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065		0.00054 U	0.00043 U	0.00041 U	0.00043 U	0.00044 U	0.00056 UJ	0.00052 U	0.00051 U	0.00055 U
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270			0.0011 U	0.00087 U	0.00082 U	0.00087 U	0.00089 U	0.0011 UJ	0.0011 U	0.001 U	0.0011 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0015 U	0.0012 U	0.0011 U	0.0012 U	0.0012 U	0.0015 UJ	0.0014 U	0.0014 U	0.0015 U
1,3-Dichloropropane	142-28-9	mg/kg		410			0.00031 U	0.00025 U	0.00023 U	0.00025 U	0.00025 U	0.00032 UJ	0.0003 U	0.00029 U	0.00032 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0013 U	0.0011 U	0.00099 U	0.001 U	0.0011 U	0.0014 UJ	0.0013 U	0.0012 U	0.0014 U
2,2-Dichloropropane	594-20-7	mg/kg					0.00045 U	0.00035 U	0.00033 U	0.00035 U	0.00036 U	0.00046 UJ	0.00043 U	0.00042 U	0.00046 U
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.012 U	0.0095 U	0.009 U	0.0095 U	0.0097 U	0.012 UJ	0.012 U	0.011 U	0.012 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.0013 U	0.001 U	0.00094 U	0.00099 U	0.001 U	0.0013 UJ	0.0012 U	0.0012 U	0.0013 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.0053 U	0.0042 U	0.0039 U	0.0042 U	0.0043 U	0.0054 UJ	0.0051 U	0.0049 U	0.0054 U
4-Chlorotoluene	106-43-4	mg/kg		440			0.0013 U	0.0011 U	0.001 U	0.0011 U	0.0011 U	0.0014 UJ	0.0013 U	0.0013 U	0.0014 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.0081 U	0.0064 U	0.0061 U	0.0064 U	0.0066 U	0.0084 UJ	0.0078 U	0.0076 U	0.0083 U
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.012 U	0.0093 U	0.0087 U	0.0092 U	0.012 J	0.012 U	0.011 U	0.011 U	0.012 U
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.00053 U	0.00042 U	0.00039 U	0.00042 U	0.00043 U	0.00054 UJ	0.00051 U	0.00049 U	0.00054 U
Bromobenzene	108-86-1	mg/kg		290			0.0013 U	0.0011 U	0.001 U	0.0011 U	0.0011 U	0.0014 UJ	0.0013 U	0.0013 U	0.0014 U
Bromochloromethane	74-97-5	mg/kg		150			0.00034 U	0.00027 U	0.00025 U	0.00027 U	0.00027 U	0.00035 UJ	0.00032 U	0.00032 U	0.00035 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.00024 U	0.00019 U	0.00018 U	0.00019 U	0.0002 U	0.00025 UJ	0.00023 U	0.00023 U	0.00025 U
Bromoform	75-25-2	mg/kg		19	0.69		0.0011 U	0.0009 U	0.00085 U	0.0009 U	0.00092 U	0.0012 UJ	0.0011 U	0.0011 U	0.0012 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.00028 U	0.00023 U	0.00021 U	0.00022 U	0.00023 U	0.00029 UJ	0.00027 U	0.00027 U	0.00029 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.00027 U	0.00021 U	0.0002 U	0.00021 U	0.00022 U	0.00028 UJ	0.00026 U	0.00025 U	0.00028 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.0004 U	0.00032 U	0.0003 U	0.00032 U	0.00033 U	0.00042 UJ	0.00039 U	0.00038 U	0.00042 U
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.00034 U	0.00027 U	0.00025 U	0.00027 U	0.00027 U	0.00035 UJ	0.00032 U	0.00032 U	0.00035 U
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.00036 U	0.00029 U	0.00027 U	0.00029 U	0.0003 U	0.00038 UJ	0.00035 U	0.00034 U	0.00037 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.001 U	0.0008 U	0.00076 U	0.0008 U	0.00082 U	0.001 U	0.00097 U	0.00095 U	0.001 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.0004 U	0.00032 U	0.0003 U	0.00032 U	0.00033 U	0.00042 UJ	0.00039 U	0.00038 U	0.00042 U
Chloromethane	74-87-3	mg/kg		110	11		0.0013 U	0.001 U	0.00094 U	0.00099 U	0.001 U	0.0013 U	0.0012 U	0.0012 U	0.0013 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.00081 U	0.00064 U	0.00061 U	0.00064 U	0.00066 U	0.00084 UJ	0.00078 U	0.00076 U	0.00083 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.00027 U	0.00021 U	0.0002 U	0.00021 U	0.00022 U	0.00028 UJ	0.00026 U	0.00025 U	0.00028 U
Dibromomethane	74-95-3	mg/kg		24			0.00023 U	0.00018 U	0.00017 U	0.00018 U	0.00019 U	0.00024 UJ	0.00022 U	0.00022 U	0.00024 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.00066 UJ	0.00053 U	0.0005 U	0.00052 U	0.00054 U	0.00068 UJ	0.00064 U	0.00062 U	0.00068 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.013 UJ	0.011 U	0.01 U	0.011 U	0.011 U	0.014 U	0.013 U	0.013 U	0.014 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.00055 U	0.00044 U	0.00042 U	0.00044 U	0.00045 U	0.00057 UJ	0.00053 U	0.00052 U	0.00057 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.00081 U	0.00064 U	0.00061 U	0.00064 U	0.00066 U	0.00084 UJ	0.00078 U	0.00076 U	0.00083 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.00062 U	0.00049 U	0.00047 U	0.00049 U	0.0005 U	0.00064 UJ	0.0006 U	0.00058 U	0.00064 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.0004 U	0.00032 U	0.0003 U	0.00032 U	0.00033 U	0.00042 UJ	0.00039 U	0.00038 U	0.00042 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0024 U	0.0019 U	0.0018 U	0.0019 U	0.002 U	0.0025 UJ	0.0023 U	0.0023 U	0.0025 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.00085 U	0.00068 U	0.00064 U	0.00067 U	0.00069 U	0.00088 UJ	0.00082 U	0.0008 U	0.00087 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.001 U	0.00081 U	0.00077 U	0.00081 U	0.00083 U	0.0011 UJ	0.00099 U	0.00096 U	0.0011 U
p-Isopropyltoluene	99-87-6	mg/kg					0.00054 U	0.00043 U	0.00041 U	0.00043 U	0.00044 U	0.00056 UJ	0.00052 U	0.00051 U	0.00055 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.0009 U	0.00072 U	0.00068 U	0.00072 U	0.00073 U	0.00093 UJ	0.00087 U	0.00085 U	0.00093 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.001 U	0.00079 U	0.00075 U	0.00079 U	0.00081 U	0.001 UJ	0.00096 U	0.00094 U	0.001 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.00089 U	0.00071 U	0.00067 U	0.00071 U	0.00072 U	0.00092 UJ	0.00086 U	0.00083 U	0.00092 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.00054 U	0.00043 U	0.00041 U	0.00043 U	0.00044 U	0.00056 UJ	0.00052 U	0.00051 U	0.00055 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.0018 U	0.0014 U	0.0013 U	0.0014 U	0.0014 U	0.0018 UJ	0.0017 U	0.0016 U	0.0018 U
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.00054 U	0.00043 U	0.00041 U	0.00043 U	0.00044 U	0.00056 UJ	0.00052 U	0.00051 U	0.00055 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.00081 U	0.00064 U	0.00061 U	0.00064 U	0.00066 U	0.00084 UJ	0.00078 U	0.00076 U	0.00083 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.0004 U	0.00032 U	0.0003 U	0.00032 U	0.00033 U	0.00042 UJ	0.00039 U	0.00038 U	0.00042 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.0004 U	0.00032 U	0.0003 U	0.00032 U	0.00033 U	0.00042 UJ	0.00039 U	0.00038 U	0.00042 U
Vinyl Acetate	108-05-4	mg/kg		910			0.002 UJ	0.0016 U	0.0015 U	0.0016 U	0.0016 U	0.0021 UJ	0.0019 U	0.0019 U	0.0021 U
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.0004 U	0.00032 U	0.0003 U	0.00032 U	0.00033 U	0.00042 UJ	0.00039 U	0.00038 U	0.00042 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-10	C2BP-11	C2BP-11	C2BP-11	C2BP-11	C2BP-12	C2BP-12	C2BP-12	C2BP-12
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022
						Depth Interval	5.5 - 6	0 - 0.5	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	1 - 1.5	2 - 2.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	N	N	FD
Xylene, o	95-47-6	mg/kg	1.4	650			0.0012 U	0.00099 U	0.00093 U	0.00098 U	0.001 U	0.0013 UJ	0.0012 U	0.0012 U	0.0013 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.00076 U	0.0006 U	0.00057 U	0.0006 U	0.00061 U	0.00078 UJ	0.00073 U	0.00071 U	0.00078 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.0012 U	0.00099 U	0.00093 U	0.00098 U	0.001 U	0.0013 UJ	0.0012 U	0.0012 U	0.0013 U
SW8270C															
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.00069 U	0.0022 J	0.0007 U	0.00075 U	0.00074 U	0.00087 U	0.00073 U	0.00081 U	0.00081 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.00058 U	0.002 J	0.00058 U	0.00062 U	0.00062 U	0.00072 U	0.00061 U	0.00068 U	0.00067 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.00055 U	0.00056 U	0.00056 U	0.0006 U	0.00059 U	0.00069 U	0.00058 U	0.00065 U	0.00064 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.00096 U	0.0017 J	0.00096 U	0.001 U	0.001 U	0.0012 U	0.001 U	0.0011 U	0.0011 U
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.00058 U	0.0067	0.00058 U	0.00062 U	0.00062 U	0.00072 U	0.00061 U	0.00068 U	0.00067 U
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9		0.00094 U	0.00094 UJ	0.00094 U	0.001 U	0.001 U	0.0012 U	0.00099 U	0.0011 U	0.0011 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04		0.0015 U	0.0015 UJ	0.0015 UJ	0.0016 UJ	0.0016 UJ	0.0019 U	0.0016 U	0.0018 U	0.0017 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.0032 U	0.0033 UJ	0.0033 U	0.0035 U	0.0035 U	0.004 U	0.0034 U	0.0038 U	0.0038 U
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.0069 U	0.007 UJ	0.007 U	0.0075 U	0.0074 U	0.0087 U	0.0073 U	0.0081 U	0.0081 U
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.068 U	0.068 UJ	0.068 U	0.073 U	0.072 U	0.085 U	0.071 U	0.079 U	0.079 U
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.005 U	0.005 U	0.005 U	0.0053 U	0.0053 U	0.0062 U	0.0052 U	0.0058 U	0.0058 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.0017 U	0.0017 U	0.0017 U	0.0019 U	0.0019 U	0.0022 U	0.0018 U	0.002 U	0.002 U
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.00058 U	0.00058 U	0.00058 U	0.00062 U	0.00062 U	0.00072 U	0.00061 U	0.00068 U	0.00067 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.00046 U	0.00047 UJ	0.00046 U	0.0005 U	0.00049 U	0.00058 U	0.00049 U	0.00054 U	0.00054 U
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.001 U	0.011	0.001 U	0.0011 U	0.0011 U	0.0013 J	0.0011 U	0.0012 U	0.0012 U
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.0011 U	0.0011 UJ	0.0011 U	0.0012 U	0.0012 U	0.0014 U	0.0012 U	0.0013 U	0.0013 U
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.0017 U	0.0017 U	0.0017 U	0.0019 U	0.0019 U	0.0022 U	0.0018 U	0.002 U	0.002 U
2-Nitrophenol	88-75-5	mg/kg					0.00072 U	0.00072 UJ	0.00072 U	0.00077 U	0.00077 U	0.0009 U	0.00075 U	0.00084 U	0.00083 U
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.0017 U	0.0017 UJ	0.0017 U	0.0019 U	0.0019 U	0.0022 U	0.0018 U	0.002 U	0.002 U
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.0097 U	0.0098 U	0.0098 U	0.01 U	0.01 U	--	0.01 U	0.011 U	0.011 U
3-Nitroaniline	99-09-2	mg/kg					0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.014 UJ	0.012 U	0.014 U	0.013 U
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.012 U	0.012 UJ	0.012 U	0.012 U	0.012 U	0.014 U	0.012 U	0.014 U	0.013 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0013 U	0.0011 U	0.0012 U	0.0012 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.0038 U	0.0038 UJ	0.0038 U	0.0041 U	0.0041 U	0.0048 U	0.004 U	0.0045 U	0.0044 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.015 U	0.016 U	0.016 U	0.017 U	0.017 U	--	0.016 U	0.018 U	0.018 U
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.00073 U	0.00073 U	0.00073 U	0.00078 U	0.00078 U	0.00091 U	0.00077 U	0.00085 U	0.00085 U
4-Nitroaniline	100-01-6	mg/kg		27			0.0058 U	0.0058 U	0.0058 U	0.0062 U	0.0062 U	0.0072 UJ	0.0061 U	0.0068 U	0.0067 U
4-Nitrophenol	100-02-7	mg/kg					0.02 U	0.02 UJ	0.02 U	0.021 U	0.021 U	0.025 U	0.021 U	0.023 U	0.023 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00053 U	0.00054 U	0.00053 U	0.00057 U	0.00057 U	0.00066 U	0.00056 U	0.00062 U	0.00062 U
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.00058 U	0.00058 U	0.00058 U	0.00062 U	0.00062 U	0.00072 U	0.00061 U	0.00068 U	0.00067 U
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0018 U	0.0019 U	0.0019 U	0.002 U	0.002 U	0.0023 U	0.0019 U	0.0022 U	0.0021 U
Azobenzene	103-33-3	mg/kg		5.6			0.00058 U	0.00058 U	0.00058 U	0.00062 U	0.00062 U	0.00072 U	0.00061 U	0.00068 U	0.00067 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0013 U	0.0024 J	0.0022 J	0.0014 U	0.0014 U	0.0016 U	0.0014 J	0.0015 U	0.0015 U
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0015 U	0.0021 J	0.0015 U	0.0016 U	0.0016 U	0.0019 UJ	0.0016 U	0.0018 U	0.0017 U
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.0012 U	0.0032 J	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0012 U	0.0014 U	0.0013 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0021 U	0.0021 U	0.0021 U	0.0022 U	0.0022 U	0.0026 UJ	0.0022 U	0.0024 U	0.0024 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0016 U	0.0016 U	0.0016 U	0.0017 U	0.0017 U	0.002 U	0.0017 U	0.0019 U	0.0019 U
Benzoic Acid	65-85-0	mg/kg	0.01	250000			0.14 U	--	--	--	--	--	0.15 U	0.17 U	0.16 U
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.0058 U	0.0058 UJ	0.0058 UJ	0.0062 UJ	0.0062 UJ	0.0072 U	0.0061 UJ	0.0068 UJ	0.0067 UJ
Bis (2-chloro-1-methylethyl) ether	108-60-1	mg/kg		2000	0.0051		0.00071 U	0.00071 U	0.00071 U	0.00076 U	0.00075 U	0.00088 U	0.00074 U	0.00083 U	0.00082 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.0021 U	0.0021 U	0.0021 U	0.0022 U	0.0022 U	0.0026 U	0.0022 U	0.0024 U	0.0024 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.00089 U	0.0009 U	0.00089 U	0.00096 U	0.00095 U	0.0011 U	0.00094 U	0.001 U	0.001 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.028 U	0.019 U	0.0093 U	0.01 U	0.021 U	0.032 U	0.04 U	0.025 U	0.043 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.0059 U	0.017 U	0.0093 U	0.014 U	0.015 U	0.019 U	0.0062 U	0.0071 U	0.0069 U
Carbazole	86-74-8	mg/kg	79				0.00084 U	0.00085 U	0.0015 J	0.00091 U	0.0009 U	0.0011 U	0.0011 J	0.00099 U	0.00098 U
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0015 U	0.0018 J	0.0015 U	0.0016 U	0.0016 U	0.0019 U	0.0016 U	0.0018 U	0.0017 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0015 U	0.0017 U	0.0015 U	0.0016 U	0.0016 U

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	C2BP-10	C2BP-11	C2BP-11	C2BP-11	C2BP-11	C2BP-12	C2BP-12	C2BP-12	C2BP-12
						Sample Date	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/10/2022	3/9/2022	3/9/2022	3/9/2022	3/9/2022
						Depth Interval	5.5 - 6	0 - 0.5	1 - 1.5	2 - 2.5	3 - 3.5	0 - 0.5	1 - 1.5	2 - 2.5	2 - 2.5
						Sample Type	N	N	N	N	N	N	N	N	FD
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.00068 U	0.0035 J	0.00068 U	0.00073 U	0.00073 U	0.00085 U	0.00072 U	0.0008 U	0.00079 U
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.0025 U	0.006 J	0.0029 J	0.0034 J	0.0077 J	0.0047 J	0.0048 J	0.0066 J	0.0057 J
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.00058 U	0.00058 U	0.00058 U	0.00062 U	0.00062 U	0.00072 U	0.00061 U	0.00068 U	0.00067 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.0085 U	0.0031 U	0.0031 U	0.0034 U	0.0033 U	0.0039 U	0.0037 U	0.0037 U	0.0036 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.0014 U	0.0014 U	0.0014 U	0.0015 U	0.0015 U	0.0017 U	0.0015 U	0.0016 U	0.0016 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0014 U	0.0028 J	0.0018 J	0.0015 U	0.0015 U	0.0017 U	0.0015 J	0.0016 U	0.0016 U
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.00058 U	0.00058 U	0.00058 U	0.00062 U	0.00062 U	0.00072 U	0.00061 U	0.00068 U	0.00067 U
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.0017 U	0.0017 U	0.0017 U	0.0019 U	0.0019 U	0.0022 U	0.0018 U	0.002 U	0.002 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.0017 U	0.0017 U	0.0017 U	0.0019 U	0.0019 U	0.0022 U	0.0018 U	0.002 U	0.002 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.00089 U	0.0009 U	0.00089 U	0.00096 U	0.00095 U	0.0011 UJ	0.00094 U	0.001 U	0.001 U
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.0005 U	0.0005 U	0.0005 U	0.00053 U	0.00053 U	0.00062 U	0.00052 U	0.00058 U	0.00058 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.0014 U	0.0023 J	0.0014 U	0.0015 U	0.0015 U	0.0017 U	0.0015 U	0.0016 U	0.0016 U
Isophorone	78-59-1	mg/kg		570			0.00097 U	0.00098 U	0.00098 U	0.001 U	0.001 U	0.0012 U	0.001 U	0.0011 U	0.0011 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0014 J	0.022	0.00074 J	0.00062 U	0.0012 J	0.0015 J	0.00061 U	0.00068 U	0.00067 U
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.0023 U	0.0023 U	0.0023 U	0.0025 U	0.0025 U	0.0029 U	0.0024 U	0.0027 U	0.0027 U
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.0025 U	0.0026 U	0.0026 U	0.0027 U	0.0027 U	0.0032 U	0.0027 U	0.003 U	0.003 U
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.00092 U	0.00093 U	0.00093 U	0.00099 U	0.00099 U	0.0012 U	0.00097 UJ	0.0011 UJ	0.0011 UJ
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		0.0073 U	0.0073 UJ	0.0073 UJ	0.0078 UJ	0.0078 UJ	0.0091 U	0.0077 U	0.0085 U	0.0085 U
Phenanthrene	85-01-8	mg/kg	5.5		11		0.00075 J	0.0049 J	0.0015 J	0.0014 J	0.00072 U	0.00084 U	0.00071 U	0.00078 U	0.00078 U
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.0027 U	0.006 J	0.0027 U	0.0029 U	0.0028 U	0.0033 U	0.0028 U	0.0031 U	0.0031 U
Pyrene	129-00-0	mg/kg	10	1800	45		0.0015 U	0.0029 J	0.0015 U	0.0016 U	0.0016 U	0.0019 U	0.0016 U	0.0018 U	0.0017 U
Pyridine	110-86-1	mg/kg		58			0.018 U	0.018 U	0.018 U	0.02 U	0.02 U	0.023 U	0.019 U	0.021 U	0.021 U
SW8270SIM															
1-Methylnaphthalene	90-12-0	mg/kg		9.9			--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		--	--	--	--	--	--	--	--	--
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		--	--	--	--	--	--	--	--	--
Acenaphthylene	208-96-8	mg/kg	120		6.4		--	--	--	--	--	--	--	--	--
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		--	--	--	--	--	--	--	--	--
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		--	--	--	--	--	--	--	--	--
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		--	--	--	--	--	--	--	--	--
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		--	--	--	--	--	--	--	--	--
Chrysene	218-01-9	mg/kg	3.1	110	2.2		--	--	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		--	--	--	--	--	--	--	--	--
Fluoranthene	206-44-0	mg/kg	10	2400	86		--	--	--	--	--	--	--	--	--
Fluorene	86-73-7	mg/kg	3.7	2300	6		--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		--	--	--	--	--	--	--	--	--
Naphthalene	91-20-3	mg/kg	1	2	0.042		--	--	--	--	--	--	--	--	--
Phenanthrene	85-01-8	mg/kg	5.5		11		--	--	--	--	--	--	--	--	--
Pyrene	129-00-0	mg/kg	10	1800	45		--	--	--	--	--	--	--	--	--
SW8290															
1,2,3,4,6,7,8-HpCDD	35822-46-9	mg/kg	2.9E-05	0.00048			5.5E-06 J	0.00033	1.4E-05	7.8E-06	1.2E-05	--	--	--	--
1,2,3,4,6,7,8-HpCDF	67562-39-4	mg/kg	2.9E-05	0.00048			8.7E-07 UJ	2.8E-05	6.3E-07 UJ	3.7E-07 U	5.9E-07 U	--	--	--	--
1,2,3,4,7,8,9-HpCDF	55673-89-7	mg/kg	2.9E-05	0.00048			6.8E-08 U	2.9E-06 J	2.5E-07 J	6.8E-08 U	7.9E-08 U	--	--	--	--
1,2,3,4,7,8-HxCDD	39227-28-6	mg/kg	2.9E-06	4.8E-05			8.7E-08 U	1.9E-05	7.3E-07 UJ	5.1E-07 UJ	5.1E-07 U	--	--	--	--
1,2,3,4,7,8-HxCDF	70648-26-9	mg/kg	2.9E-06	4.8E-05			1E-07 J	9.8E-06	1.7E-07 J	5.2E-08 U	6.3E-08 U	--	--	--	--
1,2,3,6,7,8-HxCDD	57653-85-7	mg/kg	2.9E-06	4.8E-05			3.7E-07 U	2.9E-05	9.8E-07 UJ	6.7E-07 U	8.1E-07 U	--	--	--	--
1,2,3,6,7,8-HxCDF	57117-44-9	mg/kg	2.9E-06	4.8E-05			1.1E-07 UJ	9.2E-06	2.3E-07 J	4.7E-08 U	5.6E-08 U	--	--	--	--
1,2,3,7,8,9-HxCDD	19408-74-3	mg/kg	2.9E-06	4.8E-05			3.3E-07 J	4.4E-05	2.1E-06 J	4.7E-07 UJ	1.5E-06 J	--	--	--	--
1,2,3,7,8,9-HxCDF	72918-21-9	mg/kg	2.9E-06	4.8E-05			1.6E-07 U	1.2E-06 U	4.9E-08 U	5.2E-08 U	6.3E-08 U	--	--	--	--

Table D-10. Copco No. 2 Burn Pit Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location											
						Sample Date	Depth Interval	Sample Type	C2BP-10	C2BP-11	C2BP-11	C2BP-11	C2BP-11	C2BP-12	C2BP-12	C2BP-12	C2BP-12
1,2,3,7,8-PeCDD	40321-76-4	mg/kg	2.9E-07	4.8E-06		3/10/2022	5.5 - 6	N	1.1E-07 U	2E-05	4.7E-07 J	1.7E-07 U	2.2E-07 U	--	--	--	--
1,2,3,7,8-PeCDF	57117-41-6	mg/kg	9.7E-06	0.00016		3/10/2022	0 - 0.5	N	6.4E-08 U	1.5E-05	9.2E-08 U	7.6E-08 U	9.3E-08 U	--	--	--	--
2,3,4,6,7,8-HxCDF	60851-34-5	mg/kg	2.9E-06	4.8E-05		3/10/2022	1 - 1.5	N	4.9E-08 U	8.7E-06	4.8E-08 U	5.1E-08 U	6.1E-08 U	--	--	--	--
2,3,4,7,8-PeCDF	57117-31-4	mg/kg	9.7E-07	1.6E-05		3/10/2022	2 - 2.5	N	6.5E-08 U	1.7E-05	9.3E-08 U	7.7E-08 U	9.5E-08 U	--	--	--	--
2,3,7,8-TCDD	1746-01-6	mg/kg	2.9E-07	4.8E-06	0.3	3/10/2022	3 - 3.5	N	9.1E-08 U	1.2E-05	1.2E-07 U	1.2E-07 U	1.4E-07 U	--	--	--	--
2,3,7,8-TCDF	51207-31-9	mg/kg	2.9E-06	4.8E-05		3/9/2022	0 - 0.5	N	5.8E-08 U	2.7E-05	7.7E-07 J	4.2E-07 J	9.9E-07 J	--	--	--	--
OCDD	3268-87-9	mg/kg	0.00097	0.016		3/9/2022	1 - 1.5	N	2.3E-05	0.00097	4.7E-05	2.8E-05	3.7E-05	--	--	--	--
OCDF	39001-02-0	mg/kg	0.00097	0.016		3/9/2022	2 - 2.5	N	2.1E-06 U	1.4E-05	1.9E-06 U	8.8E-07 U	2E-06 U	--	--	--	--

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

mg/kg = milligram(s) per kilogram

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-11. Iron Gate Shooting Range Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	IGSR-01	IGSR-01	IGSR-02	IGSR-02	IGSR-02	IGSR-02	IGSR-02	IGSR-03	IGSR-03	IGSR-03	IGSR-03	IGSR-03	IGSR-03	IGSR-04	IGSR-04	
						Sample Date	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/13/2022	5/13/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022
						Depth Interval	0 - 0.5	0.5 - 1	0 - 0.5	1 - 1.5	3 - 3.5	5 - 6	5 - 6	0 - 0.5	0 - 0.5	1 - 1.5	2.5 - 3.5	5 - 6	5 - 6	0 - 0.5	1 - 1.5	
						Sample Type	N	N	N	N	N	N	FD	N	FD	N	N	N	N	FD	N	N
CALC																						
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg					0 U	0 U	0 U	0 U	0 U	0 U	0 U	0.067005	0.03158	0.0025028	0 U	0 U	0 U	0 U	0 U	
SW6010B																						
Boron	7440-42-8	mg/kg	2	16000			6.7 J	140 U	130 U	130 U	8.7 J	140 U	150 U	7.5 J	9.3 J	7.7 J	9.1 J	5.5 J	9.6 J	130 U	130 U	
SW6020																						
Antimony	7440-36-0	mg/kg	0.67	31			0.099 J	0.077 J	0.63	0.11 J	0.13 J	0.081 J	0.094 J	13	11	28	0.32 J	0.028 J	0.29 U	0.93	0.27 J	
Arsenic	7440-38-2	mg/kg	19	19			2	1.9	2.7	3.2	4.4	3.2	3.6	2.4 J	3.1 J	3.3	2.5	2	2	2.7	2.1	
Barium	7440-39-3	mg/kg	630	15000			170	160	160	110	86	66	63	120 J	180 J	190	170	240 J	110 J	170	110	
Beryllium	7440-41-7	mg/kg	2.5	16			0.45	0.42	0.56	0.58	0.57	0.72	0.7	0.55	0.72	0.69	0.7	0.59	0.62	0.57	0.53	
Cadmium	7440-43-9	mg/kg	0.54	71			0.13 J	0.11 J	0.13 J	0.085 J	0.051 J	0.13 J	0.14 J	0.16 J	0.34 J	0.15 J	0.12 J	0.21 J	0.13 J	0.12 J	0.092 J	
Chromium	7440-47-3	mg/kg	200	120000			11	11	11	7.2	4.5	3.8	4.1	7.8 J	11 J	11	7.7	2.8	3.4	11	8.6	
Cobalt	7440-48-4	mg/kg	13	23			20	22	22	18	15	15	15	11 J	17 J	19	16	15	15	25	19	
Copper	7440-50-8	mg/kg	73	3100			99	100	110	96	110	180	160	65	79	84	54	37	40	110	130	
Iron	7439-89-6	mg/kg		55000			49000	52000	54000	52000	53000	45000	44000	33000 J	47000 J	53000	50000	46000	51000	62000	57000	
Lead	7439-92-1	mg/kg	34	80			8.5	6	60	4.7	3.4	3.2	3.4	1100 J	840 J	1400	24	3.2	3	34	10	
Manganese	7439-96-5	mg/kg	2100	2100			1300	1400	1500	1000	550	1100	1200	860 J	1200 J	1300	1100	2700 J	1600 J	1600	1400	
Molybdenum	7439-98-7	mg/kg	2	390			0.53	0.46	0.5	0.28	0.33	0.26	0.31	0.35	0.39	0.31	0.22 J	0.41	0.2	0.43	0.36	
Nickel	7440-02-0	mg/kg	110	820			11	11	11	7.5	3.6	3.8	3.4	7.4 J	11 J	11	7.8	2.6	2.6	12	8.2	
Selenium	7782-49-2	mg/kg	0.52	390			3.2	3.2	3.3	2.9	3.8	3.5	2.7	2.6	3.8	3.5	3.3	4	3.5	3.7	3.6	
Silver	7440-22-4	mg/kg	4.2	390			0.03 J	0.035 J	0.033 J	0.033 J	0.13 U	0.12 U	0.12 U	0.084 J	0.064 J	0.089 J	0.018 J	0.0076 J	0.097 U	0.036 J	0.027 J	
Thallium	7440-28-0	mg/kg	2.8	2.8			0.07 J	0.07 J	0.081 J	0.085 J	0.049 J	0.057 J	0.062 J	0.073 J	0.093 J	0.096 J	0.068 J	0.095 J	0.039 J	0.07 J	0.04 J	
Vanadium	7440-62-2	mg/kg	280	390			260	260	240	150	99	68	72	89 J	130 J	160	110	66	75	270	270	
Zinc	7440-66-6	mg/kg	170	23000			79	76	89	73	87	41 J	29 J	230 J	560 J	150	71	69	69	82	87	
SW7471A																						
Mercury	7439-97-6	mg/kg	0.24	1			0.033	0.026 J	0.012 J	0.03 U	0.032 U	0.031 U	0.021 U	0.017 J	0.012 J	0.034 U	0.029 U	0.03 U	0.033 U	0.018 J	0.028 U	
SW8270SIM																						
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.0055 U	0.00087 J	0.0054 U	0.00089 J	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.0055 U	0.005 U	0.0054 U	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.0016 J	0.005 U	0.0054 U	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.0055 U	0.005 U	0.0054 U	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.0035 J	0.0031 J	0.00099 J	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.034	0.017	0.0054 U	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.047 J	0.022 J	0.0023 J	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.046 J	0.017 J	0.002 J	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.038	0.034	0.0023 J	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.016	0.0055	0.0054 U	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.045	0.025	0.0028 J	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.0085	0.0047 J	0.0054 U	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0021 J	0.0013 J	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.047 J	0.024 J	0.0032 J	0.0061 U	0.0055 U	0.0057 U	0.0016 J	0.0051 U	
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.00081 J	0.005 U	0.0054 U	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.033	0.014	0.0054 U	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.0055 U	0.0018 J	0.0054 U	0.003 J	0.0055 U	0.0057 U	0.0025 J	0.0051 U	
Phenanthrene	85-01-8	mg/kg	5.5		11		0.0053 U	0.0045 U	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.015	0.019	0.0018 J	0.0061 U	0.0055 U	0.0057 U	0.0058 U	0.0051 U	
Pyrene	129-00-0	mg/kg	10	1800	45		0.0023 J	0.0015 J	0.0051 U	0.0059 U	0.0061 U	0.0055 U	0.0053 U	0.065	0.044	0.004 J	0.0061 U	0.0055 U	0.0057 U	0.0014 J	0.0051 U	

Table D-11. Iron Gate Shooting Range Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	IGSR-04	IGSR-05	IGSR-05	IGSR-06	IGSR-06	IGSR-07	IGSR-07	IGSR-08	IGSR-08	IGSR-08	IGSR-09	IGSR-09	IGSR-09	IGSR-10	IGSR-10
						Sample Date	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/3/2022	5/6/2022
						Depth Interval	1.5 - 2	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.25	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5	1 - 1.5	0 - 0.5	1 - 1.5	1 - 1.5	0 - 0.5	0.5 - 1.5
						Sample Type	N	N	N	N	N	N	N	N	N	FD	N	N	FD	N	N
CALC																					
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0.0059042	0 U	0 U	0 U	0 U
SW6010B																					
Boron	7440-42-8	mg/kg	2	16000		130 U	6.8 J	7.6 J	130 U	150 U	160 U	150 U	140 U	150 U	150 U	130 U	140 U	130 U	79 U	120 U	
SW6020																					
Antimony	7440-36-0	mg/kg	0.67	31		0.12 J	0.05 J	0.058 J	0.11 J	0.089 J	0.14 J	0.11 J	0.17 J	0.086 J	0.086 J	0.35	0.13 J	0.16 J	0.095 J	0.093 J	
Arsenic	7440-38-2	mg/kg	19	19		2.1	3.1 J	3.5	1.9	2.5	3	3.1	2.7	1.6	1.5	2.2	1.8	2.2	1.1	1.6	
Barium	7440-39-3	mg/kg	630	15000		100	130 J	120	84	100	170	160	170	120	110	170	160	170	96	150	
Beryllium	7440-41-7	mg/kg	2.5	16		0.52	0.74 J	0.56	0.29	0.36	0.63	0.78	0.69	0.55	0.45	0.52	0.68	0.68	0.33	0.47	
Cadmium	7440-43-9	mg/kg	0.54	71		0.098 J	0.14 J	0.13 J	0.081 J	0.093 J	0.15 J	0.12 J	0.086 J	0.063 J	0.051 J	0.14 J	0.1 J	0.12 J	0.058 J	0.075 J	
Chromium	7440-47-3	mg/kg	200	120000		6.7	8.4 J	6.6	5.3	7.4	18	18	16	4.7	4.5	17	21	22	7.1	14	
Cobalt	7440-48-4	mg/kg	13	23		18	19 J	16	14	18	21	19	13	6.9	5.8	22	18	20	9.5	14	
Copper	7440-50-8	mg/kg	73	3100		120	62 J	49	81	91	60	56	20	11	10	34	18	19	9.8	14	
Iron	7439-89-6	mg/kg		55000		58000	53000	46000	36000	45000	45000	47000	39000	23000	21000	39000	36000	43000	26000	32000	
Lead	7439-92-1	mg/kg	34	80		4.6	4.4 J	3.8	4.6	3.9	6.3	5.1	6.4	2.6	2.4	9.8	5.7	6.4	3	4.4	
Manganese	7439-96-5	mg/kg	2100	2100		1500	1200 J	1000	860	1100	1300	1100	950	560 J	380 J	1700	1300	1500	800	1200	
Molybdenum	7439-98-7	mg/kg	2	390		0.37	0.25 J	0.5	0.38	0.34	0.44	0.26	0.34	0.11 J	0.092 J	0.55	0.24	0.34	0.25	0.29	
Nickel	7440-02-0	mg/kg	110	820		7.7	8.9 J	7.1	5.3	7.1	19	20	16	5.1	4.2	17	21	21	7.7	14	
Selenium	7782-49-2	mg/kg	0.52	390		3.8	4 J	3	2.5	2.8	3.7	3.4	3.4	2.8	2.9	4.2	3.8	4.1	3	3	
Silver	7440-22-4	mg/kg	4.2	390		0.022 J	0.023 J	0.026 J	0.022 J	0.032 J	0.044 J	0.056 J	0.044 J	0.04 J	0.036 J	0.02 J	0.041 J	0.041 J	0.011 J	0.031 J	
Thallium	7440-28-0	mg/kg	2.8	2.8		0.032 J	0.083 J	0.086 J	0.044 J	0.073 J	0.11 J	0.11 J	0.1 J	0.048 J	0.036 J	0.086 J	0.11 J	0.11 J	0.025 J	0.051 J	
Vanadium	7440-62-2	mg/kg	280	390		250	120 J	99	170	190	160	150	92	41	36	120	88 J	110 J	68	76	
Zinc	7440-66-6	mg/kg	170	23000		82	79 J	73	56	64	77	72	71	35	36	120	62	71	41	51	
SW7471A																					
Mercury	7439-97-6	mg/kg	0.24	1		0.034 U	0.032 U	0.038 U	0.011 J	0.029 U	0.036 U	0.037 U	0.035 U	0.0096 J	0.035 U	0.013 J	0.03 U	0.033 U	0.031 U	0.022 U	
SW8270SIM																					
1-Methylnaphthalene	90-12-0	mg/kg		9.9		0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0049 U	0.0052 U	0.0057 U	0.00089 J	0.0053 U	
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0049 U	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Acenaphthene	83-32-9	mg/kg	0.25	3300	12	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0049 U	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Acenaphthylene	208-96-8	mg/kg	120		6.4	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0049 U	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Anthracene	120-12-7	mg/kg	6.8	17000	1.9	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0011 J	0.001 J	0.0052 U	0.0011 J	0.0055 U	0.0053 U	
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.002 J	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0024 J	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0024 J	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0019 J	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0011 J	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Chrysene	218-01-9	mg/kg	3.1	110	2.2	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0032 J	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0029 J	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Fluoranthene	206-44-0	mg/kg	10	2400	86	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0017 J	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0023 J	0.0052 U	0.0057 U	0.0021 J	0.0053 U	
Fluorene	86-73-7	mg/kg	3.7	2300	6	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.00076 J	0.0058 U	0.0058 U	0.0058 U	0.0049 U	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0015 J	0.0052 U	0.0057 U	0.0055 U	0.0053 U	
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.0057 U	0.002 J	0.0063 U	0.0053 U	0.005 U	0.0019 J	0.006 U	0.0024 J	0.0058 U	0.0058 U	0.0049 U	0.0052 U	0.0057 U	0.0077	0.0053 U	
Phenanthrene	85-01-8	mg/kg	5.5		11	0.0057 U	0.006 U	0.0063 U	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0049 U	0.0052 U	0.0057 U	0.002 J	0.0053 U	
Pyrene	129-00-0	mg/kg	10	1800	45	0.0057 U	0.006 U	0.0012 J	0.0053 U	0.005 U	0.0059 U	0.006 U	0.0058 U	0.0058 U	0.0058 U	0.0031 J	0.0052 U	0.0057 U	0.0055 U	0.0053 U	

Table D-11. Iron Gate Shooting Range Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	IGSR-10	IGSR-10	IGSR-11	IGSR-11	IGSR-12	IGSR-12	IGSR-13	IGSR-13	IGSR-14	IGSR-14	IGSR-15	IGSR-15	IGSR-16	IGSR-16	IGSR-17	IGSR-17				
						Sample Date	5/13/2022	5/13/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/6/2022	5/5/2022	5/5/2022	5/5/2022	5/5/2022	5/5/2022	5/5/2022	5/5/2022	5/5/2022
						Depth Interval	2.5 - 3.5	5 - 6	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
CALC																										
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U				
SW6010B																										
Boron	7440-42-8	mg/kg	2	16000		77 U	120 U	130 U	140 U	150 U	130 U	140 U	160 U	150 U	150 U	150 U	3.6 J	5.9 J	6.9 J	6.8 J	5.9 J					
SW6020																										
Antimony	7440-36-0	mg/kg	0.67	31		0.1 J	0.096 J	0.15 J	0.14 J	0.1 J	0.087 J	0.14 J	0.14 J	0.18 J	0.095 J	0.16 J	0.11 J	0.19 J	0.18 J	0.16 J	0.15 J					
Arsenic	7440-38-2	mg/kg	19	19		2.2	2.3	1.7	1.8	1.9	2.1	2.9	2.9	3.1	2.7	3	2.7	2.8	2.9	3.5	3.2					
Barium	7440-39-3	mg/kg	630	15000		160	130	170	190	130	130	190	190 J	210	190	160	120	170	180 J	140	130					
Beryllium	7440-41-7	mg/kg	2.5	16		0.57	0.56	0.53	0.59	0.64	0.64	0.84	0.85	0.89	0.64	0.8	0.54	0.88	0.8	0.86	0.85					
Cadmium	7440-43-9	mg/kg	0.54	71		0.056 J	0.067 J	0.12 J	0.11 J	0.062 J	0.051 J	0.1 J	0.11 J	0.11 J	0.12 J	0.12 J	0.11 J	0.12 J	0.1 J	0.11 J	0.1 J					
Chromium	7440-47-3	mg/kg	200	120000		10	9.1	17	20	6.6	4.5	13	12	15	6.2	19	8.8	23	22	21	19					
Cobalt	7440-48-4	mg/kg	13	23		10	10	20	20	8.6	7.3	13	12	13	8	16	18	17	17	15	15					
Copper	7440-50-8	mg/kg	73	3100		17	22	16	17	23	25	22	21	23	18	42	89	31	35	25	22					
Iron	7439-89-6	mg/kg		55000		32000	34000	34000	38000	31000	29000	41000	38000 J	39000	29000	42000	47000	41000	41000 J	46000	42000					
Lead	7439-92-1	mg/kg	34	80		4.2	3.5	6.1	6	3.6	2.8	5	4.9	5.7	3.2	6.1	4.6	7	5.8	6.1	5.7					
Manganese	7439-96-5	mg/kg	2100	2100		950	1200	1600	1500	730	560	1100	1100 J	1100	1000	1200	1200	1300	1300 J	1100	1100					
Molybdenum	7439-98-7	mg/kg	2	390		0.28	0.46	0.4	0.31	0.33	0.34	0.32	0.33	0.34	0.27	0.34	0.27	0.43	0.3	0.38	0.35					
Nickel	7440-02-0	mg/kg	110	820		11	9.3	19	21	5	3.3	12	12	15	5.5	19	8.8	23	24	21	19					
Selenium	7782-49-2	mg/kg	0.52	390		3.8	4	4	4.3	3.8	3.9	4.4	4.2	4.4	3.8	4	3.5	3.8	4.7	4.3	3.8					
Silver	7440-22-4	mg/kg	4.2	390		0.027 J	0.013 J	0.029 J	0.037 J	0.12 U	0.11 U	0.037 J	0.034 J	0.037 J	0.014 J	0.044 J	0.034 J	0.054 J	0.045 J	0.051 J	0.048 J					
Thallium	7440-28-0	mg/kg	2.8	2.8		0.065 J	0.043 J	0.095 J	0.11 J	0.31 U	0.27 U	0.1 J	0.1 J	0.12 J	0.05 J	0.13 J	0.08 J	0.13 J	0.16 J	0.13 J	0.13 J					
Vanadium	7440-62-2	mg/kg	280	390		64	70	98	100	73	56	80	72	78	68	110	160	110	110	98	91					
Zinc	7440-66-6	mg/kg	170	23000		57	71	69	67	64	64	77	74	75	62	78	70	78	72	84	78					
SW7471A																										
Mercury	7439-97-6	mg/kg	0.24	1		0.033 U	0.031 U	0.014 J	0.034 U	0.031 U	0.028 U	0.034 U	0.039 U	0.036 U	0.032 U	0.013 J	0.0072 J	0.035 U	0.035 U	0.038 U	0.028 U					
SW8270SIM																										
1-Methylnaphthalene	90-12-0	mg/kg		9.9		0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Acenaphthene	83-32-9	mg/kg	0.25	3300	12	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Acenaphthylene	208-96-8	mg/kg	120		6.4	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Anthracene	120-12-7	mg/kg	6.8	17000	1.9	0.0056 U	0.0055 U	0.00091 J	0.0011 J	0.00085 J	0.0059 U	0.0009 J	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Chrysene	218-01-9	mg/kg	3.1	110	2.2	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Fluoranthene	206-44-0	mg/kg	10	2400	86	0.0062	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Fluorene	86-73-7	mg/kg	3.7	2300	6	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0031 J	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Phenanthrene	85-01-8	mg/kg	5.5		11	0.0056 U	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					
Pyrene	129-00-0	mg/kg	10	1800	45	0.0032 J	0.0055 U	0.0048 U	0.0058 U	0.0057 U	0.0059 U	0.0053 U	0.0064 U	0.006 U	0.0057 U	0.0056 U	0.0055 U	0.0057 U	0.0057 U	0.0056 U	0.0065 U					

Table D-11. Iron Gate Shooting Range Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	IGSR-18	IGSR-18	IGSR-19	IGSR-19	IGSR-19	IGSR-20	IGSR-20	IGSR-20	IGSR-20	IGSR-21	IGSR-21	IGSR-21	IGSR-22	IGSR-22	IGSR-23
						Sample Date	5/5/2022	5/5/2022	5/5/2022	5/5/2022	5/5/2022	5/13/2022	5/13/2022	5/13/2022	5/13/2022	5/5/2022	5/5/2022	5/5/2022	5/5/2022	5/5/2022	5/5/2022
						Depth Interval	0 - 0.5	1 - 1.5	0 - 0.5	1 - 1.5	2 - 2.5	0 - 0.5	0.5 - 1.5	2.5 - 3.5	5 - 6	0 - 0.5	1 - 1.5	1 - 1.5	0 - 0.5	1 - 1.5	0 - 0.5
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	FD	N	N	N
CALC																					
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0 U	0 U	0.18157	0.032259	0.0065217	0 U	0 U	0 U	0 U	0.035092	0 U	0 U	0 U	0 U	0 U	1.9E-06
SW6010B																					
Boron	7440-42-8	mg/kg	2	16000		4.8 J	100 U	6.4 J	8.6 J	4.9 J	110 U	150 U	150 U	11 J	11 J	10 J	6.2 J	7.1 J	7.9 J	4.6 J	
SW6020																					
Antimony	7440-36-0	mg/kg	0.67	31		0.13 J	0.1 J	110	20	5.3	0.26	0.14 J	0.12 J	0.17 J	2.3	0.32	0.24	0.2 J	0.21 J	0.27	
Arsenic	7440-38-2	mg/kg	19	19		2.8	2.6	6	3.8	3	3	2.9	2.8	4.4	4.4	3.7	3.5	4.1	4.1	2.8	
Barium	7440-39-3	mg/kg	630	15000		300	340	130	150	130	180	170	180	170	100	180 J	140 J	110	130	170	
Beryllium	7440-41-7	mg/kg	2.5	16		0.68	0.64	0.82	0.83	0.76	0.69	0.71	0.73	0.84	0.81	0.79	0.77	0.86	0.87	0.64	
Cadmium	7440-43-9	mg/kg	0.54	71		0.11 J	0.067 J	0.11 J	0.11 J	0.098 J	0.1 J	0.1 J	0.1 J	0.083 J	0.083 J	0.075 J	0.07 J	0.088 J	0.081 J	0.077 J	
Chromium	7440-47-3	mg/kg	200	120000		17	9.3	17	18	17	17	17	17	20	17	16	15	18	17	15	
Cobalt	7440-48-4	mg/kg	13	23		12	9.5	13	15	13	13	14	13	15	14	14	13	14	13	12	
Copper	7440-50-8	mg/kg	73	3100		18	21	58	39	29	22	22	25	31	36	25	24	23	24	20	
Iron	7439-89-6	mg/kg		55000		34000	32000	39000	44000	38000	37000	38000	37000	46000	44000	44000	39000	41000	41000	37000	
Lead	7439-92-1	mg/kg	34	80		5	3.6	8900	1400	410	8.2	5.8	5.7	5.1	160	15 J	10 J	9.4	8.5	14	
Manganese	7439-96-5	mg/kg	2100	2100		950	1400	990	1100	970	1000	1100	1100	1100	1100	1100	1000	1000	1000	1000	
Molybdenum	7439-98-7	mg/kg	2	390		0.32	0.56	0.33	0.34	0.31	0.46	0.34	0.33	0.7	0.44	0.71	0.59	0.31	0.43	0.33	
Nickel	7440-02-0	mg/kg	110	820		15	8.7	17	19	17	18	19	19	20	16	15	15	18	17	15	
Selenium	7782-49-2	mg/kg	0.52	390		3.6	3.6	3.3	4.3	3.5	4	4.2	3.6	3.8	3.9	3.7	3.5	3.4	3.5	3.6	
Silver	7440-22-4	mg/kg	4.2	390		0.025 J	0.011 J	0.37	0.099 J	0.055 J	0.037 J	0.037 J	0.045 J	0.05 J	0.05 J	0.036 J	0.035 J	0.04 J	0.029 J	0.026 J	
Thallium	7440-28-0	mg/kg	2.8	2.8		0.11 J	0.062 J	0.15 J	0.14 J	0.12 J	0.094 J	0.087 J	0.1 J	0.13 J	0.11 J	0.11 J	0.1 J	0.12 J	0.11 J	0.093 J	
Vanadium	7440-62-2	mg/kg	280	390		82	93	84	95	79	75	77	77	120	120	110	100	100	100	86	
Zinc	7440-66-6	mg/kg	170	23000		60	86	80	83	71	77	79	77	78	80	76	68	74	74	67	
SW7471A																					
Mercury	7439-97-6	mg/kg	0.24	1		0.026 U	0.026 U	0.022 U	0.031 U	0.026 U	0.034 U	0.028 U	0.035 U	0.038 U	0.024 U	0.037 U	0.032 U	0.034 U	0.027 U	0.029 U	
SW8270SIM																					
1-Methylnaphthalene	90-12-0	mg/kg		9.9		0.0063 U	0.0059 U	0.0057 U	0.0053 U	0.0049 U	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.0059 U	0.0056 U	0.0018 J	0.006 U	0.0061 U	0.0059 U	
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88	0.0063 U	0.0059 U	0.0057 U	0.0053 U	0.0049 U	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.0059 U	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Acenaphthene	83-32-9	mg/kg	0.25	3300	12	0.0063 U	0.0059 U	0.0049 J	0.001 J	0.0049 U	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.0011 J	0.0056 U	0.0017 J	0.006 U	0.0061 U	0.0059 U	
Acenaphthylene	208-96-8	mg/kg	120		6.4	0.0063 U	0.0059 U	0.0057 U	0.0053 U	0.0049 U	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.0059 U	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Anthracene	120-12-7	mg/kg	6.8	17000	1.9	0.0063 U	0.0059 U	0.0044 J	0.0053 U	0.0049 U	0.0061 U	0.0011 J	0.0061 U	0.006 U	0.0059 U	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10	0.0063 U	0.0059 U	0.079	0.015	0.0025 J	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.017	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7	0.0063 U	0.0059 U	0.12	0.021	0.0048 J	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.023	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4	0.0063 U	0.0059 U	0.16	0.029	0.0079	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.033	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27	0.0063 U	0.0059 U	0.11	0.02	0.0054	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.027	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8	0.0063 U	0.0059 U	0.056	0.014	0.0026 J	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.017	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Chrysene	218-01-9	mg/kg	3.1	110	2.2	0.0063 U	0.0059 U	0.11	0.019	0.0057	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.022	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0019 J	
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29	0.0063 U	0.0059 U	0.024	0.0043 J	0.0049 U	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.0041 J	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Fluoranthene	206-44-0	mg/kg	10	2400	86	0.0063 U	0.0059 U	0.12	0.024	0.0056	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.023	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Fluorene	86-73-7	mg/kg	3.7	2300	6	0.0063 U	0.0059 U	0.0021 J	0.0015 J	0.0049 U	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.0059 U	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16	0.0063 U	0.0059 U	0.13	0.024	0.0065	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.028	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.0063 U	0.0059 U	0.0057 U	0.0053 U	0.0049 U	0.0061 U	0.0044 J	0.0061 U	0.006 U	0.0059 U	0.0056 U	0.0054	0.006 U	0.0061 U	0.0059 U	
Phenanthrene	85-01-8	mg/kg	5.5		11	0.0063 U	0.0059 U	0.025	0.0043 J	0.0049 U	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.0035 J	0.0056 U	0.0054 U	0.006 U	0.0061 U	0.0059 U	
Pyrene	129-00-0	mg/kg	10	1800	45	0.0063 U	0.0059 U	0.12	0.023	0.0059	0.0061 U	0.0061 U	0.0061 U	0.006 U	0.025	0.0056 U	0.0013 J	0.006 U	0.0061 U	0.0012 J	

Table D-11. Iron Gate Shooting Range Analytical Results

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	IGSR-23	IGSR-24	IGSR-24	IGSR-25	IGSR-25	IGSR-25	IGSR-25	IGSR-26	IGSR-26	IGSR-27	IGSR-27	IGSR-27	IGSR-28	IGSR-28	IGSR-28	
						Sample Date	5/5/2022	5/5/2022	5/5/2022	5/13/2022	5/13/2022	5/13/2022	5/13/2022	5/5/2022	5/5/2022	5/13/2022	5/13/2022	5/13/2022	5/5/2022	5/5/2022	5/13/2022	5/13/2022
						Depth Interval	1 - 1.5	0 - 0.5	1 - 1.5	0 - 0.5	0.5 - 1.5	2.5 - 3.5	5 - 6	0 - 0.5	1 - 1.5	0 - 0.5	0.5 - 1.5	2.5 - 3.5	0 - 0.5	1 - 1.5	1 - 1.5	
						Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
CALC																						
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0 U	0 U	0 U	0.0028206	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	
SW6010B																						
Boron	7440-42-8	mg/kg	2	16000		5.4 J	4.9 J	5.9 J	130 U	80 UJ	96 U	120 U	88 U	120 U	8.8 J	9.4 J	7.5 J	6.1 J	5.6 J	6.4 J		
SW6020																						
Antimony	7440-36-0	mg/kg	0.67	31		0.14 J	0.2 J	0.13 J	0.083 J	0.13 J	0.082 J	0.15 J	0.11 J	0.13 J	0.15 J	0.15 J	0.082 J	0.16 J	0.12 J	0.14 J		
Arsenic	7440-38-2	mg/kg	19	19		2.5	3.5	3.1	0.97	1.5	1.5	3.7	2.1	2.4	3.1	3.2	3.1	3.1	3	3.2		
Barium	7440-39-3	mg/kg	630	15000		270	150	120	80	180 J	210	140	190	170	200	230	210	190	190	200		
Beryllium	7440-41-7	mg/kg	2.5	16		0.69	0.67	0.82	0.22	0.61	0.54	0.55	0.63	0.7	0.83	0.91	0.7	0.87	0.84	0.87		
Cadmium	7440-43-9	mg/kg	0.54	71		0.059 J	0.071 J	0.087 J	0.052 J	0.096 J	0.072 J	0.37 U	0.1 J	0.078 J	0.12 J	0.12 J	0.12 J	0.13 J	0.13 J	0.13 J		
Chromium	7440-47-3	mg/kg	200	120000		14	15	18	6.7	17 J	15	6.4	15	17	22	23	10	19	21	21		
Cobalt	7440-48-4	mg/kg	13	23		12	12	14	7.3	16	13	10	17	14	18	20	17	18	19	19		
Copper	7440-50-8	mg/kg	73	3100		18	18	21	8.3	16 J	17	14	18	21	45	51	38	38	45	45		
Iron	7439-89-6	mg/kg		55000		37000	39000	41000	20000	34000 J	29000	39000	34000	39000	50000	55000	51000	47000	48000	49000		
Lead	7439-92-1	mg/kg	34	80		4.7	8.5	5.4	3.1	5.4	4.6	3	5.7	4.6	5.8	6	3.6	7.9	5.9 J	15 J		
Manganese	7439-96-5	mg/kg	2100	2100		1000	920	1000	580	1400 J	1100	690	1300	1000	1100	1200	1500	1200	1200	1200		
Molybdenum	7439-98-7	mg/kg	2	390		0.27	0.38	0.31	0.27	0.26	0.21	0.44	0.36	0.3	0.5	0.32	0.4	0.37	0.3	0.3		
Nickel	7440-02-0	mg/kg	110	820		13	15	18	6.6	17 J	16	4.5	17	16	22	24	7.9	20	21	22		
Selenium	7782-49-2	mg/kg	0.52	390		3.6	3.7	3.7	2.3	3.6	3.7	3.7	4.5	3.9	3.5	3.4	2.9	4.3	3.5	3.4		
Silver	7440-22-4	mg/kg	4.2	390		0.031 J	0.037 J	0.039 J	0.012 J	0.036 J	0.038 J	0.012 J	0.029 J	0.036 J	0.045 J	0.042 J	0.012 J	0.045 J	0.037 J	0.041 J		
Thallium	7440-28-0	mg/kg	2.8	2.8		0.077 J	0.1 J	0.13 J	0.27 U	0.1 J	0.079 J	0.05 J	0.098 J	0.096 J	0.13 J	0.14 J	0.061 J	0.12 J	0.13 J	0.13 J		
Vanadium	7440-62-2	mg/kg	280	390		85	92	89	55	75 J	55	83	75	79	130	150	110	120	130	130		
Zinc	7440-66-6	mg/kg	170	23000		64	69	73	34	60 J	55	69	75	68	78	86	67	80	78	80		
SW7471A																						
Mercury	7439-97-6	mg/kg	0.24	1		0.028 U	0.028 U	0.025 U	0.012 J	0.029 U	0.033 U	0.022 U	0.014 J	0.0084 J	0.037 U	0.036 U	0.037 U	0.01 J	0.031 U	0.027 U		
SW8270SIM																						
1-Methylnaphthalene	90-12-0	mg/kg		9.9		0.005 U	0.0059 U	0.0061 U	0.0054 U	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88	0.005 U	0.0059 U	0.0061 U	0.0054 U	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Acenaphthene	83-32-9	mg/kg	0.25	3300	12	0.005 U	0.0059 U	0.0061 U	0.0054 U	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Acenaphthylene	208-96-8	mg/kg	120		6.4	0.005 U	0.0059 U	0.0061 U	0.0054 U	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Anthracene	120-12-7	mg/kg	6.8	17000	1.9	0.005 U	0.0059 U	0.0061 U	0.0054 U	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10	0.005 U	0.0059 U	0.0061 U	0.0019 J	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7	0.005 U	0.0059 U	0.0061 U	0.0022 J	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4	0.005 U	0.0059 U	0.0061 U	0.0041 J	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27	0.005 U	0.0059 U	0.0061 U	0.0024 J	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8	0.005 U	0.0059 U	0.0061 U	0.0016 J	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Chrysene	218-01-9	mg/kg	3.1	110	2.2	0.005 U	0.0059 U	0.0061 U	0.0046 J	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29	0.005 U	0.0059 U	0.0061 U	0.0054 U	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Fluoranthene	206-44-0	mg/kg	10	2400	86	0.005 U	0.0059 U	0.0061 U	0.0097	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Fluorene	86-73-7	mg/kg	3.7	2300	6	0.005 U	0.0059 U	0.0061 U	0.0054 U	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16	0.005 U	0.0059 U	0.0061 U	0.0054 U	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Naphthalene	91-20-3	mg/kg	1	2	0.042	0.005 U	0.0059 U	0.0061 U	0.0054 U	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0032 J	0.0059 U	0.0025 J	0.006 U	0.006 U		
Phenanthrene	85-01-8	mg/kg	5.5		11	0.005 U	0.0059 U	0.0061 U	0.0018 J	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		
Pyrene	129-00-0	mg/kg	10	1800	45	0.005 U	0.0059 U	0.0061 U	0.007	0.0057 U	0.0058 U	0.006 U	0.0047 U	0.0052 U	0.0056 U	0.0062 U	0.0059 U	0.0073 U	0.006 U	0.006 U		

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

mg/kg = milligram(s) per kilogram

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Table D-12. Iron Gate Hatchery Burn Pit

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	IGBP-01	IGBP-01	IGBP-01	IGBP-01	IGBP-01	IGBP-02	IGBP-C1	IGBP-C2
						Sample Date	5/2/2022	5/2/2022	5/2/2022	5/13/2022	5/13/2022	5/2/2022	5/2/2022	5/2/2022
						Depth Interval	0 - 0.5	0 - 0.5	0.5 - 1.5	2.5 - 3.5	5 - 6	0 - 0.5	0 - 0.5	0 - 0.5
						Sample Type	N	FD	N	N	N	N	N	N
CALC														
2,3,7,8-TCDD Toxic Equivalent (TEQ) Bird, (ND=0)	TEQ-BO	mg/kg				9.174E-07	4.584E-07	8E-10	6E-08	9.2E-09	1.531E-06	5.1133E-06	1.4834E-06	
2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-MO	mg/kg				1.6751E-06	1.3142E-06	2.3E-09	6E-08	9.2E-08	2.792E-06	9.7849E-06	2.0981E-06	
Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	mg/kg				0 U	0 U	0 U	0 U	0 U	0.0005095	0 U	0 U	
SW6010B														
Boron	7440-42-8	mg/kg	2	16000		6.8 J	8.4 J	5.3 U	4.7 U	6.3 J	40 J	10 J	17 J	
SW6020														
Antimony	7440-36-0	mg/kg	0.67	31		0.41	0.35	0.2 J	0.21 J	0.28 J	7.8	0.36	3.2 J	
Arsenic	7440-38-2	mg/kg	19	19		6.9 J	9 J	2.9	3.7	5.5	33	4.6	86 J	
Barium	7440-39-3	mg/kg	630	15000		120 J	150 J	120	150	130	200	130	230	
Beryllium	7440-41-7	mg/kg	2.5	16		0.68	0.69	0.8	0.7	0.6	0.6	0.69	0.66	
Cadmium	7440-43-9	mg/kg	0.54	71		0.1 J	0.11 J	0.093 J	0.088 J	0.077 J	0.25 J	0.1 J	0.18 J	
Chromium	7440-47-3	mg/kg	200	120000		40 J	57 J	8.8	12	14	42	14	130 J	
Cobalt	7440-48-4	mg/kg	13	23		19	20	17	21	16	21	17	20	
Copper	7440-50-8	mg/kg	73	3100		34	37	29	36	32	77	35	200 J	
Iron	7439-89-6	mg/kg		55000		49000	51000	49000	47000	44000	53000	47000	49000	
Lead	7439-92-1	mg/kg	34	80		6.8	7.7	5.8	5.1	5.4	68	9.8	25 J	
Manganese	7439-96-5	mg/kg	2100	2100		1100	1200	1100	1100	810	1400	1100	1400	
Molybdenum	7439-98-7	mg/kg	2	390		0.78	1	0.48	0.52	0.8	1.3	0.77	0.92	
Nickel	7440-02-0	mg/kg	110	820		10 J	14 J	7.5 U	11	12	13	11	12	
Selenium	7782-49-2	mg/kg	0.52	390		3.8	3.7	4.5	3.9	3.6	3.7	3.9	4.1	
Silver	7440-22-4	mg/kg	4.2	390		0.026 J	0.026 J	0.037 J	0.036 J	0.032 J	0.053 J	0.032 J	0.043 J	
Thallium	7440-28-0	mg/kg	2.8	2.8		0.092 J	0.1 J	0.098 J	0.1 J	0.065 J	0.1 J	0.087 J	0.11 J	
Vanadium	7440-62-2	mg/kg	280	390		130	130	130	140	140	140	130	140	
Zinc	7440-66-6	mg/kg	170	23000		78 J	130 J	73	65	70	240	96	150	
SW7471A														
Mercury	7439-97-6	mg/kg	0.24	1		0.034	0.026 J	0.018 J	0.02 J	0.0079 J	0.034	0.092	0.066	
SW8011														
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	6.9E-05 U	6.9E-05 U	7.2E-05 U	6.5E-05 UJ	6.7E-05 UJ	6.8E-05 U	7.5E-05 U	7.7E-05 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	1.1E-05 U	1E-05 U	1.1E-05 U	9.8E-06 UJ	1E-05 UJ	1E-05 U	1.1E-05 U	1.2E-05 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	1.3E-05 U	1.3E-05 U	1.3E-05 U	1.2E-05 UJ	1.2E-05 UJ	1.2E-05 U	1.4E-05 U	1.4E-05 U	
SW8015-E														
Diesel Range Organics	DRO	mg/kg		260	1100	270	340	15 U	10 U	75	53 U	69 U	86	
Extended Range Organics	ERO	mg/kg		12000		94	110	22 U	21 U	18 U	150	110	170	
SW8015-P														
Gasoline Range Organics	GRO	mg/kg		430	1100	1.8 U	2 U	1.6 U	1.4 U	1.3 U	1.8 U	1.7 U	2.2 U	
SW8260B														
1,1,1,2-Tetrachloroethane	630-20-6	mg/kg	0.07	2	0.017	0.007 U	0.0078 U	0.006 U	0.00065 U	0.00052 U	0.0069 U	0.0067 U	0.0083 U	
1,1,1-Trichloroethane	71-55-6	mg/kg	260	1700	7	0.0065 U	0.0072 U	0.0055 U	0.00033 U	0.00026 U	0.0064 U	0.0061 U	0.0077 U	
1,1,2,2-Tetrachloroethane	79-34-5	mg/kg	0.13	0.6	0.018	0.011 U	0.012 U	0.0091 U	0.001 U	0.00079 U	0.011 U	0.01 U	0.013 UJ	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	mg/kg		6700		0.021 U	0.024 U	0.018 U	0.00058 U	0.00046 U	0.021 U	0.02 U	0.025 U	
1,1,2-Trichloroethane	79-00-5	mg/kg	0.32	1.1	0.076	0.01 U	0.012 U	0.0089 U	0.00059 U	0.00047 U	0.01 U	0.0099 U	0.012 U	
1,1-Dichloroethane	75-34-3	mg/kg	210	3.6	0.2	0.013 U	0.014 U	0.011 U	0.00021 U	0.00017 U	0.013 U	0.012 U	0.015 U	
1,1-Dichloroethene	75-35-4	mg/kg	11		0.54	0.017 U	0.019 U	0.015 U	0.0012 U	0.00097 U	0.017 U	0.016 U	0.02 U	
1,1-Dichloropropene	563-58-6	mg/kg				0.0074 U	0.0083 U	0.0064 U	0.00029 U	0.00026 U	0.0073 U	0.0071 U	0.0088 U	
1,2,3-Trichlorobenzene	87-61-6	mg/kg	20	40		0.056 U	0.062 U	0.048 U	0.00067 U	0.00053 U	0.06 J	0.053 U	0.066 U	
1,2,3-Trichloropropane	96-18-4	mg/kg		0.0015	0.00011	0.016 U	0.018 U	0.014 U	0.0011 U	0.00088 U	0.016 U	0.015 U	0.019 U	
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2	0.06 U	0.067 U	0.051 U	0.00047 U	0.00037 U	0.059 U	0.057 U	0.071 U	
1,2,4-Trimethylbenzene	95-63-6	mg/kg	0.09	300		0.025 U	0.03 U	0.016 U	0.0013 U	0.0011 U	0.03 U	0.028 U	0.022 U	
1,2-Dibromo-3-chloropropane	96-12-8	mg/kg		0.0043	0.00059	0.021 U	0.024 U	0.018 U	0.0018 U	0.0014 U	0.021 U	0.02 U	0.025 U	
1,2-Dibromoethane	106-93-4	mg/kg		0.036	0.00053	0.0053 U	0.006 U	0.0046 U	0.00022 U	0.00018 U	0.0053 U	0.0051 U	0.0063 U	
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1	0.012 U	0.014 U	0.01 U	0.0014 U	0.0011 U	0.017 J	0.012 U	0.014 U	
1,2-Dichloroethane	107-06-2	mg/kg	0.85	0.46	0.007	0.0077 U	0.0086 U	0.0066 U	0.00022 U	0.00018 U	0.0076 U	0.0073 U	0.0092 U	
1,2-Dichloropropane	78-87-5	mg/kg	0.28	2.5	0.065	0.0093 U	0.01 U	0.0079 U	0.00044 U	0.00035 U	0.0091 U	0.0088 U	0.011 U	
1,3,5-Trimethylbenzene	108-67-8	mg/kg	0.07	270		0.013 U	0.013 U	0.0091 U	0.0009 U	0.00071 U	0.024 U	0.015 U	0.017 U	

Table D-12. Iron Gate Hatchery Burn Pit

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	IGBP-01	IGBP-01	IGBP-01	IGBP-01	IGBP-01	IGBP-02	IGBP-C1	IGBP-C2
						Sample Date	5/2/2022	5/2/2022	5/2/2022	5/13/2022	5/13/2022	5/2/2022	5/2/2022	5/2/2022
						Depth Interval	0 - 0.5	0 - 0.5	0.5 - 1.5	2.5 - 3.5	5 - 6	0 - 0.5	0 - 0.5	0 - 0.5
						Sample Type	N	FD	N	N	N	N	N	N
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.019 U	0.021 U	0.016 U	0.0012 U	0.00097 U	0.018 U	0.018 U	0.022 U
1,3-Dichloropropane	142-28-9	mg/kg		410			0.0079 U	0.0088 U	0.0067 U	0.00026 U	0.0002 U	0.0077 U	0.0075 U	0.0093 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.015 U	0.017 U	0.013 U	0.0011 U	0.00086 U	0.015 U	0.014 U	0.018 U
2,2-Dichloropropane	594-20-7	mg/kg					0.017 U	0.019 U	0.015 U	0.00085 U	0.00068 U	0.017 U	0.016 U	0.02 U
2-Butanone	78-93-3	mg/kg	350	27000	6.1		0.12 U	0.13 U	0.099 U	0.0099 U	0.0078 U	0.32 J	0.11 U	0.14 U
2-Chlorotoluene	95-49-8	mg/kg		470			0.012 U	0.014 U	0.011 U	0.001 U	0.00082 U	0.012 J	0.012 U	0.015 U
2-Hexanone	591-78-6	mg/kg	0.36	200			0.041 U	0.045 U	0.035 U	0.0043 U	0.0034 U	0.04 U	0.039 U	0.075 J
4-Chlorotoluene	106-43-4	mg/kg		440			0.014 U	0.015 U	0.012 U	0.0011 U	0.00088 U	0.015 J	0.013 U	0.016 U
4-Methyl-2-Pentanone	108-10-1	mg/kg	9.7	33000	0.36		0.026 U	0.029 U	0.023 U	0.0067 U	0.0053 U	0.026 U	0.025 U	0.081 J
Acetone	67-64-1	mg/kg	1.2	61000	0.92		0.24 U	0.27 U	0.21 U	0.0096 U	0.0076 U	0.24 U	0.23 U	0.29 U
Benzene	71-43-2	mg/kg	24	0.33	0.025		0.012 J	0.044	0.0046 U	0.00043 U	0.00034 U	0.18	0.037	0.37
Bromobenzene	108-86-1	mg/kg		290			0.0059 U	0.0066 U	0.005 U	0.0011 U	0.00088 U	0.01 J	0.0056 U	0.007 U
Bromochloromethane	74-97-5	mg/kg		150			0.0087 U	0.0097 U	0.0074 U	0.00028 U	0.00022 U	0.0086 U	0.0083 U	0.01 U
Bromodichloromethane	75-27-4	mg/kg		0.29	0.016		0.0077 U	0.0086 U	0.0066 U	0.0002 U	0.00016 U	0.0076 U	0.0073 U	0.0092 U
Bromoform	75-25-2	mg/kg		19	0.69		0.0063 U	0.007 U	0.0054 U	0.00093 U	0.00074 U	0.0062 U	0.006 U	0.0075 U
Bromomethane	74-83-9	mg/kg		6.8	0.36		0.053 U	0.059 U	0.045 U	0.00023 U	0.00018 U	0.052 U	0.05 U	0.063 U
Carbon Disulfide	75-15-0	mg/kg	0.81	770			0.017 U	0.019 U	0.015 U	0.00022 U	0.00018 U	0.017 U	0.016 U	0.02 U
Carbon tetrachloride	56-23-5	mg/kg		0.65	0.076		0.0062 U	0.0069 U	0.0053 U	0.00033 U	0.00026 U	0.0061 U	0.0059 U	0.013 J
Chlorobenzene	108-90-7	mg/kg	2.4	280	1.4		0.0067 U	0.0075 U	0.0058 U	0.00028 U	0.00022 U	0.0088 J	0.0064 U	0.011 J
Chlorodibromomethane	124-48-1	mg/kg		0.94	0.35		0.0069 U	0.0077 U	0.0059 U	0.00062 U	0.00049 U	0.0068 U	0.0065 U	0.0082 U
Chloroethane	75-00-3	mg/kg		14000	1.2		0.029 U	0.033 U	0.025 U	0.00083 U	0.00066 U	0.029 U	0.028 U	0.035 U
Chloroform	67-66-3	mg/kg	8	0.32	0.023		0.0059 U	0.0066 U	0.005 U	0.00033 U	0.00026 U	0.0058 U	0.0056 U	0.007 U
Chloromethane	74-87-3	mg/kg		110	11		0.014 U	0.016 U	0.012 U	0.001 U	0.00082 U	0.014 U	0.013 U	0.017 U
cis-1,2-Dichloroethene	156-59-2	mg/kg	24	18	0.19		0.018 U	0.02 U	0.015 U	0.00067 U	0.00053 U	0.017 U	0.017 U	0.021 U
cis-1,3-Dichloropropene	10061-01-5	mg/kg					0.0056 U	0.0063 U	0.0048 U	0.00022 U	0.00018 U	0.0055 U	0.0053 U	0.0067 U
Dibromomethane	74-95-3	mg/kg		24			0.01 U	0.012 U	0.0089 U	0.00047 U	0.00037 U	0.01 U	0.0099 U	0.012 U
Dichlorodifluoromethane	75-71-8	mg/kg		87			0.064 U	0.072 U	0.055 U	0.00054 U	0.00043 U	0.063 U	0.061 U	0.076 U
Dichloromethane	75-09-2	mg/kg	2.6	2.2	0.12		0.036 U	0.041 U	0.031 U	0.011 U	0.0087 U	0.036 U	0.035 U	0.043 U
Ethylbenzene	100-41-4	mg/kg	0.27	5.8	0.43		0.013 U	0.021 J	0.011 U	0.00046 U	0.00036 U	0.042 J	0.018 J	0.02 J
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.034 U	0.037 U	0.029 U	0.00067 U	0.00053 U	0.043 J	0.032 U	0.04 U
Isopropylbenzene	98-82-8	mg/kg		1900			0.013 U	0.015 U	0.01 U	0.00051 U	0.0004 U	0.016 U	0.011 U	0.014 U
Methyl tert-butyl ether (MTBE)	1634-04-4	mg/kg		47	0.028		0.0084 U	0.0094 U	0.0072 U	0.00033 U	0.00026 U	0.0083 U	0.008 U	0.01 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.055 U	0.061 U	0.047 U	0.002 U	0.0016 U	0.06 J	0.052 U	0.065 U
n-Butylbenzene	104-51-8	mg/kg		2400			0.026 U	0.029 U	0.022 U	0.0007 U	0.00055 U	0.031 J	0.025 U	0.031 U
n-Propylbenzene	103-65-1	mg/kg		3800			0.021 U	0.023 U	0.018 U	0.00084 U	0.00067 U	0.021 U	0.02 U	0.025 U
p-Isopropyltoluene	99-87-6	mg/kg					0.014 U	0.028 U	0.012 U	0.00044 U	0.00035 U	0.04 U	0.018 U	0.029 U
sec-Butylbenzene	135-98-8	mg/kg		2200			0.012 U	0.013 U	0.01 U	0.00074 U	0.00059 U	0.022 U	0.011 U	0.014 U
Styrene	100-42-5	mg/kg	1.2	5600	0.92		0.018 U	0.02 U	0.015 U	0.00082 U	0.00065 U	0.018 U	0.017 U	0.021 U
tert-Butylbenzene	98-06-6	mg/kg		2200			0.011 U	0.013 U	0.0093 U	0.00073 U	0.00058 U	0.018 U	0.01 U	0.013 U
Tetrachloroethene	127-18-4	mg/kg	0.18	0.59	0.08		0.0074 U	0.0083 U	0.0064 U	0.00039 U	0.00035 U	0.0078 J	0.0071 U	0.0088 U
Toluene	108-88-3	mg/kg	23	1100	3.2		0.019 U	0.067 J	0.016 U	0.0014 U	0.0011 U	0.16	0.052 J	0.079 J
trans-1,2-Dichloroethene	156-60-5	mg/kg	24	130	0.65		0.02 U	0.023 U	0.018 U	0.00044 U	0.00035 U	0.02 U	0.019 U	0.024 U
trans-1,3-Dichloropropene	10061-02-6	mg/kg					0.0098 U	0.011 U	0.0084 U	0.00067 U	0.00053 U	0.0097 U	0.0093 U	0.012 U
Trichloroethylene	79-01-6	mg/kg	42	0.94	0.085		0.014 U	0.016 U	0.012 U	0.00033 U	0.00026 U	0.014 U	0.014 U	0.017 U
Trichlorofluoromethane	75-69-4	mg/kg	52	1200			0.036 U	0.041 U	0.031 U	0.00033 U	0.00026 U	0.036 U	0.035 U	0.043 U
Vinyl Acetate	108-05-4	mg/kg		910			0.065 U	0.072 U	0.055 U	0.0017 U	0.0013 U	0.064 U	0.062 U	0.077 UJ
Vinyl Chloride	75-01-4	mg/kg	0.12	0.0082	0.0015		0.026 UJ	0.029 UJ	0.022 UJ	0.00033 U	0.00026 U	0.026 UJ	0.025 UJ	0.031 UJ
Xylene, o	95-47-6	mg/kg	1.4	650			0.013 U	0.021 U	0.006 U	0.001 U	0.00081 U	0.034 U	0.021 U	0.016 U
Xylenes, m & p	179601-23-1	mg/kg	1.4	550			0.021 U	0.042 U	0.0085 U	0.0013 U	0.001 U	0.051 U	0.045 U	0.032 U
Xylenes, Total	1330-20-7	mg/kg	1.4	580	2.1		0.034 U	0.063 U	0.0085 U	0.001 U	0.00081 U	0.085 U	0.066 U	0.048 U
SW8270C														
1,2,4-Trichlorobenzene	120-82-1	mg/kg	0.27	7.8	1.2		0.0069 U	0.0065 U	0.00069 U	0.00067 U	0.0033 U	0.0067 U	0.0066 U	0.0071 U
1,2-Dichlorobenzene	95-50-1	mg/kg	0.09	1800	1		0.0057 U	0.0054 U	0.00057 U	0.00056 U	0.0027 U	0.0056 U	0.0055 U	0.0059 U
1,3-Dichlorobenzene	541-73-1	mg/kg	0.08		7.4		0.0055 U	0.0052 U	0.00055 U	0.00053 U	0.0026 U	0.0054 U	0.0053 U	0.0057 U
1,4-Dichlorobenzene	106-46-7	mg/kg	0.89	2.6	0.2		0.0095 U	0.009 U	0.00095 U	0.00092 U	0.0046 U	0.0093 U	0.0092 U	0.0098 UJ

Table D-12. Iron Gate Hatchery Burn Pit

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	IGBP-01	IGBP-01	IGBP-01	IGBP-01	IGBP-01	IGBP-02	IGBP-C1	IGBP-C2
						Sample Date	5/2/2022	5/2/2022	5/2/2022	5/13/2022	5/13/2022	5/2/2022	5/2/2022	5/2/2022
						Depth Interval	0 - 0.5	0 - 0.5	0.5 - 1.5	2.5 - 3.5	5 - 6	0 - 0.5	0 - 0.5	0 - 0.5
						Sample Type	N	FD	N	N	N	N	N	N
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.0071 J	0.015 J	0.00057 U	0.00056 U	0.0027 U	0.016 J	0.0055 U	0.0091 J
2,4,5-Trichlorophenol	95-95-4	mg/kg	4	6300	2.9		0.0093 U	0.0088 U	0.00093 U	0.0009 U	0.0045 U	0.0091 U	0.009 U	0.0096 U
2,4,6-Trichlorophenol	88-06-2	mg/kg	9.9	7.8	0.04		0.015 U	0.014 U	0.0015 U	0.0014 U	0.0071 U	0.015 U	0.014 U	0.015 U
2,4-Dichlorophenol	120-83-2	mg/kg	0.05	190	0.0075		0.032 U	0.03 UJ	0.0032 U	0.0031 U	0.015 UJ	0.031 UJ	0.031 U	0.033 UJ
2,4-Dimethylphenol	105-67-9	mg/kg	0.04	1300	8.1		0.069 U	0.065 UJ	0.0069 U	0.0067 U	0.033 UJ	0.067 UJ	0.066 U	0.071 UJ
2,4-Dinitrophenol	51-28-5	mg/kg	0.061	130	3		0.67 UJ	0.64 UJ	0.067 UJ	0.065 U	0.32 U	0.66 UJ	0.65 UJ	0.69 UJ
2,4-Dinitrotoluene	121-14-2	mg/kg	6	1.7	0.023		0.049 U	0.047 U	0.0049 U	0.0048 U	0.024 U	0.048 U	0.048 U	0.051 U
2,6-Dinitrotoluene	606-20-2	mg/kg	4	0.36			0.017 U	0.016 U	0.0017 U	0.0017 UJ	0.0082 U	0.017 U	0.017 U	0.018 UJ
2-Chloronaphthalene	91-58-7	mg/kg		4100			0.0057 U	0.0054 U	0.00057 U	0.00056 U	0.0027 U	0.0056 U	0.0055 U	0.0059 U
2-Chlorophenol	95-57-8	mg/kg	0.39	340	0.012		0.0046 U	0.0043 UJ	0.00046 U	0.00044 UJ	0.0022 UJ	0.0045 UJ	0.0044 U	0.0047 UJ
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.015 J	0.03 J	0.001 U	0.00098 UJ	0.0048 U	0.016 J	0.0097 U	0.014 J
2-Methylphenol	95-48-7	mg/kg	0.67	3200			0.011 U	0.011 UJ	0.0011 U	0.0011 U	0.0054 UJ	0.011 UJ	0.011 U	0.012 UJ
2-Nitroaniline	88-74-4	mg/kg	5.3	630			0.017 U	0.016 U	0.0017 U	0.0017 UJ	0.0082 U	0.017 U	0.017 U	0.018 U
2-Nitrophenol	88-75-5	mg/kg					0.0071 U	0.0067 UJ	0.00071 U	0.00069 U	0.0034 UJ	0.007 UJ	0.0069 U	0.0073 UJ
3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	mg/kg	0.69				0.017 U	0.016 UJ	0.0017 U	0.0017 U	0.0082 UJ	0.017 UJ	0.017 U	0.018 UJ
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.03	0.45	0.025		0.096 U	0.091 U	0.0096 U	0.0093 UJ	0.046 U	0.094 U	0.093 U	0.099 UJ
3-Nitroaniline	99-09-2	mg/kg					0.11 U	0.11 U	0.011 U	0.011 U	0.055 U	0.11 U	0.11 U	0.12 UJ
4,6-Dinitro-2-methylphenol	534-52-1	mg/kg		5.1			0.11 U	0.11 U	0.011 U	0.011 U	0.055 U	0.11 U	0.11 U	0.12 U
4-Bromophenyl Phenyl Ether	101-55-3	mg/kg					0.01 U	0.0099 U	0.001 U	0.001 U	0.005 U	0.01 U	0.01 U	0.011 U
4-Chloro-3-methylphenol	59-50-7	mg/kg		6300			0.038 U	0.036 U	0.0038 U	0.0037 U	0.018 U	0.037 U	0.037 U	0.039 U
4-Chloroaniline	106-47-8	mg/kg	1	2.7	0.0067		0.15 UJ	0.15 UJ	0.015 UJ	0.015 UJ	0.074 U	0.15 UJ	0.15 UJ	0.16 UJ
4-Chlorophenyl Phenylether	7005-72-3	mg/kg					0.0072 U	0.0068 U	0.00072 U	0.0007 UJ	0.0035 U	0.0071 U	0.007 U	0.0074 U
4-Nitroaniline	100-01-6	mg/kg		27			0.057 U	0.054 U	0.0057 U	0.0056 UJ	0.027 U	0.056 U	0.055 U	0.059 UJ
4-Nitrophenol	100-02-7	mg/kg					0.2 U	0.19 U	0.02 U	0.019 U	0.095 U	0.19 U	0.19 U	0.2 U
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.0053 U	0.005 U	0.00053 U	0.00051 U	0.0025 U	0.0052 U	0.0051 U	0.0054 U
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.0057 U	0.0054 U	0.00057 U	0.00056 UJ	0.0027 U	0.0056 U	0.0055 U	0.0059 U
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.018 U	0.017 U	0.0018 U	0.0018 U	0.0088 U	0.018 U	0.018 U	0.019 U
Azobenzene	103-33-3	mg/kg		5.6			0.0057 U	0.0054 U	0.00057 U	0.00056 UJ	0.0027 U	0.0056 U	0.0055 U	0.0059 UJ
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.013 U	0.012 U	0.0013 U	0.0012 U	0.006 U	0.012 U	0.012 U	0.013 U
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.015 U	0.014 U	0.0015 U	0.0014 U	0.0071 U	0.015 U	0.014 U	0.015 U
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.011 U	0.011 U	0.0011 U	0.0011 U	0.0055 U	0.011 U	0.011 U	0.012 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.021 U	0.02 U	0.0021 U	0.002 U	0.0099 U	0.02 U	0.02 U	0.021 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.016 U	0.015 U	0.0016 U	0.0016 U	0.0077 U	0.016 U	0.015 U	0.017 U
Benzoic Acid	65-85-0	mg/kg	0.01	250000			1.4 UJ	1.3 UJ	0.14 UJ	0.14 UJ	0.67 UJ	1.4 UJ	1.4 UJ	1.4 UJ
Benzyl Alcohol	100-51-6	mg/kg	0.002	6300			0.057 U	0.054 U	0.0057 U	0.0056 U	0.027 U	0.056 U	0.055 U	0.059 U
Bis (2-chloroethoxy) methane	111-91-1	mg/kg		190			0.021 U	0.02 U	0.0021 U	0.002 U	0.0099 U	0.02 U	0.02 U	0.021 U
Bis (2-chloroethyl) ether	111-44-4	mg/kg		0.1	3.4E-05		0.0088 U	0.0084 U	0.00088 U	0.00086 U	0.0042 U	0.0086 U	0.0085 U	0.0091 U
bis (2-Chloroisopropyl) ether	39638-32-9	mg/kg					0.007 U	0.0066 U	0.0007 U	0.00068 U	0.0034 U	0.0068 U	0.0068 U	0.0072 U
Bis (2-ethylhexyl) phthalate	117-81-7	mg/kg	0.02	39	190		0.18 J	0.13 J	0.0081 U	0.0079 U	0.24 J	0.08 U	0.079 U	0.084 U
Butyl benzyl phthalate	85-68-7	mg/kg	90	290			0.058 U	0.055 U	0.0058 U	0.0057 U	0.028 U	0.057 U	0.056 U	0.06 U
Carbazole	86-74-8	mg/kg					0.0083 U	0.0079 U	0.00084 U	0.00081 U	0.004 U	0.0082 U	0.0081 U	0.0086 UJ
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.015 U	0.014 U	0.0015 U	0.0014 U	0.0071 U	0.015 U	0.014 U	0.015 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.014 U	0.013 U	0.0014 U	0.0013 U	0.0066 U	0.013 U	0.013 U	0.014 U
Dibenzofuran	132-64-9	mg/kg	6.1	66			0.0067 U	0.0064 U	0.00068 U	0.00066 U	0.0032 U	0.035 J	0.0065 U	0.007 U
Diethylphthalate	84-66-2	mg/kg	100	51000	0.025		0.025 U	0.024 U	0.063	0.0025 U	0.012 U	0.025 U	0.024 U	0.026 U
Dimethylphthalate	131-11-3	mg/kg	10		0.035		0.0057 U	0.0054 U	0.00057 U	0.00056 U	0.0027 U	0.0056 U	0.0055 U	0.0059 U
Di-N-Butylphthalate	84-74-2	mg/kg	0.011	6300			0.031 U	0.029 U	0.0031 U	0.003 U	0.015 U	0.03 U	0.03 U	0.032 U
Di-n-octyl phthalate	117-84-0	mg/kg	0.91	630			0.014 U	0.013 U	0.0014 U	0.0013 U	0.0066 U	0.013 U	0.013 U	0.014 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.014 U	0.013 U	0.0014 U	0.0013 U	0.0066 U	0.013 U	0.013 U	0.014 U
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.0057 U	0.0054 U	0.00057 U	0.00056 U	0.0027 U	0.012 J	0.0055 U	0.0059 U
Hexachlorobenzene	118-74-1	mg/kg	0.079	0.19	0.0008		0.017 U	0.016 U	0.0017 U	0.0017 U	0.0082 U	0.017 U	0.017 U	0.018 U
Hexachlorobutadiene	87-68-3	mg/kg	0.009	1.2	0.028		0.017 U	0.016 U	0.0017 U	0.0017 U	0.0082 U	0.017 U	0.017 U	0.018 U
Hexachlorocyclopentadiene	77-47-4	mg/kg	0.001	1.8			0.0088 UJ	0.0084 UJ	0.00088 UJ	0.00086 U	0.0042 U	0.0086 UJ	0.0085 UJ	0.0091 UJ
Hexachloroethane	67-72-1	mg/kg	0.024	1.8	0.019		0.0049 U	0.0047 U	0.00049 U	0.00048 U	0.0024 U	0.0048 U	0.0048 U	0.0051 U
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.014 U	0.013 U	0.0014 U	0.0013 U	0.0066 U	0.013 U	0.013 U	0.014 U

Table D-12. Iron Gate Hatchery Burn Pit

Analyte	CAS	Unit	Ecological Receptors - No Effect	Human Health	Leaching to Groundwater	Location	IGBP-01	IGBP-01	IGBP-01	IGBP-01	IGBP-01	IGBP-02	IGBP-C1	IGBP-C2
						Sample Date	5/2/2022	5/2/2022	5/2/2022	5/13/2022	5/13/2022	5/2/2022	5/2/2022	5/2/2022
						Depth Interval	0 - 0.5	0 - 0.5	0.5 - 1.5	2.5 - 3.5	5 - 6	0 - 0.5	0 - 0.5	0 - 0.5
						Sample Type	N	FD	N	N	N	N	N	N
Isophorone	78-59-1	mg/kg		570			0.0096 U	0.0091 U	0.00096 U	0.00093 U	0.0046 U	0.0094 U	0.0093 U	0.0099 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.011 J	0.018 J	0.00072 J	0.00056 U	0.0027 U	0.078 J	0.019 J	0.043 J
Nitrobenzene	98-95-3	mg/kg	2.2	5.1			0.023 U	0.022 U	0.0023 U	0.0022 U	0.011 U	0.022 U	0.022 U	0.024 UJ
N-Nitrosodi-N-propylamine	621-64-7	mg/kg		0.078			0.025 U	0.024 U	0.0025 U	0.0024 UJ	0.012 U	0.025 U	0.024 U	0.026 UJ
N-Nitrosodiphenylamine	86-30-6	mg/kg	0.55	110			0.0091 U	0.0087 U	0.00092 U	0.00089 U	0.0044 U	0.009 U	0.0089 U	0.0095 U
Pentachlorophenol	87-86-5	mg/kg	0.36	1	0.098		0.072 U	0.068 U	0.0072 U	0.025 J	0.035 U	0.071 U	0.07 U	0.074 U
Phenanthrene	85-01-8	mg/kg	5.5		11		0.0066 U	0.0065 J	0.00066 U	0.00077 J	0.0032 U	0.028 J	0.0064 U	0.017 J
Phenol	108-95-2	mg/kg	0.79	19000	0.16		0.026 U	0.025 UJ	0.0026 U	0.0026 UJ	0.013 UJ	0.04 J	0.025 U	0.027 UJ
Pyrene	129-00-0	mg/kg	10	1800	45		0.015 U	0.02 J	0.0015 U	0.0014 U	0.0071 U	0.015 U	0.014 U	0.015 U
Pyridine	110-86-1	mg/kg		58			0.18 UJ	0.17 UJ	0.018 UJ	0.018 UJ	0.087 U	0.18 UJ	0.17 UJ	0.19 UJ
SW8270SIM														
1-Methylnaphthalene	90-12-0	mg/kg		9.9			0.0055 J	0.0099 J	0.0003 J	0.00069 U	0.0011 J	0.013 J	0.0027 J	0.0071 J
2-Methylnaphthalene	91-57-6	mg/kg	16	190	0.88		0.014 J	0.024 J	0.00062 J	0.0022 U	0.0029 J	0.014 J	0.0065 J	0.011 J
Acenaphthene	83-32-9	mg/kg	0.25	3300	12		0.00069 UJ	0.00065 UJ	6.9E-05 UJ	0.00065 U	0.00064 U	0.00067 UJ	0.00066 UJ	0.00071 UJ
Acenaphthylene	208-96-8	mg/kg	120		6.4		0.00057 UJ	0.00054 UJ	5.7E-05 UJ	0.00054 U	0.00053 U	0.0011 J	0.00055 UJ	0.0029 J
Anthracene	120-12-7	mg/kg	6.8	17000	1.9		0.00069 U	0.00065 U	6.9E-05 U	0.00065 U	0.00064 U	0.0025 J	0.00066 U	0.00071 U
Benzo(a)anthracene	56-55-3	mg/kg	0.73	1.1	10		0.002 UJ	0.0019 UJ	0.0002 UJ	0.0019 U	0.0019 U	0.002 UJ	0.002 UJ	0.0021 UJ
Benzo(a)pyrene	50-32-8	mg/kg	62	0.11	5.7		0.00096 UJ	0.00091 UJ	9.6E-05 UJ	0.00091 U	0.00089 U	0.00094 UJ	0.00093 UJ	0.00099 UJ
Benzo(b)fluoranthene	205-99-2	mg/kg	18	1.1	5.4		0.0013 U	0.0013 U	0.00013 U	0.0013 U	0.0012 U	0.0031 J	0.0013 U	0.0014 U
Benzo(g,h,i)perylene	191-24-2	mg/kg	25		27		0.00057 U	0.00054 U	5.7E-05 U	0.00054 U	0.00053 U	0.00056 U	0.00055 U	0.00059 U
Benzo(k)fluoranthene	207-08-9	mg/kg	71	11	4.8		0.00069 U	0.00065 U	6.9E-05 U	0.00065 U	0.00064 U	0.00067 U	0.00066 U	0.00071 U
Chrysene	218-01-9	mg/kg	3.1	110	2.2		0.0017 U	0.0016 U	0.00017 U	0.0016 U	0.0016 U	0.0095	0.0017 U	0.0018 U
Dibenzo(a,h)anthracene	53-70-3	mg/kg	14	0.028	29		0.00082 U	0.00078 U	8.2E-05 U	0.00078 U	0.00076 U	0.00081 U	0.0008 U	0.00085 U
Fluoranthene	206-44-0	mg/kg	10	2400	86		0.0016 U	0.0015 U	0.00016 J	0.0015 U	0.0015 U	0.0073	0.0015 U	0.0035 J
Fluorene	86-73-7	mg/kg	3.7	2300	6		0.00057 U	0.00054 U	5.7E-05 U	0.00054 U	0.00053 U	0.0063	0.00055 U	0.002 J
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	71	1.1	16		0.00069 U	0.00065 U	6.9E-05 U	0.00065 U	0.00064 U	0.0019 J	0.00066 U	0.00071 U
Naphthalene	91-20-3	mg/kg	1	2	0.042		0.0099 J	0.017 J	0.00055 J	0.0018 U	0.0017 J	0.075 J	0.018 J	0.042 J
Phenanthrene	85-01-8	mg/kg	5.5		11		0.0038 J	0.006 J	0.00019 UJ	0.0018 U	0.0017 U	0.026 J	0.0035 J	0.012 J
Pyrene	129-00-0	mg/kg	10	1800	45		0.013	0.02	0.00053 J	0.0011 U	0.0018 J	0.0054 J	0.0023 J	0.0043 J
SW8290														
1,2,3,4,6,7,8-HpCDD	35822-46-9	mg/kg	2.9E-05	0.00048			5.1E-05	5.9E-05	1.5E-06 U	2.8E-06 U	9.2E-06	6.1E-05	0.00033	4.2E-05 J
1,2,3,4,6,7,8-HpCDF	67562-39-4	mg/kg	2.9E-05	0.00048			2.5E-06 J	3.2E-06 J	3.9E-07 U	6E-06	1.4E-06 UJ	4E-05 UJ	1.4E-05	4E-06 UJ
1,2,3,4,7,8,9-HpCDF	55673-89-7	mg/kg	2.9E-05	0.00048			2.4E-07 U	1.4E-07 U	2.7E-07 U	2.1E-07 U	3.6E-07 UJ	2.7E-05 U	3.4E-07 U	2.6E-06 U
1,2,3,4,7,8-HxCDD	39227-28-6	mg/kg	2.9E-06	4.8E-05			8.9E-07 U	9E-07 U	3.5E-08 U	4.2E-07 U	4.4E-07 U	5E-06 J	3.5E-06 J	8.6E-07 UJ
1,2,3,4,7,8-HxCDF	70648-26-9	mg/kg	2.9E-06	4.8E-05			3.1E-07 U	4.3E-07 U	2E-07 U	5.8E-07 UJ	3.1E-07 UJ	4.8E-07 UJ	1.8E-06 J	8.9E-07 UJ
1,2,3,6,7,8-HxCDD	57653-85-7	mg/kg	2.9E-06	4.8E-05			2.8E-06 J	3E-06 J	3.8E-08 U	5.2E-08 U	6.7E-07 UJ	4.6E-06 J	1.7E-05	2.2E-06 J
1,2,3,6,7,8-HxCDF	57117-44-9	mg/kg	2.9E-06	4.8E-05			2.4E-07 U	2.4E-07 UJ	1.5E-07 U	3.7E-07 UJ	3.1E-07 U	5.1E-07 UJ	8.7E-07 J	3.4E-07 UJ
1,2,3,7,8,9-HxCDD	19408-74-3	mg/kg	2.9E-06	4.8E-05			2.7E-06 J	3.1E-06 J	3.4E-08 U	4.3E-07 U	6.1E-07 U	4.7E-06 J	6.7E-06	2.7E-06 J
1,2,3,7,8,9-HxCDF	72918-21-9	mg/kg	2.9E-06	4.8E-05			2.9E-07 U	3.2E-07 UJ	2.9E-07 U	2.8E-07 UJ	3E-07 U	1E-06 UJ	3.2E-07 UJ	2.9E-07 UJ
1,2,3,7,8-PeCDD	40321-76-4	mg/kg	2.9E-07	4.8E-06			5.2E-07 J	5.6E-07 UJ	8E-08 U	9.4E-08 U	9.6E-08 U	7.3E-07 U	1.9E-06 J	6.2E-07 J
1,2,3,7,8-PeCDF	57117-41-6	mg/kg	9.7E-06	0.00016			1.6E-07 UJ	6.5E-08 U	4.4E-08 U	3.6E-07 U	3.5E-07 U	6.7E-07 UJ	6.2E-07 U	3.2E-07 UJ
2,3,4,6,7,8-HxCDF	60851-34-5	mg/kg	2.9E-06	4.8E-05			5.1E-08 U	2.1E-07 U	1.6E-08 U	2.8E-07 U	2.1E-07 U	3.1E-07 UJ	8E-07 J	2.9E-07 UJ
2,3,4,7,8-PeCDF	57117-31-4	mg/kg	9.7E-07	1.6E-05			5.1E-08 U	7.2E-08 U	4.9E-08 U	5.8E-08 U	2.2E-07 U	1.4E-07 U	5.8E-07 J	1E-07 U
2,3,7,8-TCDD	1746-01-6	mg/kg	2.9E-07	4.8E-06	0.3		1.4E-07 U	1.2E-07 U	8.8E-08 U	1.4E-07 U	1.4E-07 U	8.1E-07 UJ	5.9E-07 UJ	1.4E-07 U
2,3,7,8-TCDF	51207-31-9	mg/kg	2.9E-06	4.8E-05			2.5E-08 U	2.7E-08 U	1.5E-08 U	3.6E-08 U	4.1E-08 U	6.8E-07 J	6E-07 J	5.1E-07 J
OCDD	3268-87-9	mg/kg	0.00097	0.016			0.00023	0.00027	7.8E-06 J	1.1E-05 U	4.2E-05 U	0.00024	0.002	0.00019 J
OCDF	39001-02-0	mg/kg	0.00097	0.016			3.5E-06 J	3.9E-06 J	5.2E-07 U	4.7E-06 U	2.1E-06 U	3.8E-06 UJ	1.3E-05	3.7E-06 J

Notes:

-- = Not analyzed

CAS = Chemical Abstracts Service

FD = field duplicate sample

J = Estimated value less than reporting limit but greater than method detection limit or value is estimated due to a sampling or laboratory quality control issue

mg/kg = milligram(s) per kilogram

N = normal sample

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit

UJ = The analyte was below the reported sample quantitation limit; however, the reported value is approximate

Bold indicates the analyte was detected

Shading indicates the result exceeded screening criteria

Appendix D2

Laboratory Reports

Provided upon request.

Appendix E
Data Quality Evaluation Report



**Lower Klamath Hydroelectric Project
(FERC No. P-14803)**

Data Quality Evaluation Report

Final

February 2023

PacifiCorp



Contents

Acronyms and Abbreviations.....	iii
1. Introduction	1
2. Analytical Data.....	1
3. Findings	3
3.1 Holding Times	3
3.2 Calibration.....	4
3.3 Method Blanks	4
3.4 Field Blanks	5
3.5 Field Duplicates	5
3.6 Surrogates.....	6
3.7 Internal Standards.....	7
3.8 Laboratory Control Samples.....	7
3.9 Matrix Spike/Matrix Spike Duplicate.....	7
3.10 Laboratory Duplicates.....	8
3.11 Estimated Maximum Possible Concentrations.....	8
3.12 Chain of Custody	8
3.13 Overall Assessment.....	9
4. References.....	11
5. Signature Page.....	12

Attachment

Samples Associated with Data Quality Evaluation Report

Tables

1	Sample Delivery Groups.....	1
2	Analytical Parameters.....	2
3	Data Qualification Summary	10

Acronyms and Abbreviations

DQE	data quality evaluation
DQO	data quality objective
EB	equipment blank
EMPC	estimated maximum possible concentration
EPA	U.S. Environmental Protection Agency
EUCG	Eurofins Calscience Laboratory
FD	field duplicate
Jacobs	Jacobs Engineering Group Inc.
LANC	Eurofins Lancaster Laboratory
LCL	lower control limit
LCS	laboratory control sample
MS/MSD	matrix spike/matrix spike duplicates
PAH	polycyclic aromatic hydrocarbon(s)
Project	Lower Klamath Hydroelectric Project
QC	quality control
RPD	relative percent difference
SIWP	site investigation work plan
STLC	Soluble Threshold Limit Concentration
SVOC	semivolatile organic compound
TAM2	Eurofins TestAmerica Seattle
TAMC	Eurofins TestAmerica West Sac
TB	trip blank
TCLP	toxicity characteristic leaching procedure
TPH	total petroleum hydrocarbon(s)
UCL	upper confidence limit
VOC	volatile organic compound

1. Introduction

The objective of this data quality evaluation (DQE) report is to assess the data quality of analytical results for water and soil samples collected by Jacobs Engineering Group Inc. (Jacobs) on behalf of PacifiCorp during investigation of pre-existing environmental conditions for the Lower Klamath Hydroelectric Project (Project). The Project is divided between sites in California and Oregon. Jacobs and PacifiCorp have prepared separate Site Investigation Work Plans (SIWPs) for the sites in California and Oregon (Jacobs 2021a and 2021b) and a sampling and analysis plan (Appendix A to the California and Oregon SIWPs). Jacobs is currently preparing a site investigation report for the sites in each state to meet Project-specific requirements.

The individual method requirements and guidelines from the U.S. Environmental Protection Agency (EPA) *National Functional Guidelines for Organic Superfund Methods Data Review* (EPA 2020a) and the EPA *National Functional Guidelines for Inorganic Superfund Methods Data Review* (EPA 2020b) were consulted for this evaluation. This DQE report provides a general data quality assessment and a summary of data issues.

2. Analytical Data

This DQE report covers 17 normal water and 308 normal soil samples, 5 water and 30 soil field duplicates (FDs), 16 equipment blanks (EBs), and 21 trip blanks (TBs) for a total of 39,378 individual sample results. Samples were collected between March 8 and May 14, 2022. A list of samples and collection dates is attached to this report. These sample results were reported under 38 sample delivery groups (Table 1). The analyses were performed by Eurofins Calscience Laboratory (EUCG) in Garden Grove, California, Eurofins Lancaster Laboratory (LANC) in Lancaster, Pennsylvania, Eurofins TestAmerica Seattle (TAM2) in Tacoma, Washington, and Eurofins TestAmerica West Sac (TAMC) in West Sacramento, California.

Table 1. Sample Delivery Groups

580-111242-1	580-111242-3	580-111291-1	580-111291-3
580-111310-1	580-111310-4	580-111378-1	580-111378-5
580-111908-1	580-113389-1	580-113389-2	580-113389-3
580-113389-4	580-113448-1	580-113448-2	580-113501-1
580-113501-2	580-113501-3	580-113534-1	580-113534-2
580-113673-1	580-113673-2	580-113717-1	580-113720-1
580-113720-2	580-113785-1	580-113785-2	580-113790-1
580-113790-2	580-113802-1	580-113809-1	580-113809-2
580-113851-1	580-113851-2	580-113862-1	580-113862-2
580-113864-1	580-113864-2		

Samples were collected and delivered by courier to the laboratories for analysis. Samples were analyzed by the laboratories listed above for the one or more of the parameters/methods presented in the California or Oregon SIWPs (Table 2).

Table 2. Analytical Parameters

Parameter	Method	Laboratory
TPH as Gasoline Range Organics	CALUFTMS/SW8015B-P	TAM2; LANC
Metals	SW6010B/SW6020	TAM2
Metals (STLC Leachate)	SW6010B-STLC	TAMC
Metals (TCLP Leachate)	SW1311/SW6010B	TAM2
Mercury	SW7470A/SW7471A	TAM2
Mercury (STLC Leachate)	SW7470A-STLC	TAMC
Ethylene Dibromide/Dibromochloropropane	SW8011	TAM2
TPH as Diesel Range Organics/Extended Range Organics	SW8015B-E	TAM2
Polychlorinated Biphenyls	SW8082	TAM2
Volatile Organic Compounds	SW8260B	TAM2
Volatile Organic Compounds (STLC Leachate)	SW8260B-STLC	EUCG
Semivolatile Organic Compounds	SW8270C	TAM2
Semivolatile Organic Compounds (STLC Leachate)	SW8270C-STLC	TAMC
Polycyclic Aromatic Hydrocarbons	SW8270SIM	TAM2
Dioxins/Furans	SW8290	TAMC

Notes:

Parameters

STLC = Soluble Threshold Limit Concentration
 TPH = total petroleum hydrocarbons
 TCLP = toxicity characteristic leaching procedure

Laboratories

EUCG = Eurofins Calscience Laboratory
 LANC = Eurofins Lancaster Laboratory
 TAM2 = Eurofins TestAmerica Seattle
 TAMC = Eurofins TestAmerica West Sac

The assessment of data includes a review of: (1) the chain-of-custody documentation; (2) holding-time compliance; (3) the required field and laboratory quality control (QC) samples; (4) method blanks; (5) laboratory control samples (LCS); (6) surrogate spike recoveries; (7) matrix spike/matrix spike duplicate (MS/MSD) samples; (8) analytical spike data (for example, post-digestion spikes for metals analyses); (9) initial and continuing calibration information; and (10) other method-specific criteria.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included the review of FDs, EBs, and TBs.

Data flags were assigned according to QC acceptance limits. These flags, as well as the reason for each flag, are entered into the electronic database. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there will be only one final flag. A final flag is applied to the data and is the most conservative of the applied validation flags. The final flag also includes blank sample impacts.

The data flags are defined from most conservative to least as follows:

- R = The result was unusable due to deficiencies in the ability to analyze the sample and meet QC criteria.
- J = Analyte was present but the reported value may not be accurate or precise (estimated). The result was estimated due to either being less than the referenced reporting limit but greater than the method detection limit or due to a QC exceedance.
- UJ = Analyte was not detected and the specified detection limit may not be accurate or precise (estimated).
- U = Analyte was not detected at the specified detection limit.

3. Findings

The overall summaries of the data validation findings are contained in the following sections. Qualified data are presented in Table 3.

3.1 Holding Times

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

- The holding time for the STLC leachate of mercury by method SW7470A was exceeded by 15 to 17 days for 22 soil samples. Samples were received by the secondary laboratory after holding time had been exceeded. Analysis was also performed by laboratory on a precautionary basis due to lab capacity issues. After review of the final results for total mercury, the analysis of method SW7470A-STLC was not required. Because hold times had been exceeded, one detected sample result was qualified as an estimated value and flagged "J" and 21 nondetected sample results were qualified as estimated values and flagged "UJ."
- The holding time for 1,2,3-trichloropropane, 1,2-dibromo-3-chloropropane, and ethylene dibromide by method SW8011 was exceeded by 1 to 14 days for one groundwater sample and 112 soil samples because of a laboratory error. The laboratory utilized a holding time of 14 days from sample collection to extraction, then 40 days from extraction to analysis while the methodology recommends using a 14-day holding time from sample collection to analysis like other volatile organic compound (VOC) methods (for example, SW8260B). The data were evaluated based on SW8011 methodology recommendation. Seven detected sample results were qualified as estimated and flagged "J;" 326 nondetected sample results were qualified as estimated and flagged "UJ." One sample was analyzed more than 14 days past the holding time. The associated three sample results were nondetect and were rejected from project use and flagged "R."
- The sample preparation holding time for TPH as Diesel Range Organics/Extended Range Organics by method SW8015B-E was exceeded by 13 to 15 days for two soil samples. Samples were released from hold after the holding time had been exceeded. Three detected sample results were qualified as estimated and flagged "J;" one nondetected sample result was qualified as estimated and flagged "UJ." One water sample was reprepared 2 days past the sample preparation holding because of a laboratory QC exceedance in the original sample batch. One detected sample result was qualified as estimated and flagged "J."
- The sample preparation holding time for benzoic acid by method SW8270C was exceeded by 3 days for 13 soil samples. The samples were reprepared outside holding time because of laboratory QC exceedances in the original sample batch. A total of 13 nondetected sample results were qualified as estimated and flagged "UJ."

- The holding time for the STLC leachate of semivolatile organic compounds (SVOC) by method SW8270C-STLC was exceeded by 4 days for 4 soil samples. Analysis was performed by laboratory on a precautionary basis because of lab capacity issues. SW8270C-STLC analysis was only required for two of the four samples due to pentachlorophenol exceeding STLC limits in the original SW8270C analysis. A total of 264 nondetected sample results were qualified as estimated and flagged "UJ."
- The sample preparation holding time for polycyclic aromatic hydrocarbons (PAH) by method SW8270SIM was exceeded by 6 days for one soil sample, and 2 days for two water samples. The samples were reprepared outside holding time because of laboratory QC exceedances in the original sample batch. A total of 54 nondetected sample results were qualified as estimated and flagged "UJ."
- The sample preparation holding time for dioxins/furans by method SW8290 was exceeded by 1 day for two soil samples because of a laboratory error. A total of 12 detected sample results were qualified as estimated and flagged "J;" 22 nondetected sample results were qualified as estimated and flagged "UJ."

3.2 Calibration

Initial and continuing calibration criteria were met, with the following exceptions:

- Acetone or vinyl acetate in the initial calibration verification standard by method SW8260B were either less than or greater than the acceptance criteria. Two detected sample results were qualified as estimated and flagged "J;" six nondetected sample results were qualified as estimated and flagged "UJ."
- Benzo(a)pyrene in the initial calibration verification standard by method SW8270C was either less than or greater than the acceptance criteria. A total of 14 detected sample results were qualified as estimated and flagged "J;" 20 nondetected sample results were qualified as estimated and flagged "UJ."
- Several VOCs in one or more continuing calibration verification standards by method SW8260B were either less than or greater than the acceptance criteria. A total of 10 detected sample results were qualified as estimated and flagged "J;" 60 nondetected sample results were qualified as estimated and flagged "UJ."
- Several SVOCs in one or more continuing calibration verification standards by method SW8270C were either less than or greater than the acceptance criteria. Three detected sample results were qualified as estimated and flagged "J;" 79 nondetected sample results were qualified as estimated and flagged "UJ."

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:

- Boron was detected less than the reporting limit in three method blanks for method SW6010B. A total of 18 associated results less than five times the blank concentrations were qualified as not detected (EPA 2020b) and flagged "U."
- Beryllium, chromium, copper, selenium, silver, or zinc were detected less than the reporting limit in three method blanks for method SW6010B-STLC. A total of 44 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Several VOCs were detected less than the reporting limit in three method blanks for method SW8260B. A total of 36 associated results less than five times the blank concentrations were qualified as not detected (EPA 2020a) and flagged "U."

- Several SVOCs were detected less than the reporting limit in 12 method blanks for method SW8270C. A total of 223 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Fluorene was detected less than the reporting limit in one method blank for method SW8270SIM. Two associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Dioxins/furans were detected less than the reporting limit in 11 method blanks for method SW8290. A total of 311 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."

3.4 Field Blanks

Field blanks consist of Equipment Blanks (EBs) collected to evaluate the potential for contamination from equipment between sites and Travel Blanks (TBs) included in sample shipping containers to evaluate contamination during transit. A total of 16 EBs and 20 TBs were collected and analyzed and were free of contamination that would affect the sample results with the following exceptions:

- Boron was detected less than the reporting limit in three EBs for method SW6010B. A total of 31 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Molybdenum or nickel were detected less than the reporting limit in four EBs for method SW6020. A total of 50 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- TPH as Diesel Range Organics/Extended Range Organics were detected greater than the reporting limit in four EBs for method SW8015B-E. Eight associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Several VOCs were detected either less than or greater than the reporting limit in two EBs or TBs for method SW8260B. A total of 22 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Bis(2-ethylhexyl) phthalate was detected less than the reporting limit in five EBs for method SW8270C. A total of 66 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Several PAHs were detected less than the reporting limit in one EB for method SW8270SIM. Thirteen associated results less than five times the blank concentrations were qualified as not detected and flagged "U."
- Dioxins/furans were detected less than the reporting limit in eight EBs for method SW8290. A total of 92 associated results less than five times the blank concentrations were qualified as not detected and flagged "U."

3.5 Field Duplicates

Five water and 30 soil FD sets were collected and analyzed during this event. Precision criteria are based on laboratory established precision values. All precision criteria were met, with the following exceptions:

- The TCLP leachate for lead in one soil FD set for method SW1311/SW6010B exceeded the relative percent difference (RPD) limit of less than 20 percent between the native and field duplicate results. Two detected sample results were qualified as estimated and flagged "J."

- The STLC leachate for vanadium or lead in two soil FD sets for method SW6010B-STLC exceeded the RPD limit of less than 20 percent between the native and field duplicate results. Four detected sample results were qualified as estimated and flagged "J."
- Several metal compounds in two water and 19 soil FD sets for method SW6020 exceeded the RPD limit of less than 20 percent between the native and field duplicate results. A total of 182 detected sample results were qualified as estimated and flagged "J."
- Several SVOCs in six soil FD sets for method SW8270C exceeded the RPD limit of less than 50 percent between the native and field duplicate results. A total of 62 detected sample results were qualified as estimated and flagged "J;" four nondetected sample results were qualified as estimated and flagged "UJ."
- Several PAHs in one water and one soil FD sets for method SW8270SIM exceeded the RPD limit of less than 50 percent between the native and field duplicate results. A total of 19 detected sample results were qualified as estimated and flagged "J;" nine nondetected sample results were qualified as estimated and flagged "UJ."
- Four dioxin or furan compounds in one soil FD set for method SW8290 exceeded the RPD limit of less than 40 percent between the native and field duplicate results. Eight detected sample results were qualified as estimated and flagged "J."

3.6 Surrogates

Surrogate spikes were analyzed in each sample for all required methods. All acceptance criteria were met, with the following exceptions:

- Surrogate recoveries were less than the lower control limit (LCL) in five soil samples for method SW8011. Fifteen associated nondetected sample results were qualified as estimated and flagged "UJ." Surrogate recoveries were less than 10 percent in one soil sample. Three nondetected sample results were rejected from project use and flagged "R."
- Surrogate recoveries were less than the LCL in three water and two soil samples for method SW8015B-E. Five associated detected sample results were qualified as estimated and flagged "J;" Three nondetected sample results were qualified as estimated and flagged "UJ."
- Surrogate recoveries were less than the LCL in three water and four soil samples for method SW8082. One associated detected sample result was qualified as estimated and flagged "J;" 61 nondetected sample results were qualified as estimated and flagged "UJ."
- Surrogate recoveries were either less than the LCL or greater than the upper confidence limit (UCL) in two water and 32 soil samples for method SW8260B. A total of 43 associated detected sample results were qualified as estimated and flagged "J" and 1,009 nondetected sample results were qualified as estimated and flagged "UJ."
- Surrogate recoveries were less than the LCL in 21 soil samples for method SW8270C. A total of 63 associated detected sample results were qualified as estimated and flagged "J;" 493 nondetected sample results were qualified as estimated and flagged "UJ." Surrogate recoveries were less than 10 percent in three soil samples. A total of 19 nondetected sample results were rejected from project use and flagged "R."
- Surrogate recoveries were less than the LCL in seven soil samples for method SW8290. Three associated detected sample results were qualified as estimated and flagged "J;" five nondetected sample results were qualified as estimated and flagged "UJ."

3.7 Internal Standards

Internal standards are compounds that have similar properties as the analytes of interest but are not expected to occur naturally in the samples. Some methods require the use of internal standards to compensate for losses during injection or purging or losses due to viscosity. A measured amount of the internal standard is added to the standards, the samples, and QC samples following preparation. Internal standards were analyzed for all required methods. All acceptance criteria were met.

3.8 Laboratory Control Samples

LCS and LCS duplicates were analyzed as required. Accuracy and precision criteria were met, with the following exceptions:

- The recovery for 1,2-dibromo-3-chloropropane in one soil LCS was greater than the UCL for method SW8011. One associated detected sample result was qualified as estimated and flagged "J."
- The recovery for TPH as Extended Range Organics in one water LCS was less than the LCL for method SW8015B-E. One associated detected sample result was qualified as estimated and flagged "J;" three nondetected sample results were qualified as estimated and flagged "UJ."
- The RPD for Aroclor-1260 in one soil LCS/LCS duplicate exceeded the control limit for method SW8082. One associated detected sample result was qualified as estimated and flagged "J."
- The recoveries for several VOCs in one or more soil LCS were either less than the LCL or greater than the UCL for method SW8260B. Nine associated detected sample results were qualified as estimated and flagged "J;" 119 nondetected sample results were qualified as estimated and flagged "UJ."
- The recoveries for several SVOCs in one or more soil or water LCS were either less than the LCL or greater than the UCL for method SW8270C. A total of 57 associated detected sample results were qualified as estimated and flagged "J;" 372 nondetected sample results were qualified as estimated and flagged "UJ." The recoveries of either benzoic acid or pyridine were less than 10 percent in one or more LCS. A total of 21 nondetected sample results were rejected from project use and flagged "R."
- The RPD for several SVOCs in one or more soil LCS/LCS duplicate exceeded the control limit for method SW8270C. A total of 20 associated detected sample results were qualified as estimated and flagged "J;" two nondetected sample results were qualified as estimated and flagged "UJ."
- The recoveries for several PAHs in one or more soil LCS were less than the LCL for method SW8270SIM. A total of 25 associated detected sample results were qualified as estimated and flagged "J;" 23 nondetected sample results were qualified as estimated and flagged "UJ."

3.9 Matrix Spike/Matrix Spike Duplicate

The results of MS/MSD analyses provide information about the possible influence of the matrix on either accuracy or precision of the measurements. A total of 47 MS/MSD sets were submitted by the field team or selected by the laboratory. All acceptance criteria were met, with the following exceptions:

- The recovery for boron in five soil MS/MSD sets was less than the LCL for method SW6010B. Three detected native sample results were qualified as estimated and flagged "J;" two nondetected native sample results were qualified as estimated and flagged "UJ."
- The recoveries for several metal compounds in 20 soil MS/MSD sets were either less than the LCL or greater than the UCL for method SW6020. A total of 86 detected native sample results were qualified as estimated and flagged "J."
- The RPD for several metal compounds in five soil MS/MSD sets exceeded the control limit for method SW6020. A total of 24 detected native sample results were qualified as estimated and flagged "J."

- The recovery for the STLC leachate of mercury in one soil MSD was less than the LCL for method SW7470A. One detected native sample result was qualified as estimated and flagged "J."
- The recovery for mercury in one soil MS/MSD set was less than the LCL for method SW7471A. One detected native sample result was qualified as estimated and flagged "J."
- The recovery for TPH as Diesel Range Organics/Extended Range Organics in one water and two soil MS/MSD sets were either less than the LCL or greater than the UCL for method SW8015B-E. Four detected native sample results were qualified as estimated and flagged "J."
- The RPD for TPH as Diesel Range Organics/Extended Range Organics in one soil MS/MSD set exceeded the control limit for method SW8015B-E. Two detected native sample results were qualified as estimated and flagged "J."
- The recoveries for several VOCs in 12 soil MS/MSD sets were either less than the LCL or greater than the UCL for method SW8260B. One detected native sample result was qualified as estimated and flagged "J;" 477 nondetected native sample results were qualified as estimated and flagged "UJ." The recoveries for several VOCs in two soil MS/MSD sets were less than 10 percent. Six nondetected native sample results were rejected from project use and flagged "R."
- The recoveries for several SVOCs in 14 soil MS/MSD sets were either less than the LCL or greater than the UCL for method SW8270C. Twelve detected native sample results were qualified as estimated and flagged "J;" 74 nondetected native sample results were qualified as estimated and flagged "UJ." The recoveries for several SVOCs in seven soil MS/MSD sets were less than 10 percent. A total of 14 nondetected native sample results were rejected from project use and flagged "R."
- The RPD for several SVOCs in five soil MS/MSD sets exceeded the control limit for method SW8270C. A total of 22 detected native sample results were qualified as estimated and flagged "J."
- The recovery for several PAHs in one water and two soil MS/MSD sets were less than the LCL for method SW8270SIM. Five nondetected native sample results were qualified as estimated and flagged "UJ."
- The recoveries or RPD for two dioxin compounds in one soil MS/MSD set were greater than the UCL for method SW8290. Two detected native sample results were qualified as estimated and flagged "J."

3.10 Laboratory Duplicates

Laboratory duplicate sets were analyzed at the proper frequency for the required methods. All precision criteria were met, with the exception of RPDs for several metal compounds in five laboratory duplicates exceeded the control limit for method SW6020. A total of 18 detected native sample results were qualified as estimated and flagged "J."

3.11 Estimated Maximum Possible Concentrations

Estimated maximum possible concentrations (EMPCs) were reported for Method SW8290 where ion abundance ratio criteria were not met. One or more analytes in 4 water or 69 soil samples exceedance ion abundance ratio criteria. A total of 205 results were qualified as estimated and flagged "UJ."

3.12 Chain of Custody

Each sample was documented in a completed chain-of-custody form and received at the laboratory within temperature criteria and in good condition.

3.13 Overall Assessment

The final activity in the DQE is an assessment of whether the data meet the required precision, accuracy, representativeness, completeness, and comparability (PARCC). 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 for the above defined events:

- 1) A total of 65 results for Methods SW8011, SW8260B, or SW8270C were rejected due to low LCS, MS/MSD, or surrogate recoveries, or for hold-time exceedances. The completeness goal of 95 percent for water samples or 90 percent for soil samples were met for all method/analyte combinations, except for benzoic acid which was 86 percent complete in soil. Benzoic acid is a historically poor performing analyte; however, based on common industrial uses this analyte is not considered to be a COPC for this site.
- 2) Approximately 1.7 percent of the data were qualified due to associated method blank and EB contamination. Approximately 1.8 percent of the data were qualified as estimated because of holding-time issues.
- 3) Approximately 11 percent of the data were qualified as estimated due to quality control exceedances that included: FD and laboratory RPD exceedances, LCS recovery and RPD exceedances, surrogate and internal standard recovery exceedances, MS/MSD recovery and RPD exceedances, calibration standard exceedances, or ion ratio exceedances resulting in reported EMPC values.
- 4) Overall, the precision and accuracy of the data, as measured by laboratory and field quality control indicators, indicates that the PARCC were met. Data are usable for project decision-making, considering the biases outlined in this data quality evaluation, except for the rejected data.
- 5) Representativeness and comparability of the data was 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 events.
- 6) Sensitivity is a measurement based on the analytical instrument method reporting limits determined by each subcontract laboratory and is ensured through compliance with reporting limits being equivalent to, or less than the project screening levels. Any nondetect results that were reported by the laboratory, or were flagged nondetect due to blank contamination, have been evaluated against the project screening levels as discussed in the work plan.

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-01-0.5-20220310	SW6020	Barium	67	mg/Kg	J	LabDupRPD
C1DP-01-0.5-20220310	SW6020	Chromium	45	mg/Kg	J	LabDupRPD; SD>UCL
C1DP-01-0.5-20220310	SW6020	Copper	50	mg/Kg	J	MS>UCL; SD>UCL
C1DP-01-0.5-20220310	SW6020	Iron	33000	mg/Kg	J	LabDupRPD
C1DP-01-0.5-20220310	SW6020	Lead	5.3	mg/Kg	J	LabDupRPD
C1DP-01-0.5-20220310	SW6020	Manganese	490	mg/Kg	J	LabDupRPD
C1DP-01-0.5-20220310	SW6020	Nickel	53	mg/Kg	J	SD>UCL
C1DP-01-0.5-20220310	SW6020	Vanadium	84	mg/Kg	J	LabDupRPD;MS>UCL; SD>UCL
C1DP-01-0.5-20220310	SW6020	Zinc	25	mg/Kg	J	LabDupRPD
C1DP-02-0.5-20220310	SW6020	Lead	5.9	mg/Kg	J	FD>RPD
C1DP-02-0.5-20220310-FD	SW6020	Lead	3.3	mg/Kg	J	FD>RPD
C1DP-04-0.5-20220311	SW6010B	Boron	4	mg/Kg	U	EB<RL
C1DP-04-0.5-20220311	SW6020	Molybdenum	0.092	mg/Kg	U	EB<RL
C1DP-04-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
C1DP-04-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-04-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-04-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.032	mg/Kg	U	EB<RL; LB<RL
C1DP-04-0.5-20220311	SW8270C	Di-n-butyl phthalate	0.0081	mg/Kg	U	LB<RL
C1DP-04-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000074	mg/Kg	U	LB<RL
C1DP-04-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000025	mg/Kg	UJ	EMPC
C1DP-04-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000048	mg/Kg	U	LB<RL
C1DP-04-1.5-20220311	SW6010B	Boron	2.7	mg/Kg	U	EB<RL
C1DP-04-1.5-20220311	SW6020	Molybdenum	0.063	mg/Kg	U	EB<RL
C1DP-04-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
C1DP-04-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-04-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-04-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.024	mg/Kg	U	EB<RL; LB<RL
C1DP-04-1.5-20220311	SW8270C	Di-n-butyl phthalate	0.006	mg/Kg	U	LB<RL
C1DP-04-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000089	mg/Kg	U	LB<RL
C1DP-04-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.00000049	mg/Kg	U	LB<RL
C1DP-04-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000043	mg/Kg	U	LB<RL
C1DP-04-2.5-20220311	SW6010B	Boron	2.5	mg/Kg	U	EB<RL
C1DP-04-2.5-20220311	SW6020	Molybdenum	0.12	mg/Kg	U	EB<RL
C1DP-04-2.5-20220311	SW8011	1,2,3-Trichloropropane	0.000066	mg/Kg	UJ	HTa>UCL
C1DP-04-2.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-04-2.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-04-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.028	mg/Kg	U	EB<RL; LB<RL
C1DP-04-2.5-20220311	SW8270C	Di-n-butyl phthalate	0.0071	mg/Kg	U	LB<RL
C1DP-04-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000023	mg/Kg	U	LB<RL
C1DP-04-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000012	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-04-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000042	mg/Kg	U	LB<RL
C1DP-04-2.5-20220311	SW8290	OCDF	0.00000008	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-05-0.5-20220311	SW6010B	Boron	8.7	mg/Kg	U	EB<RL
C1DP-05-0.5-20220311	SW6020	Molybdenum	0.19	mg/Kg	U	EB<RL
C1DP-05-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000069	mg/Kg	UJ	HTa>UCL
C1DP-05-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-05-0.5-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-05-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.025	mg/Kg	U	EB<RL; LB<RL
C1DP-05-0.5-20220311	SW8270C	Di-n-butyl phthalate	0.0086	mg/Kg	U	LB<RL
C1DP-05-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000012	mg/Kg	UJ	EMPC
C1DP-05-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000004	mg/Kg	U	EB<RL; LB<RL
C1DP-05-1.5-20220311	SW6010B	Boron	3.7	mg/Kg	U	EB<RL
C1DP-05-1.5-20220311	SW6020	Molybdenum	0.075	mg/Kg	U	EB<RL
C1DP-05-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C1DP-05-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-05-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-05-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.026	mg/Kg	U	EB<RL; LB<RL
C1DP-05-1.5-20220311	SW8270C	Di-n-butyl phthalate	0.0061	mg/Kg	U	LB<RL
C1DP-05-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000005	mg/Kg	UJ	EMPC
C1DP-05-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000003	mg/Kg	U	EB<RL; LB<RL
C1DP-05-2.5-20220311	SW6020	Molybdenum	0.14	mg/Kg	U	EB<RL
C1DP-05-2.5-20220311	SW8011	1,2,3-Trichloropropane	0.000065	mg/Kg	UJ	HTa>UCL
C1DP-05-2.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.0000098	mg/Kg	UJ	HTa>UCL
C1DP-05-2.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-05-2.5-20220311	SW8270C	2,4,5-Trichlorophenol	0.00083	mg/Kg	UJ	Sur<LCL
C1DP-05-2.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL; Sur<LCL
C1DP-05-2.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL; Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-05-2.5-20220311	SW8270C	2-Methylnaphthalene	0.0009	mg/Kg	UJ	LCS<LCL
C1DP-05-2.5-20220311	SW8270C	4,6-Dinitro-2-methylphenol	0.01	mg/Kg	UJ	Sur<LCL
C1DP-05-2.5-20220311	SW8270C	4-Chloro-3-methylphenol	0.0034	mg/Kg	UJ	Sur<LCL
C1DP-05-2.5-20220311	SW8270C	4-Nitrophenol	0.018	mg/Kg	UJ	Sur<LCL
C1DP-05-2.5-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTp>UCL
C1DP-05-2.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-05-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.011	mg/Kg	U	EB<RL; LB<RL
C1DP-05-2.5-20220311	SW8270C	Pentachlorophenol	0.0064	mg/Kg	UJ	Sur<LCL
C1DP-05-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000005	mg/Kg	U	LB<RL
C1DP-05-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000018	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-05-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000004	mg/Kg	U	EB<RL; LB<RL
C1DP-06-0.5-20220311	SW6020	Molybdenum	0.15	mg/Kg	U	EB<RL
C1DP-06-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL; Sur<LCL
C1DP-06-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL; Sur<LCL
C1DP-06-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL; Sur<LCL
C1DP-06-0.5-20220311	SW8260B	2-Butanone (MEK)	0.029	mg/Kg	J	Sur>UCL
C1DP-06-0.5-20220311	SW8260B	Acetone	0.41	mg/Kg	J	Sur>UCL
C1DP-06-0.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0012	mg/Kg	UJ	LCS<LCL
C1DP-06-0.5-20220311	SW8270C	2,4-Dichlorophenol	0.0026	mg/Kg	UJ	LCS<LCL
C1DP-06-0.5-20220311	SW8270C	2-Methylnaphthalene	0.0045	mg/Kg	J	LCS<LCL
C1DP-06-0.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	UJ	HTp>UCL
C1DP-06-0.5-20220311	SW8270C	Benzyl alcohol	0.0047	mg/Kg	UJ	CCV<LCL
C1DP-06-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.015	mg/Kg	U	EB<RL; LB<RL
C1DP-06-0.5-20220311	SW8270C	Di-n-butyl phthalate	0.0027	mg/Kg	U	LB<RL
C1DP-06-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000013	mg/Kg	U	LB<RL
C1DP-06-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000043	mg/Kg	U	LB<RL
C1DP-06-0.5-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.0000013	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311	SW6010B	Boron	2.8	mg/Kg	U	EB<RL
C1DP-06-1.5-20220311	SW6020	Molybdenum	0.078	mg/Kg	U	EB<RL
C1DP-06-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000061	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.0000092	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311	SW8011	Ethylene Dibromide	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311	SW8270C	2,4,5-Trichlorophenol	0.00083	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL; Sur<LCL
C1DP-06-1.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-06-1.5-20220311	SW8270C	2,4-Dinitrophenol	0.06	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8270C	2-Methylnaphthalene	0.0009	mg/Kg	UJ	LCS<LCL
C1DP-06-1.5-20220311	SW8270C	4,6-Dinitro-2-methylphenol	0.01	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8270C	4-Chloro-3-methylphenol	0.0034	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8270C	4-Nitrophenol	0.018	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTp>UCL
C1DP-06-1.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-06-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.0076	mg/Kg	U	EB<RL; LB<RL
C1DP-06-1.5-20220311	SW8270C	Pentachlorophenol	0.0064	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000008	mg/Kg	U	LB<RL
C1DP-06-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000065	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000013	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000035	mg/Kg	U	EB<RL; LB<RL
C1DP-06-1.5-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.0000001	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311-FD	SW6010B	Boron	3.1	mg/Kg	U	EB<RL
C1DP-06-1.5-20220311-FD	SW6020	Molybdenum	0.084	mg/Kg	U	EB<RL
C1DP-06-1.5-20220311-FD	SW8011	1,2,3-Trichloropropane	0.00006	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.0000091	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311-FD	SW8011	Ethylene Dibromide	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-06-1.5-20220311-FD	SW8260B	Acetone	0.027	mg/Kg	J	Sur>UCL
C1DP-06-1.5-20220311-FD	SW8260B	Dichlorodifluoromethane	0.00056	mg/Kg	UJ	CCV<LCL
C1DP-06-1.5-20220311-FD	SW8260B	Methylene Chloride	0.011	mg/Kg	UJ	CCV<LCL
C1DP-06-1.5-20220311-FD	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	CCV<LCL
C1DP-06-1.5-20220311-FD	SW8270C	2,4,5-Trichlorophenol	0.00082	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL; Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	2,4-Dichlorophenol	0.0028	mg/Kg	UJ	LCS<LCL
C1DP-06-1.5-20220311-FD	SW8270C	2,4-Dinitrophenol	0.06	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	2-Methylnaphthalene	0.00095	mg/Kg	J	LCS<LCL
C1DP-06-1.5-20220311-FD	SW8270C	4,6-Dinitro-2-methylphenol	0.01	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	4-Chloro-3-methylphenol	0.0034	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	4-Nitrophenol	0.017	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8270C	Benzoic acid	0.12	mg/Kg	UJ	HTp>UCL
C1DP-06-1.5-20220311-FD	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-06-1.5-20220311-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.016	mg/Kg	U	EB<RL
C1DP-06-1.5-20220311-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.016	mg/Kg	U	LB<RL
C1DP-06-1.5-20220311-FD	SW8270C	Pentachlorophenol	0.0064	mg/Kg	UJ	Sur<LCL
C1DP-06-1.5-20220311-FD	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000022	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311-FD	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000022	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-06-1.5-20220311-FD	SW8290	1,2,3,4,7,8-HxCDF	0.0000037	mg/Kg	UJ	EMPC
C1DP-06-1.5-20220311-FD	SW8290	1,2,3,7,8,9-HxCDF	0.0000041	mg/Kg	UJ	EB<RL
C1DP-06-1.5-20220311-FD	SW8290	1,2,3,7,8,9-HxCDF	0.0000041	mg/Kg	U	LB<RL
C1DP-06-4.5-20220311	SW6010B	Boron	2.5	mg/Kg	U	EB<RL
C1DP-06-4.5-20220311	SW6020	Molybdenum	0.23	mg/Kg	U	EB<RL
C1DP-06-4.5-20220311	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C1DP-06-4.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-06-4.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-06-4.5-20220311	SW8260B	Acetone	0.011	mg/Kg	J	Sur>UCL
C1DP-06-4.5-20220311	SW8260B	Dichlorodifluoromethane	0.00061	mg/Kg	UJ	CCV<LCL
C1DP-06-4.5-20220311	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	CCV<LCL
C1DP-06-4.5-20220311	SW8260B	Vinyl acetate	0.0019	mg/Kg	UJ	CCV<LCL
C1DP-06-4.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-06-4.5-20220311	SW8270C	2,4-Dichlorophenol	0.0028	mg/Kg	UJ	LCS<LCL
C1DP-06-4.5-20220311	SW8270C	2-Methylnaphthalene	0.00089	mg/Kg	UJ	LCS<LCL
C1DP-06-4.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	UJ	HTp>UCL
C1DP-06-4.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-06-4.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.016	mg/Kg	U	EB<RL
C1DP-06-4.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000066	mg/Kg	U	LB<RL
C1DP-06-4.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000032	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-06-4.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.0000012	mg/Kg	UJ	EMPC
C1DP-06-4.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.0000035	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-06-4.5-20220311	SW8290	OCDF	0.0000008	mg/Kg	U	EB<RL; LB<RL
C1DP-06-6.0-20220311	SW6010B	Boron	2.8	mg/Kg	U	EB<RL
C1DP-06-6.0-20220311	SW6020	Molybdenum	0.26	mg/Kg	U	EB<RL
C1DP-06-6.0-20220311	SW8011	1,2,3-Trichloropropane	0.000064	mg/Kg	UJ	HTa>UCL
C1DP-06-6.0-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000097	mg/Kg	UJ	HTa>UCL
C1DP-06-6.0-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-06-6.0-20220311	SW8270C	2,4,6-Trichlorophenol	0.0014	mg/Kg	UJ	LCS<LCL
C1DP-06-6.0-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-06-6.0-20220311	SW8270C	2-Methylnaphthalene	0.00092	mg/Kg	UJ	LCS<LCL
C1DP-06-6.0-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTp>UCL
C1DP-06-6.0-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-06-6.0-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.0096	mg/Kg	UJ	EB<RL; LB<RL
C1DP-06-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000034	mg/Kg	U	EMPC; EB<RL; LB<RL (U)
C1DP-06-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000016	mg/Kg	U	LB<RL
C1DP-06-6.0-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000012	mg/Kg	U	LB<RL
C1DP-06-6.0-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.0000022	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-06-6.0-20220311	SW8290	OCDF	0.0000049	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-07-0.5-20220311	SW6010B	Boron	2.9	mg/Kg	U	EB<RL
C1DP-07-0.5-20220311	SW6020	Barium	20	mg/Kg	J	MSRPD
C1DP-07-0.5-20220311	SW6020	Copper	61	mg/Kg	J	MS>UCL; SD>UCL
C1DP-07-0.5-20220311	SW6020	Molybdenum	0.19	mg/Kg	U	EB<RL
C1DP-07-0.5-20220311	SW6020	Vanadium	36	mg/Kg	J	SD>UCL
C1DP-07-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.00008	mg/Kg	UJ	HTa>UCL
C1DP-07-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-07-0.5-20220311	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C1DP-07-0.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.00095	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.00097	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00068	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.0019	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0021	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,3-Dichlorobenzene	0.0018	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	1,4-Dichlorobenzene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	2-Chlorotoluene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	2-Hexanone	0.0063	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	4-Chlorotoluene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Bromobenzene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Bromomethane	0.00034	mg/Kg	R	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Chlorobenzene	0.0004	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Chloroethane	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Chloromethane	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-07-0.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00032	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00079	mg/Kg	R	MS<LCL; SD<LCL; CCV<LCL (UJ)
C1DP-07-0.5-20220311	SW8260B	Ethylbenzene	0.00066	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Hexachlorobutadiene	0.00097	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Isopropylbenzene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Methylene Chloride	0.016	mg/Kg	UJ	CCV<LCL
C1DP-07-0.5-20220311	SW8260B	m-Xylene & p-Xylene	0.0009	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Naphthalene	0.0029	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	n-Butylbenzene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	N-Propylbenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	o-Xylene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	p-Isopropyltoluene	0.00064	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	sec-Butylbenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Styrene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	tert-Butylbenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Tetrachloroethene	0.00064	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	Toluene	0.0021	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.00097	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	Trichloroethene	0.00048	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8260B	Trichlorofluoromethane	0.00048	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Vinyl acetate	0.0024	mg/Kg	R	MS<LCL; SD<LCL; CCV<LCL (UJ)
C1DP-07-0.5-20220311	SW8260B	Vinyl chloride	0.00048	mg/Kg	R	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8260B	Xylenes, Total	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-07-0.5-20220311	SW8270C	1,2-Dichlorobenzene	0.00056	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8270C	1,4-Dichlorobenzene	0.00094	mg/Kg	UJ	MS<LCL
C1DP-07-0.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C1DP-07-0.5-20220311	SW8270C	2,4-Dichlorophenol	0.0032	mg/Kg	UJ	LCS<LCL
C1DP-07-0.5-20220311	SW8270C	2-Methylnaphthalene	0.00099	mg/Kg	UJ	LCS<LCL; MS<LCL
C1DP-07-0.5-20220311	SW8270C	Benzoic acid	0.14	mg/Kg	R	MS<LCL; SD<LCL; HTP>UCL (UJ)
C1DP-07-0.5-20220311	SW8270C	Benzyl alcohol	0.0056	mg/Kg	UJ	CCV<LCL
C1DP-07-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.00000042	mg/Kg	UJ	EMPC
C1DP-07-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.00000025	mg/Kg	U	LB<RL
C1DP-07-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000055	mg/Kg	U	LB<RL
C1DP-07-1.5-20220311	SW6020	Molybdenum	0.14	mg/Kg	U	EB<RL
C1DP-07-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.00007	mg/Kg	UJ	HTa>UCL
C1DP-07-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-07-1.5-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-07-1.5-20220311	SW8260B	Dichlorodifluoromethane	0.00079	mg/Kg	UJ	CCV<LCL
C1DP-07-1.5-20220311	SW8260B	Methylene Chloride	0.016	mg/Kg	UJ	CCV<LCL
C1DP-07-1.5-20220311	SW8260B	Vinyl acetate	0.0024	mg/Kg	UJ	CCV<LCL
C1DP-07-1.5-20220311	SW8270C	2,4,5-Trichlorophenol	0.00083	mg/Kg	UJ	Sur<LCL
C1DP-07-1.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL; Sur<LCL
C1DP-07-1.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-07-1.5-20220311	SW8270C	2,4-Dinitrophenol	0.06	mg/Kg	UJ	Sur<LCL
C1DP-07-1.5-20220311	SW8270C	2-Methylnaphthalene	0.00091	mg/Kg	UJ	LCS<LCL
C1DP-07-1.5-20220311	SW8270C	4,6-Dinitro-2-methylphenol	0.01	mg/Kg	UJ	Sur<LCL
C1DP-07-1.5-20220311	SW8270C	4-Chloro-3-methylphenol	0.0034	mg/Kg	UJ	Sur<LCL
C1DP-07-1.5-20220311	SW8270C	4-Nitrophenol	0.018	mg/Kg	UJ	Sur>UCL
C1DP-07-1.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	UJ	HTp>UCL
C1DP-07-1.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-07-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	EB<RL; LB<RL
C1DP-07-1.5-20220311	SW8270C	Pentachlorophenol	0.0065	mg/Kg	UJ	Sur<LCL
C1DP-07-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000059	mg/Kg	U	LB<RL
C1DP-07-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000037	mg/Kg	U	LB<RL
C1DP-07-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000018	mg/Kg	UJ	EMPC
C1DP-07-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000019	mg/Kg	UJ	EMPC
C1DP-07-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000041	mg/Kg	U	EB<RL; LB<RL
C1DP-07-2.5-20220311	SW6020	Molybdenum	0.14	mg/Kg	U	EB<RL
C1DP-07-2.5-20220311	SW8260B	Dichlorodifluoromethane	0.00062	mg/Kg	UJ	CCV<LCL
C1DP-07-2.5-20220311	SW8260B	Methylene Chloride	0.013	mg/Kg	UJ	CCV<LCL
C1DP-07-2.5-20220311	SW8260B	Vinyl acetate	0.0019	mg/Kg	UJ	CCV<LCL
C1DP-07-2.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-07-2.5-20220311	SW8270C	2,4-Dichlorophenol	0.0027	mg/Kg	UJ	LCS<LCL
C1DP-07-2.5-20220311	SW8270C	2-Methylnaphthalene	0.00086	mg/Kg	UJ	LCS<LCL
C1DP-07-2.5-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-07-2.5-20220311	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-07-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C1DP-07-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000012	mg/Kg	U	LB<RL
C1DP-07-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000004	mg/Kg	U	LB<RL
C1DP-07-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000019	mg/Kg	U	LB<RL
C1DP-07-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000034	mg/Kg	U	EB<RL; LB<RL
C1DP-07-2.5-20220311	SW8290	OCDF	0.0000013	mg/Kg	UJ	EMPC
C1DP-08-0.5-20220311	SW6020	Molybdenum	0.11	mg/Kg	U	EB<RL
C1DP-08-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00059	mg/Kg	UJ	CCV<LCL
C1DP-08-0.5-20220311	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	CCV<LCL
C1DP-08-0.5-20220311	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	CCV<LCL
C1DP-08-0.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-08-0.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-08-0.5-20220311	SW8270C	2-Methylnaphthalene	0.0009	mg/Kg	UJ	LCS<LCL
C1DP-08-0.5-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTp>UCL
C1DP-08-0.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-08-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	U	EB<RL; LB<RL
C1DP-08-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000064	mg/Kg	U	LB<RL
C1DP-08-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000042	mg/Kg	U	LB<RL
C1DP-08-1.5-20220311	SW6020	Molybdenum	0.14	mg/Kg	U	EB<RL
C1DP-08-1.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.00077	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1,1-Trichloroethane	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1,2,2-Tetrachloroethane	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00068	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1,2-Trichloroethane	0.00033	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1-Dichloroethane	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1-Dichloroethene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,1-Dichloropropene	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.00079	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2,3-Trichloropropane	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00055	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.0016	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2-Dibromo-3-Chloropropane	0.0021	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2-Dibromoethane	0.00026	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0017	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2-Dichloroethane	0.00026	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,2-Dichloropropane	0.00052	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,3-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,3-Dichloropropane	0.0003	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	1,4-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	2,2-Dichloropropane	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	2-Butanone (MEK)	0.012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	2-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	2-Hexanone	0.0051	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	4-Chlorotoluene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0079	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Acetone	0.011	mg/Kg	J	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Benzene	0.00051	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Bromobenzene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Bromochloromethane	0.00033	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Bromodichloromethane	0.00024	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Bromoform	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Bromomethane	0.00028	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Carbon disulfide	0.00026	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Carbon tetrachloride	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Chlorobenzene	0.00033	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Chloroethane	0.00098	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Chloroform	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Chloromethane	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	cis-1,2-Dichloroethene	0.00079	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00026	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Dibromochloromethane	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Dibromomethane	0.00022	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Dichlorodifluoromethane	0.00064	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Ethylbenzene	0.00054	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Hexachlorobutadiene	0.00079	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Isopropylbenzene	0.0006	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-08-1.5-20220311	SW8260B	Methyl tert-butyl ether	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Methylene Chloride	0.013	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-08-1.5-20220311	SW8260B	m-Xylene & p-Xylene	0.00073	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Naphthalene	0.0024	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	n-Butylbenzene	0.00083	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	N-Propylbenzene	0.001	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	p-Isopropyltoluene	0.00052	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	sec-Butylbenzene	0.00088	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Styrene	0.00097	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	tert-Butylbenzene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Tetrachloroethene	0.00052	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Toluene	0.0017	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	trans-1,2-Dichloroethene	0.00052	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.00079	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Trichloroethene	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Trichlorofluoromethane	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Vinyl acetate	0.002	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Vinyl chloride	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-08-1.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-08-1.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-08-1.5-20220311	SW8270C	2-Methylnaphthalene	0.00091	mg/Kg	UJ	LCS<LCL
C1DP-08-1.5-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	UJ	HTP>UCL
C1DP-08-1.5-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-08-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	EB<RL; LB<RL
C1DP-08-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000039	mg/Kg	U	LB<RL
C1DP-08-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.0000004	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-08-2.5-20220311	SW6020	Molybdenum	0.098	mg/Kg	U	EB<RL
C1DP-08-2.5-20220311	SW8260B	Dichlorodifluoromethane	0.00064	mg/Kg	UJ	CCV<LCL
C1DP-08-2.5-20220311	SW8260B	Methylene Chloride	0.013	mg/Kg	UJ	Sur<LCL
C1DP-08-2.5-20220311	SW8260B	Vinyl acetate	0.0019	mg/Kg	UJ	CCV<LCL
C1DP-08-2.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-08-2.5-20220311	SW8270C	2,4-Dichlorophenol	0.0029	mg/Kg	UJ	LCS<LCL
C1DP-08-2.5-20220311	SW8270C	2-Methylnaphthalene	0.00091	mg/Kg	UJ	LCS<LCL
C1DP-08-2.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	UJ	HTP>UCL
C1DP-08-2.5-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-08-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	EB<RL; LB<RL
C1DP-08-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000034	mg/Kg	U	LB<RL
C1DP-08-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000002	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-08-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000038	mg/Kg	U	EB<RL; LB<RL
C1DP-08-2.5-20220311	SW8290	OCDF	0.0000012	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-09-0.5-20220311	SW6010B	Boron	2.2	mg/Kg	U	EB<RL
C1DP-09-0.5-20220311	SW6020	Manganese	180	mg/Kg	J	MS>UCL; SD>UCL
C1DP-09-0.5-20220311	SW6020	Molybdenum	0.3	mg/Kg	U	EB<RL
C1DP-09-0.5-20220311	SW6020	Nickel	30	mg/Kg	J	MS>UCL
C1DP-09-0.5-20220311	SW6020	Vanadium	27	mg/Kg	J	MS>UCL
C1DP-09-0.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.0005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1,1-Trichloroethane	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1,2,2-Tetrachloroethane	0.00076	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00044	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1,2-Trichloroethane	0.00021	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1-Dichloroethane	0.00016	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1-Dichloroethene	0.00092	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,1-Dichloropropene	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.0005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2,3-Trichloropropane	0.00084	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.001	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2-Dibromo-3-Chloropropane	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2-Dibromoethane	0.00017	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2-Dichloroethane	0.00017	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,2-Dichloropropane	0.00034	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.00068	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,3-Dichlorobenzene	0.00092	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,3-Dichloropropane	0.00019	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	1,4-Dichlorobenzene	0.00082	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-09-0.5-20220311	SW8260B	2,2-Dichloropropane	0.00028	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	2-Butanone (MEK)	0.0075	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	2-Chlorotoluene	0.00078	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	2-Hexanone	0.0033	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	4-Chlorotoluene	0.00084	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	4-Methyl-2-pentanone (MIBK)	0.005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Acetone	0.0073	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Benzene	0.00033	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Bromobenzene	0.00084	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Bromochloromethane	0.00021	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Bromodichloromethane	0.00015	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Bromoform	0.00071	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Bromomethane	0.00018	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Carbon disulfide	0.00017	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Carbon tetrachloride	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Chlorobenzene	0.00021	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Chloroethane	0.00063	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Chloroform	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Chloromethane	0.00078	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	cis-1,2-Dichloroethene	0.0005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00017	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Dibromochloromethane	0.00023	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Dibromomethane	0.00014	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00041	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Ethylbenzene	0.00034	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Hexachlorobutadiene	0.0005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Isopropylbenzene	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Methyl tert-butyl ether	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Methylene Chloride	0.0083	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-09-0.5-20220311	SW8260B	m-Xylene & p-Xylene	0.00047	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Naphthalene	0.0015	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	n-Butylbenzene	0.00053	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	N-Propylbenzene	0.00064	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	o-Xylene	0.00077	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	p-Isopropyltoluene	0.00034	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	sec-Butylbenzene	0.00056	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Styrene	0.00062	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	tert-Butylbenzene	0.00055	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Tetrachloroethene	0.00034	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Toluene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	trans-1,2-Dichloroethene	0.00034	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.0005	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Trichloroethene	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Trichlorofluoromethane	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Vinyl acetate	0.0013	mg/Kg	UJ	CCV<LCL; Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Vinyl chloride	0.00025	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8260B	Xylenes, Total	0.00077	mg/Kg	UJ	Sur<LCL
C1DP-09-0.5-20220311	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C1DP-09-0.5-20220311	SW8270C	2,4-Dichlorophenol	0.0028	mg/Kg	UJ	LCS<LCL
C1DP-09-0.5-20220311	SW8270C	2-Methylnaphthalene	0.00086	mg/Kg	UJ	LCS<LCL
C1DP-09-0.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	R	LCS<LCL; HTP>UCL (UJ)
C1DP-09-0.5-20220311	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-09-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C1DP-09-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000011	mg/Kg	U	LB<RL
C1DP-09-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000037	mg/Kg	U	EB<RL; LB<RL
C1DP-09-1.5-20220311	SW6010B	Boron	3	mg/Kg	U	EB<RL
C1DP-09-1.5-20220311	SW6020	Molybdenum	0.35	mg/Kg	U	EB<RL
C1DP-09-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000065	mg/Kg	R	Sur<LCL
C1DP-09-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.0000098	mg/Kg	R	Sur<LCL
C1DP-09-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	R	Sur<LCL
C1DP-09-1.5-20220311	SW8260B	Dichlorodifluoromethane	0.00032	mg/Kg	UJ	CCV<LCL
C1DP-09-1.5-20220311	SW8260B	Methylene Chloride	0.0065	mg/Kg	UJ	CCV<LCL
C1DP-09-1.5-20220311	SW8260B	Vinyl acetate	0.00098	mg/Kg	UJ	CCV<LCL
C1DP-09-1.5-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-09-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.031	mg/Kg	U	EB<RL; LB<RL
C1DP-09-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000089	mg/Kg	U	LB<RL
C1DP-09-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000033	mg/Kg	U	LB<RL
C1DP-09-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000043	mg/Kg	U	LB<RL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-09-1.5-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.00000097	mg/Kg	UJ	EMPC
C1DP-09-2.5-20220311	SW6010B	Boron	2.6	mg/Kg	U	EB<RL
C1DP-09-2.5-20220311	SW6020	Molybdenum	0.7	mg/Kg	U	EB<RL
C1DP-09-2.5-20220311	SW8260B	Dichlorodifluoromethane	0.0011	mg/Kg	UJ	CCV<LCL
C1DP-09-2.5-20220311	SW8260B	Methylene Chloride	0.022	mg/Kg	UJ	CCV<LCL
C1DP-09-2.5-20220311	SW8260B	Vinyl acetate	0.0034	mg/Kg	UJ	CCV<LCL
C1DP-09-2.5-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-09-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.000001	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-09-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000003	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-09-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000023	mg/Kg	U	LB<RL
C1DP-09-2.5-20220311	SW8290	OCDF	0.00000088	mg/Kg	U	EB<RL; LB<RL
C1DP-10-0.5-20220311	SW6010B	Boron	2	mg/Kg	U	EB<RL
C1DP-10-0.5-20220311	SW6020	Molybdenum	0.069	mg/Kg	U	EB<RL
C1DP-10-0.5-20220311	SW8260B	Acetone	0.056	mg/Kg	J	Sur>UCL
C1DP-10-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00071	mg/Kg	UJ	CCV<LCL
C1DP-10-0.5-20220311	SW8260B	Methylene Chloride	0.014	mg/Kg	UJ	CCV<LCL
C1DP-10-0.5-20220311	SW8260B	Vinyl acetate	0.0022	mg/Kg	UJ	CCV<LCL
C1DP-10-0.5-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-10-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000019	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000059	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000037	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000022	mg/Kg	UJ	EMPC
C1DP-10-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000024	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.00000021	mg/Kg	UJ	EMPC
C1DP-10-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000017	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000063	mg/Kg	U	LB<RL
C1DP-10-0.5-20220311	SW8290	OCDF	0.00000021	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW6010B	Boron	2.1	mg/Kg	U	EB<RL
C1DP-10-1.5-20220311	SW6020	Molybdenum	0.072	mg/Kg	U	EB<RL
C1DP-10-1.5-20220311	SW8260B	Acetone	0.06	mg/Kg	J	Sur>UCL
C1DP-10-1.5-20220311	SW8270C	Benzyl alcohol	0.0054	mg/Kg	UJ	CCV<LCL
C1DP-10-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.016	mg/Kg	U	EB<RL; LB<RL
C1DP-10-1.5-20220311	SW8270C	Butyl benzyl phthalate	0.012	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000014	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000034	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000024	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000025	mg/Kg	UJ	EMPC
C1DP-10-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000016	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000013	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000046	mg/Kg	U	LB<RL
C1DP-10-1.5-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.00000065	mg/Kg	UJ	EMPC
C1DP-10-1.5-20220311	SW8290	OCDF	0.00000011	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-10-2.5-20220311	SW6020	Molybdenum	0.075	mg/Kg	U	EB<RL
C1DP-10-2.5-20220311	SW8260B	Acetone	0.027	mg/Kg	J	Sur>UCL
C1DP-10-2.5-20220311	SW8270C	Benzyl alcohol	0.0055	mg/Kg	UJ	CCV<LCL
C1DP-10-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.013	mg/Kg	U	EB<RL; LB<RL
C1DP-10-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000012	mg/Kg	U	LB<RL
C1DP-10-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000032	mg/Kg	U	LB<RL
C1DP-10-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000023	mg/Kg	U	LB<RL
C1DP-10-2.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000013	mg/Kg	U	LB<RL
C1DP-10-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000038	mg/Kg	U	EB<RL; LB<RL
C1DP-10-2.5-20220311	SW8290	OCDF	0.00000012	mg/Kg	U	LB<RL
C1DP-11-0.5-20220311	SW6020	Molybdenum	0.077	mg/Kg	U	EB<RL
C1DP-11-0.5-20220311	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-11-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000001	mg/Kg	U	LB<RL
C1DP-11-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000021	mg/Kg	U	LB<RL
C1DP-11-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000016	mg/Kg	UJ	EMPC
C1DP-11-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000019	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-11-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.00000017	mg/Kg	U	LB<RL
C1DP-11-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000034	mg/Kg	U	EB<RL; LB<RL
C1DP-11-1.5-20220311	SW6020	Molybdenum	0.064	mg/Kg	U	EB<RL
C1DP-11-1.5-20220311	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-11-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.0083	mg/Kg	U	EB<RL; LB<RL
C1DP-11-1.5-20220311	SW8270C	Butyl benzyl phthalate	0.0052	mg/Kg	U	LB<RL
C1DP-11-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000017	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-11-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000006	mg/Kg	U	LB<RL
C1DP-11-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000024	mg/Kg	U	LB<RL
C1DP-11-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000012	mg/Kg	UJ	EMPC; LB<RL (U)

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-11-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000041	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-11-1.5-20220311	SW8290	OCDF	0.0000014	mg/Kg	U	LB<RL
C1DP-11-2.5-20220311	SW6020	Molybdenum	0.066	mg/Kg	U	EB<RL
C1DP-11-2.5-20220311	SW8270C	Benzyl alcohol	0.0052	mg/Kg	UJ	CCV<LCL
C1DP-11-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	EB<RL; LB<RL
C1DP-11-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000018	mg/Kg	U	LB<RL
C1DP-11-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000054	mg/Kg	U	LB<RL
C1DP-11-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000017	mg/Kg	U	LB<RL
C1DP-11-2.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000019	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-11-2.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000012	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-11-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000031	mg/Kg	U	EB<RL; LB<RL
C1DP-11-2.5-20220311	SW8290	OCDF	0.0000015	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311	SW6020	Barium	25	mg/Kg	J	FD>RPD
C1DP-12-0.5-20220311	SW6020	Chromium	13	mg/Kg	J	FD>RPD
C1DP-12-0.5-20220311	SW6020	Molybdenum	0.56	mg/Kg	U	EB<RL
C1DP-12-0.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.00085	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1,1-Trichloroethane	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1,2,2-Tetrachloroethane	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00075	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1,2-Trichloroethane	0.00036	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1-Dichloroethane	0.00027	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1-Dichloroethene	0.0016	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,1-Dichloropropene	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2,3-Trichloropropane	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00061	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.0017	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2-Dibromo-3-Chloropropane	0.0023	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2-Dibromoethane	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0019	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2-Dichloroethane	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,2-Dichloropropane	0.00058	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,3-Dichlorobenzene	0.0016	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,3-Dichloropropane	0.00033	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	1,4-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	2,2-Dichloropropane	0.00048	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	2-Butanone (MEK)	0.013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	2-Chlorotoluene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	2-Hexanone	0.0056	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	4-Chlorotoluene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0086	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Acetone	0.012	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Benzene	0.00056	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Bromobenzene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Bromochloromethane	0.00036	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Bromodichloromethane	0.00026	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Bromoform	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Bromomethane	0.0003	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Carbon disulfide	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Carbon tetrachloride	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Chlorobenzene	0.00036	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Chloroethane	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Chloroform	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Chloromethane	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	cis-1,2-Dichloroethene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Dibromochloromethane	0.00039	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Dibromomethane	0.00024	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00071	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Ethylbenzene	0.00059	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Hexachlorobutadiene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Isopropylbenzene	0.00066	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Methyl tert-butyl ether	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Methylene Chloride	0.014	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	m-Xylene & p-Xylene	0.00081	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Naphthalene	0.0026	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	n-Butylbenzene	0.00091	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-12-0.5-20220311	SW8260B	N-Propylbenzene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	o-Xylene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	p-Isopropyltoluene	0.00058	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	sec-Butylbenzene	0.00097	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Styrene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	tert-Butylbenzene	0.00095	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Tetrachloroethene	0.00058	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Toluene	0.0019	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	trans-1,2-Dichloroethene	0.00058	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Trichloroethene	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Trichlorofluoromethane	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Vinyl acetate	0.0022	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Vinyl chloride	0.00043	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8260B	Xylenes, Total	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-12-0.5-20220311	SW8270C	Benzyl alcohol	0.0053	mg/Kg	UJ	CCV<LCL
C1DP-12-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.000001	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000032	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000024	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000001	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-12-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000039	mg/Kg	UJ	EB<RL; LB<RL
C1DP-12-0.5-20220311-FD	SW6020	Barium	31	mg/Kg	J	FD>RPD
C1DP-12-0.5-20220311-FD	SW6020	Chromium	18	mg/Kg	J	FD>RPD
C1DP-12-0.5-20220311-FD	SW6020	Molybdenum	0.67	mg/Kg	U	EB<RL
C1DP-12-0.5-20220311-FD	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-12-0.5-20220311-FD	SW8270C	Butyl benzyl phthalate	0.0054	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000071	mg/Kg	U	LB<RL
C1DP-12-0.5-20220311-FD	SW8290	1,2,3,7,8,9-HxCDF	0.0000002	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-12-1.5-20220311	SW6010B	Boron	2.3	mg/Kg	U	EB<RL
C1DP-12-1.5-20220311	SW8270C	Benzyl alcohol	0.0053	mg/Kg	UJ	CCV<LCL
C1DP-12-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	U	EB<RL; LB<RL
C1DP-12-1.5-20220311	SW8270C	Di-n-butyl phthalate	0.0039	mg/Kg	U	LB<RL
C1DP-12-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000017	mg/Kg	U	LB<RL
C1DP-12-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000062	mg/Kg	U	LB<RL
C1DP-12-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000025	mg/Kg	UJ	LB<RL
C1DP-12-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000024	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-12-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000095	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-12-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.0000003	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-12-1.5-20220311	SW8290	OCDF	0.0000016	mg/Kg	U	LB<RL
C1DP-12-2.5-20220311	SW8270C	Benzyl alcohol	0.0055	mg/Kg	UJ	CCV<LCL
C1DP-12-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.018	mg/Kg	U	EB<RL; LB<RL
C1DP-12-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000061	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-12-2.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000031	mg/Kg	U	LB<RL
C1DP-12-2.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000021	mg/Kg	U	LB<RL
C1DP-12-2.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000011	mg/Kg	U	LB<RL
C1DP-12-2.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000011	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-12-2.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000035	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-12-2.5-20220311	SW8290	OCDF	0.00000063	mg/Kg	U	EB<RL; LB<RL
C1DP-13-0.5-20220311	SW6020	Molybdenum	0.18	mg/Kg	UJ	EB<RL
C1DP-13-0.5-20220311	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-13-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.015	mg/Kg	U	EB<RL; LB<RL
C1DP-13-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000016	mg/Kg	U	LB<RL
C1DP-13-0.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000032	mg/Kg	U	LB<RL
C1DP-13-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000012	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.00000016	mg/Kg	UJ	EMPC
C1DP-13-0.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000072	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.00000012	mg/Kg	UJ	EMPC
C1DP-13-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000011	mg/Kg	U	LB<RL
C1DP-13-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000037	mg/Kg	U	EB<RL; LB<RL
C1DP-13-0.5-20220311	SW8290	OCDF	0.00000078	mg/Kg	U	EB<RL; LB<RL
C1DP-13-1.5-20220311	SW6020	Barium	90	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Chromium	40	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Cobalt	20	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Copper	55	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Iron	40000	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Manganese	770	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW6020	Molybdenum	0.21	mg/Kg	U	EB<RL
C1DP-13-1.5-20220311	SW6020	Vanadium	120	mg/Kg	J	FD>RPD

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-13-1.5-20220311	SW6020	Zinc	34	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311	SW8270C	Benzyl alcohol	0.0056	mg/Kg	UJ	CCV<LCL
C1DP-13-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000011	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-1.5-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000025	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000014	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000077	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000004	mg/Kg	U	EB<RL; LB<RL
C1DP-13-1.5-20220311	SW8290	OCDF	0.00000052	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C1DP-13-1.5-20220311-FD	SW6020	Barium	48	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Chromium	24	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Cobalt	14	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Copper	39	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Iron	26000	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Manganese	400	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Molybdenum	0.11	mg/Kg	U	EB<RL
C1DP-13-1.5-20220311-FD	SW6020	Vanadium	67	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW6020	Zinc	22	mg/Kg	J	FD>RPD
C1DP-13-1.5-20220311-FD	SW8270C	Benzyl alcohol	0.0049	mg/Kg	UJ	CCV<LCL
C1DP-13-1.5-20220311-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.035	mg/Kg	U	EB<RL; LB<RL
C1DP-13-1.5-20220311-FD	SW8270C	Butyl benzyl phthalate	0.0058	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000018	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000037	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000026	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,4,7,8-HxCDF	0.00000013	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,6,7,8-HxCDF	0.00000016	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	1,2,3,7,8,9-HxCDF	0.00000049	mg/Kg	U	LB<RL
C1DP-13-1.5-20220311-FD	SW8290	OCDF	0.00000094	mg/Kg	U	EB<RL; LB<RL
C1DP-13-6.0-20220311	SW6020	Molybdenum	0.21	mg/Kg	U	EB<RL
C1DP-13-6.0-20220311	SW8011	1,2,3-Trichloropropane	0.000071	mg/Kg	UJ	HTa>UCL
C1DP-13-6.0-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-13-6.0-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-13-6.0-20220311	SW8270C	Benzyl alcohol	0.0053	mg/Kg	UJ	CCV<LCL
C1DP-13-6.0-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	EB<RL; LB<RL
C1DP-13-6.0-20220311	SW8270C	Butyl benzyl phthalate	0.011	mg/Kg	U	LB<RL
C1DP-13-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000021	mg/Kg	U	LB<RL
C1DP-13-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000026	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-6.0-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000002	mg/Kg	UJ	EMPC
C1DP-13-6.0-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000002	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-13-6.0-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000012	mg/Kg	U	LB<RL
C1DP-13-6.0-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000001	mg/Kg	U	EMPC; LB<RL (U)
C1DP-13-6.0-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000049	mg/Kg	U	LB<RL
C1DP-13-6.0-20220311	SW8290	OCDF	0.00000072	mg/Kg	U	EB<RL; LB<RL
C1DP-14-0.5-20220311	SW6010B	Boron	4.2	mg/Kg	U	EB<RL
C1DP-14-0.5-20220311	SW6020	Molybdenum	0.19	mg/Kg	U	EB<RL
C1DP-14-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000063	mg/Kg	UJ	HTa>UCL
C1DP-14-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.0000096	mg/Kg	UJ	HTa>UCL
C1DP-14-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-14-0.5-20220311	SW8270C	Benzyl alcohol	0.024	mg/Kg	UJ	CCV<LCL
C1DP-14-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.15	mg/Kg	U	EB<RL; LB<RL
C1DP-14-0.5-20220311	SW8270C	Dibenzofuran	0.016	mg/Kg	J	LCS>UCL
C1DP-14-0.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000077	mg/Kg	U	LB<RL
C1DP-14-0.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000048	mg/Kg	U	LB<RL
C1DP-14-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000099	mg/Kg	U	LB<RL
C1DP-14-0.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000004	mg/Kg	U	EB<RL; LB<RL
C1DP-14-1.5-20220311	SW6010B	Boron	2.9	mg/Kg	U	EB<RL
C1DP-14-1.5-20220311	SW6020	Molybdenum	0.18	mg/Kg	U	EB<RL
C1DP-14-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C1DP-14-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-14-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-14-1.5-20220311	SW8270C	Benzyl alcohol	0.026	mg/Kg	UJ	CCV<LCL
C1DP-14-1.5-20220311	SW8270C	Dibenzofuran	0.0066	mg/Kg	J	LCS>UCL
C1DP-14-1.5-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000054	mg/Kg	U	LB<RL
C1DP-14-1.5-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000084	mg/Kg	U	LB<RL
C1DP-14-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000061	mg/Kg	UJ	EMPC
C1DP-14-1.5-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000003	mg/Kg	U	LB<RL
C1DP-14-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000056	mg/Kg	U	LB<RL
C1DP-14-1.5-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000033	mg/Kg	U	EB<RL; LB<RL
C1DP-14-1.5-20220311	SW8290	1,2,3,7,8-PeCDF	0.00000021	mg/Kg	UJ	EMPC

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-14-1.5-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.00000016	mg/Kg	UJ	EMPC
C1DP-14-1.5-20220311	SW8290	2,3,4,7,8-PeCDF	0.00000019	mg/Kg	UJ	EMPC
C1DP-14-6.0-20220311	SW6010B	Boron	2.1	mg/Kg	U	EB<RL
C1DP-14-6.0-20220311	SW6020	Molybdenum	0.35	mg/Kg	U	EB<RL
C1DP-14-6.0-20220311	SW8011	1,2,3-Trichloropropane	0.000065	mg/Kg	UJ	HTa>UCL
C1DP-14-6.0-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000098	mg/Kg	UJ	HTa>UCL
C1DP-14-6.0-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-14-6.0-20220311	SW8260B	Acetone	0.032	mg/Kg	J	Sur>UCL
C1DP-14-6.0-20220311	SW8270C	Benzyl alcohol	0.0051	mg/Kg	UJ	CCV<LCL
C1DP-14-6.0-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C1DP-14-6.0-20220311	SW8270C	Butyl benzyl phthalate	0.0079	mg/Kg	U	LB<RL
C1DP-14-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000022	mg/Kg	U	LB<RL
C1DP-14-6.0-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000045	mg/Kg	U	LB<RL
C1DP-14-6.0-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000018	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-14-6.0-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000011	mg/Kg	UJ	EMPC; LB<RL (U)
C1DP-14-6.0-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000002	mg/Kg	U	LB<RL
C1DP-14-6.0-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000046	mg/Kg	U	LB<RL
C1DP-14-6.0-20220311	SW8290	OCDF	0.00000092	mg/Kg	U	EB<RL; LB<RL
C1DP-15-0.5-20220311	SW6010B	Boron	3.3	mg/Kg	U	EB<RL
C1DP-15-0.5-20220311	SW6020	Molybdenum	0.13	mg/Kg	U	EB<RL
C1DP-15-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
C1DP-15-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-15-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-15-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	U	EB<RL; LB<RL
C1DP-15-0.5-20220311	SW8270C	Diethyl phthalate	0.0071	mg/Kg	U	LB<RL
C1DP-15-1.5-20220311	SW6010B	Boron	3.3	mg/Kg	U	EB<RL
C1DP-15-1.5-20220311	SW6020	Molybdenum	0.13	mg/Kg	U	EB<RL
C1DP-15-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000071	mg/Kg	UJ	HTa>UCL
C1DP-15-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-15-1.5-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-15-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.017	mg/Kg	U	EB<RL; LB<RL
C1DP-15-1.5-20220311	SW8270C	Diethyl phthalate	0.0095	mg/Kg	U	LB<RL
C1DP-15-6.0-20220311	SW6010B	Boron	2.9	mg/Kg	U	EB<RL
C1DP-15-6.0-20220311	SW6020	Molybdenum	0.21	mg/Kg	U	EB<RL
C1DP-15-6.0-20220311	SW8011	1,2,3-Trichloropropane	0.000074	mg/Kg	UJ	HTa>UCL
C1DP-15-6.0-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-15-6.0-20220311	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C1DP-15-6.0-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.018	mg/Kg	U	EB<RL; LB<RL
C1DP-15-6.0-20220311	SW8270C	Diethyl phthalate	0.007	mg/Kg	U	LB<RL
C1DP-16-0.5-20220311	SW6010B	Boron	2.9	mg/Kg	U	EB<RL
C1DP-16-0.5-20220311	SW6020	Molybdenum	0.15	mg/Kg	U	EB<RL
C1DP-16-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000066	mg/Kg	UJ	HTa>UCL
C1DP-16-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-16-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-16-0.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.00069	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1,1-Trichloroethane	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1,2,2-Tetrachloroethane	0.001	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.0006	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1,2-Trichloroethane	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1-Dichloroethene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,1-Dichloropropene	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.0007	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2,3-Trichloropropane	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00049	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.0014	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2-Dibromo-3-Chloropropane	0.0019	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2-Dibromoethane	0.00023	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0015	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2-Dichloroethane	0.00023	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,2-Dichloropropane	0.00047	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.00094	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,3-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,3-Dichloropropane	0.00027	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	2,2-Dichloropropane	0.00038	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-16-0.5-20220311	SW8260B	2-Hexanone	0.0045	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	4-Methyl-2-pentanone (MIBK)	0.007	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Acetone	0.01	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Benzene	0.00045	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Bromochloromethane	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Bromodichloromethane	0.00021	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Bromoform	0.00098	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Bromomethane	0.00024	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Carbon disulfide	0.00023	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Carbon tetrachloride	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Chlorobenzene	0.00029	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Chloroethane	0.00087	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Chloroform	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Chloromethane	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	cis-1,2-Dichloroethene	0.0007	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00023	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Dibromochloromethane	0.00031	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Dibromomethane	0.0002	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Dichlorodifluoromethane	0.00057	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Ethylbenzene	0.00048	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Hexachlorobutadiene	0.0007	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Isopropylbenzene	0.00054	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Methyl tert-butyl ether	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	m-Xylene & p-Xylene	0.00065	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Naphthalene	0.0021	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	n-Butylbenzene	0.00073	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	N-Propylbenzene	0.00088	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	p-Isopropyltoluene	0.00047	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	sec-Butylbenzene	0.00078	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Styrene	0.00086	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	tert-Butylbenzene	0.00077	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Tetrachloroethene	0.00047	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Toluene	0.0015	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	trans-1,2-Dichloroethene	0.00047	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.0007	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Trichloroethene	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Trichlorofluoromethane	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Vinyl chloride	0.00035	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	Sur<LCL
C1DP-16-0.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.042	mg/Kg	U	EB<RL; LB<RL
C1DP-16-0.5-20220311	SW8270C	Diethyl phthalate	0.0045	mg/Kg	U	LB<RL
C1DP-16-1.5-20220311	SW6020	Molybdenum	0.17	mg/Kg	U	EB<RL
C1DP-16-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000066	mg/Kg	UJ	HTa>UCL
C1DP-16-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-16-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-16-1.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.026	mg/Kg	U	EB<RL; LB<RL
C1DP-16-1.5-20220311	SW8270C	Diethyl phthalate	0.011	mg/Kg	U	LB<RL
C1DP-16-2.5-20220311	SW6010B	Boron	2.6	mg/Kg	U	EB<RL
C1DP-16-2.5-20220311	SW6020	Barium	45	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW6020	Chromium	24	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW6020	Copper	62	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW6020	Molybdenum	0.15	mg/Kg	U	EB<RL
C1DP-16-2.5-20220311	SW6020	Nickel	39	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW6020	Vanadium	42	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW6020	Zinc	24	mg/Kg	J	SD>UCL
C1DP-16-2.5-20220311	SW8011	1,2,3-Trichloropropane	0.000069	mg/Kg	UJ	HTa>UCL
C1DP-16-2.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-16-2.5-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-16-2.5-20220311	SW8260B	1,1,1,2-Tetrachloroethane	0.00073	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,2,3-Trichlorobenzene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,2,4-Trichlorobenzene	0.00052	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,2,4-Trimethylbenzene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,2-Dichlorobenzene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-16-2.5-20220311	SW8260B	1,3,5-Trimethylbenzene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,3-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	2-Hexanone	0.0048	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Chlorobenzene	0.00031	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	cis-1,3-Dichloropropene	0.00025	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Ethylbenzene	0.0005	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Hexachlorobutadiene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Isopropylbenzene	0.00057	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Methylene Chloride	0.012	mg/Kg	R	SD<LCL
C1DP-16-2.5-20220311	SW8260B	m-Xylene & p-Xylene	0.00069	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Naphthalene	0.0022	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	n-Butylbenzene	0.00077	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	N-Propylbenzene	0.00093	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	p-Isopropyltoluene	0.00049	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	sec-Butylbenzene	0.00082	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Styrene	0.00091	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	tert-Butylbenzene	0.00081	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Tetrachloroethene	0.00049	mg/Kg	UJ	MS<LCL
C1DP-16-2.5-20220311	SW8260B	Toluene	0.0016	mg/Kg	UJ	MS<LCL
C1DP-16-2.5-20220311	SW8260B	trans-1,3-Dichloropropene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Trichloroethene	0.00037	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Vinyl acetate	0.0018	mg/Kg	R	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8270C	3,3'-Dichlorobenzidine	0.008	mg/Kg	UJ	MS<LCL; SD<LCL
C1DP-16-2.5-20220311	SW8270C	Benzoic acid	0.12	mg/Kg	R	MS<LCL
C1DP-16-2.5-20220311	SW8270C	Benzyl alcohol	0.0048	mg/Kg	UJ	CCV<LCL
C1DP-16-2.5-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	EB<RL; LB<RL
C1DP-17-0.5-20220311	SW6010B	Boron	2.4	mg/Kg	U	EB<RL
C1DP-17-0.5-20220311	SW6020	Molybdenum	0.11	mg/Kg	U	EB<RL
C1DP-17-0.5-20220311	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C1DP-17-0.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-17-0.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-17-0.5-20220311	SW8260B	Vinyl acetate	0.0022	mg/Kg	UJ	CCV<LCL
C1DP-17-1.5-20220311	SW6010B	Boron	2.4	mg/Kg	U	EB<RL
C1DP-17-1.5-20220311	SW6020	Molybdenum	0.14	mg/Kg	U	EB<RL
C1DP-17-1.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
C1DP-17-1.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-17-1.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-17-1.5-20220311-FD	SW6010B	Boron	2.8	mg/Kg	U	EB<RL
C1DP-17-1.5-20220311-FD	SW6020	Molybdenum	0.16	mg/Kg	U	EB<RL
C1DP-17-1.5-20220311-FD	SW8011	1,2,3-Trichloropropane	0.000065	mg/Kg	UJ	HTa>UCL
C1DP-17-1.5-20220311-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.0000099	mg/Kg	UJ	HTa>UCL
C1DP-17-1.5-20220311-FD	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-17-2.5-20220311	SW6010B	Boron	3	mg/Kg	U	EB<RL
C1DP-17-2.5-20220311	SW6020	Molybdenum	0.15	mg/Kg	U	EB<RL
C1DP-17-2.5-20220311	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
C1DP-17-2.5-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-17-2.5-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-20220311-EB	SW8270C	Benzyl alcohol	0.18	ug/L	UJ	CCV<LCL
C1DP-20220311-TB-S	SW8260B	2-Butanone (MEK)	0.0089	mg/Kg	UJ	CCV<LCL
C1DP-PCB-20220311	SW6010B	Boron	2.3	mg/Kg	U	EB<RL
C1DP-PCB-20220311	SW6020	Molybdenum	0.11	mg/Kg	U	EB<RL
C1DP-PCB-20220311	SW8011	1,2,3-Trichloropropane	0.000064	mg/Kg	UJ	HTa>UCL
C1DP-PCB-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	J	HTa>UCL; LCS>UCL
C1DP-PCB-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-PCB-20220311	SW8270C	Benzoic acid	0.13	mg/Kg	R	MS<LCL; SD<LCL
C1DP-PCB-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C1DP-PCB-20220311	SW8270C	Dibenzofuran	0.00074	mg/Kg	J	MSRPD
C1DP-PCB-20220311	SW8270C	Diethyl phthalate	0.0094	mg/Kg	U	LB<RL
C1DP-PCB-20220311	SW8270C	Fluoranthene	0.0022	mg/Kg	J	MSRPD
C1DP-WC2-20220311	SW6010B	Boron	2.9	mg/Kg	U	EB<RL
C1DP-WC2-20220311	SW6020	Molybdenum	0.12	mg/Kg	U	EB<RL
C1DP-WC2-20220311	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C1DP-WC2-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C1DP-WC2-20220311	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C1DP-WC2-20220311	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	CCV<LCL
C1DP-WC2-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	EB<RL; LB<RL
C1DP-WC2-20220311	SW8270C	Diethyl phthalate	0.0068	mg/Kg	U	LB<RL
C1DP-WC2-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0001	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.000012	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000011	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.0000069	mg/Kg	UJ	EMPC; HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.0000058	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.0000029	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.0000039	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.0000013	mg/Kg	UJ	EMPC; HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.0000038	mg/Kg	UJ	HTp>UCL; EB<RL (U)
C1DP-WC2-20220311	SW8290	1,2,3,7,8-PeCDD	0.0000019	mg/Kg	UJ	HTp>UCL
C1DP-WC2-20220311	SW8290	1,2,3,7,8-PeCDF	0.00000089	mg/Kg	UJ	HTp>UCL
C1DP-WC2-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.0000026	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	2,3,4,7,8-PeCDF	0.00000091	mg/Kg	UJ	HTp>UCL
C1DP-WC2-20220311	SW8290	2,3,7,8-TCDD	0.00000021	mg/Kg	UJ	HTp>UCL
C1DP-WC2-20220311	SW8290	2,3,7,8-TCDF	0.00000085	mg/Kg	UJ	HTp>UCL
C1DP-WC2-20220311	SW8290	OCDD	0.00063	mg/Kg	J	HTp>UCL
C1DP-WC2-20220311	SW8290	OCDF	0.000075	mg/Kg	J	HTp>UCL
C1DP-WC3-20220311	SW6020	Molybdenum	0.36	mg/Kg	U	EB<RL
C1DP-WC3-20220311	SW8011	1,2,3-Trichloropropane	0.00007	mg/Kg	UJ	HTa>UCL
C1DP-WC3-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C1DP-WC3-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C1DP-WC3-20220311	SW8260B	2-Butanone (MEK)	0.0053	mg/Kg	UJ	CCV<LCL
C1DP-WC3-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C1DP-WC3-20220311	SW8270C	Diethyl phthalate	0.008	mg/Kg	U	LB<RL
C1DP-WC3-20220311	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000024	mg/Kg	J	HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000066	mg/Kg	UJ	HTp>UCL; LB<RL (U)
C1DP-WC3-20220311	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000012	mg/Kg	UJ	EMPC; HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,4,7,8-HxCDD	0.0000022	mg/Kg	UJ	EMPC; HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,4,7,8-HxCDF	0.00000044	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,6,7,8-HxCDD	0.00000017	mg/Kg	UJ	EMPC; HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,6,7,8-HxCDF	0.00000039	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,7,8,9-HxCDD	0.00000054	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,7,8,9-HxCDF	0.00000018	mg/Kg	UJ	HTp>UCL; EB<RL (U)
C1DP-WC3-20220311	SW8290	1,2,3,7,8-PeCDD	0.00000012	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	1,2,3,7,8-PeCDF	0.00000068	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	2,3,4,6,7,8-HxCDF	0.00000043	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	2,3,4,7,8-PeCDF	0.00000069	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	2,3,7,8-TCDD	0.00000019	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	2,3,7,8-TCDF	0.00000077	mg/Kg	UJ	HTp>UCL
C1DP-WC3-20220311	SW8290	OCDD	0.000022	mg/Kg	J	HTp>UCL
C1DP-WC3-20220311	SW8290	OCDF	0.0000016	mg/Kg	J	HTp>UCL
C1DP-WC4-20220311	SW6010B	Boron	2.2	mg/Kg	U	EB<RL
C1DP-WC4-20220311	SW6020	Molybdenum	0.15	mg/Kg	U	EB<RL
C1DP-WC4-20220311	SW8011	1,2,3-Trichloropropane	0.000069	mg/Kg	R	HTa>UCL
C1DP-WC4-20220311	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	R	HTa>UCL
C1DP-WC4-20220311	SW8011	Ethylene Dibromide	0.000013	mg/Kg	R	HTa>UCL
C1DP-WC4-20220311	SW8260B	2-Butanone (MEK)	0.014	mg/Kg	UJ	CCV<LCL
C1DP-WC4-20220311	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	EB<RL; LB<RL
C1DP-WC4-20220311	SW8270C	Diethyl phthalate	0.0091	mg/Kg	U	LB<RL
C2BP-01-0.5-20220309	SW6010B	Boron	3.2	mg/Kg	U	LB<RL
C2BP-01-0.5-20220309	SW8011	1,2,3-Trichloropropane	0.000073	mg/Kg	UJ	HTa>UCL
C2BP-01-0.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-01-0.5-20220309	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-01-0.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.025	mg/Kg	U	LB<RL
C2BP-01-1.5-20220309	SW6010B	Boron	2.9	mg/Kg	U	LB<RL
C2BP-01-1.5-20220309	SW8011	1,2,3-Trichloropropane	0.000079	mg/Kg	UJ	HTa>UCL
C2BP-01-1.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-01-1.5-20220309	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-01-1.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.03	mg/Kg	U	LB<RL
C2BP-01-1.5-20220309	SW8270C	Butyl benzyl phthalate	0.0079	mg/Kg	U	LB<RL
C2BP-01-2.5-20220309	SW6010B	Boron	2.1	mg/Kg	U	LB<RL
C2BP-01-2.5-20220309	SW8011	1,2,3-Trichloropropane	0.000073	mg/Kg	UJ	HTa>UCL
C2BP-01-2.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-01-2.5-20220309	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-01-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.034	mg/Kg	U	LB<RL
C2BP-01-2.5-20220309	SW8270C	Di-n-butyl phthalate	0.0052	mg/Kg	U	LB<RL
C2BP-02-0.5-20220309	SW6010B	Boron	3.1	mg/Kg	U	LB<RL
C2BP-02-0.5-20220309	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2BP-02-0.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-02-0.5-20220309	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-02-0.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.039	mg/Kg	U	LB<RL
C2BP-02-0.5-20220309	SW8270C	Butyl benzyl phthalate	0.011	mg/Kg	U	LB<RL
C2BP-02-1.5-20220309	SW6020	Arsenic	2.3	mg/Kg	J	FD>RPD
C2BP-02-1.5-20220309	SW8011	1,2,3-Trichloropropane	0.000083	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.034	mg/Kg	U	LB<RL
C2BP-02-1.5-20220309	SW8270C	Di-n-butyl phthalate	0.0039	mg/Kg	U	LB<RL
C2BP-02-1.5-20220309-FD	SW6020	Arsenic	3	mg/Kg	J	FD>RPD
C2BP-02-1.5-20220309-FD	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309-FD	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-02-1.5-20220309-FD	SW8260B	p-Isopropyltoluene	0.00072	mg/Kg	J	Sur>UCL
C2BP-02-1.5-20220309-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.023	mg/Kg	U	LB<RL
C2BP-02-2.5-20220309	SW6010B	Boron	3	mg/Kg	U	LB<RL
C2BP-02-2.5-20220309	SW8011	1,2,3-Trichloropropane	0.000066	mg/Kg	UJ	HTa>UCL
C2BP-02-2.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C2BP-02-2.5-20220309	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-02-2.5-20220309	SW8270C	Benzyl alcohol	0.0057	mg/Kg	UJ	CCV<LCL
C2BP-02-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.027	mg/Kg	U	LB<RL
C2BP-02-2.5-20220309	SW8270C	Butyl benzyl phthalate	0.006	mg/Kg	U	LB<RL
C2BP-02-2.5-20220309	SW8270C	Di-n-butyl phthalate	0.0045	mg/Kg	U	LB<RL
C2BP-02-2.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.00092	mg/Kg	UJ	CCV<LCL
C2BP-03-0.5-20220309	SW6010B	Boron	3.9	mg/Kg	U	LB<RL
C2BP-03-0.5-20220309	SW8011	1,2,3-Trichloropropane	0.000078	mg/Kg	UJ	HTa>UCL
C2BP-03-0.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-03-0.5-20220309	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-03-0.5-20220309	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	CCV<LCL
C2BP-03-0.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.034	mg/Kg	U	LB<RL
C2BP-03-0.5-20220309	SW8270C	Di-n-butyl phthalate	0.0054	mg/Kg	U	LB<RL
C2BP-03-0.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.00094	mg/Kg	UJ	CCV<LCL
C2BP-03-1.5-20220309	SW8011	1,2,3-Trichloropropane	0.000081	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-03-1.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-03-1.5-20220309	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-03-1.5-20220309	SW8270C	Benzyl alcohol	0.0057	mg/Kg	UJ	CCV<LCL
C2BP-03-1.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.023	mg/Kg	U	LB<RL
C2BP-03-1.5-20220309	SW8270C	Di-n-butyl phthalate	0.0039	mg/Kg	U	LB<RL
C2BP-03-1.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.00091	mg/Kg	UJ	CCV<LCL
C2BP-03-2.5-20220309	SW8011	1,2,3-Trichloropropane	0.00008	mg/Kg	UJ	HTa>UCL
C2BP-03-2.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-03-2.5-20220309	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-03-2.5-20220309	SW8270C	1,2,4-Trichlorobenzene	0.00068	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	1,2-Dichlorobenzene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	1,3-Dichlorobenzene	0.00054	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	1,4-Dichlorobenzene	0.00094	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	1-Methylnaphthalene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4,5-Trichlorophenol	0.00092	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4-Dichlorophenol	0.0032	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4-Dimethylphenol	0.0068	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4-Dinitrophenol	0.066	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,4-Dinitrotoluene	0.0049	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2,6-Dinitrotoluene	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Chloronaphthalene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Chlorophenol	0.00045	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Methylnaphthalene	0.00099	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Methylphenol	0.0011	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Nitroaniline	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	2-Nitrophenol	0.0007	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	3 & 4 Methylphenol	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	3,3'-Dichlorobenzidine	0.0095	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-03-2.5-20220309	SW8270C	3-Nitroaniline	0.011	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4,6-Dinitro-2-methylphenol	0.011	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Bromophenyl phenyl ether	0.001	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Chloro-3-methylphenol	0.0037	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Chloroaniline	0.015	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Chlorophenyl phenyl ether	0.00071	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Nitroaniline	0.0057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	4-Nitrophenol	0.019	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Acenaphthene	0.00052	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Acenaphthylene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Anthracene	0.0018	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Azobenzene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzo[a]anthracene	0.0012	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzo[b]fluoranthene	0.0011	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzo[g,h,i]perylene	0.002	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzo[k]fluoranthene	0.0016	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Benzyl alcohol	0.0057	mg/Kg	UJ	CCV<LCL
C2BP-03-2.5-20220309	SW8270C	Benzyl alcohol	0.0057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	bis(2-chloroisopropyl) ether	0.00069	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Bis(2-chloroethoxy)methane	0.002	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Bis(2-chloroethyl)ether	0.00087	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.008	mg/Kg	U	LB<RL; Sur<LCL (J)
C2BP-03-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.008	mg/Kg	U	LB<RL
C2BP-03-2.5-20220309	SW8270C	Butyl benzyl phthalate	0.0058	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Carbazole	0.00082	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Chrysene	0.0015	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Dibenz(a,h)anthracene	0.0014	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Dibenzofuran	0.00067	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Diethyl phthalate	0.0025	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Dimethyl phthalate	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Di-n-butyl phthalate	0.0031	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Di-n-octyl phthalate	0.0014	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Fluoranthene	0.0014	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Fluorene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Hexachlorobenzene	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Hexachlorobutadiene	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Hexachlorocyclopentadiene	0.00087	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Hexachloroethane	0.00049	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Indeno[1,2,3-cd]pyrene	0.0014	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Isophorone	0.00095	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Naphthalene	0.00057	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Nitrobenzene	0.0023	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	N-Nitrosodi-n-propylamine	0.0025	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.0009	mg/Kg	UJ	CCV<LCL
C2BP-03-2.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.0009	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Pentachlorophenol	0.0071	mg/Kg	R	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Phenanthrene	0.00066	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Phenol	0.0026	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Pyrene	0.0015	mg/Kg	UJ	Sur<LCL
C2BP-03-2.5-20220309	SW8270C	Pyridine	0.018	mg/Kg	UJ	Sur<LCL
C2BP-04-0.5-20220310	SW6020	Vanadium	130	mg/Kg	J	MS>UCL
C2BP-04-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2BP-04-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000037	mg/Kg	J	HTa>UCL
C2BP-04-0.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-04-0.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-04-0.5-20220310	SW8270C	Benzo[a]pyrene	0.021	mg/Kg	J	ICVs>UCL
C2BP-04-0.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL
C2BP-04-0.5-20220310	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	CCV<LCL
C2BP-04-0.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.077	mg/Kg	U	EB<RL; LB<RL
C2BP-04-0.5-20220310	SW8270C	Butyl benzyl phthalate	0.021	mg/Kg	U	LB<RL
C2BP-04-0.5-20220310	SW8270C	Di-n-butyl phthalate	0.0036	mg/Kg	U	LB<RL
C2BP-04-0.5-20220310	SW8270C	Pentachlorophenol	0.0074	mg/Kg	UJ	LCS<LCL
C2BP-04-0.5-20220310	SW8270SIM	Fluoranthene	0.031	mg/Kg	U	EB<RL
C2BP-04-0.5-20220310	SW8270SIM	Pyrene	0.042	mg/Kg	U	EB<RL
C2BP-04-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL
C2BP-04-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-04-1.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-04-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-04-1.5-20220310	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	J	ICVS>UCL
C2BP-04-1.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-04-1.5-20220310	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	CCV<LCL
C2BP-04-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.023	mg/Kg	U	EB<RL; LB<RL
C2BP-04-1.5-20220310	SW8270C	Butyl benzyl phthalate	0.015	mg/Kg	U	LB<RL
C2BP-04-1.5-20220310	SW8270C	Pentachlorophenol	0.0075	mg/Kg	UJ	LCS<LCL
C2BP-04-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.000075	mg/Kg	UJ	HTa>UCL
C2BP-04-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-04-2.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-04-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-04-2.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL
C2BP-04-2.5-20220310	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	CCV<LCL
C2BP-04-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.012	mg/Kg	U	EB<RL; LB<RL
C2BP-04-2.5-20220310	SW8270C	Butyl benzyl phthalate	0.0071	mg/Kg	UJ	LB<RL
C2BP-04-2.5-20220310	SW8270C	Pentachlorophenol	0.0075	mg/Kg	UJ	LCS<LCL
C2BP-05-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2BP-05-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000026	mg/Kg	J	HTa>UCL
C2BP-05-0.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-05-0.5-20220310	SW8015B-E	CA Diesel Range Organics (C10-C28)	6700	mg/Kg	J	Sur<LCL
C2BP-05-0.5-20220310	SW8015B-E	CA Extended Range Organics (>C28-C40)	8100	mg/Kg	J	Sur<LCL
C2BP-05-0.5-20220310	SW8260B	Ethylbenzene	0.0063	mg/Kg	J	Sur>UCL
C2BP-05-0.5-20220310	SW8260B	m-Xylene & p-Xylene	0.0093	mg/Kg	J	Sur>UCL
C2BP-05-0.5-20220310	SW8260B	o-Xylene	0.016	mg/Kg	J	Sur>UCL
C2BP-05-0.5-20220310	SW8260B	Toluene	0.0074	mg/Kg	J	Sur>UCL
C2BP-05-0.5-20220310	SW8260B	Xylenes, Total	0.025	mg/Kg	J	Sur>UCL
C2BP-05-0.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0088	mg/Kg	UJ	LCS<LCL
C2BP-05-0.5-20220310	SW8270C	Benzoic acid	0.83	mg/Kg	R	LCS<LCL
C2BP-05-0.5-20220310	SW8270C	Benzyl alcohol	0.034	mg/Kg	UJ	CCV<LCL
C2BP-05-0.5-20220310	SW8270C	Butyl benzyl phthalate	4.8	mg/Kg	U	LB<RL
C2BP-05-0.5-20220310	SW8270C	Pentachlorophenol	0.36	mg/Kg	UJ	LCS<LCL
C2BP-05-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000082	mg/Kg	UJ	HTa>UCL
C2BP-05-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000018	mg/Kg	J	HTa>UCL
C2BP-05-1.5-20220310	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-05-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0017	mg/Kg	UJ	LCS<LCL
C2BP-05-1.5-20220310	SW8270C	Benzoic acid	0.16	mg/Kg	R	LCS<LCL
C2BP-05-1.5-20220310	SW8270C	Benzyl alcohol	0.0065	mg/Kg	UJ	CCV<LCL
C2BP-05-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.12	mg/Kg	U	EB<RL
C2BP-05-1.5-20220310	SW8270C	Pentachlorophenol	0.0082	mg/Kg	UJ	LCS<LCL
C2BP-05-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL
C2BP-05-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000017	mg/Kg	J	HTa>UCL
C2BP-05-2.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-05-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-05-2.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL
C2BP-05-2.5-20220310	SW8270C	Benzyl alcohol	0.0056	mg/Kg	UJ	CCV<LCL
C2BP-05-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.4	mg/Kg	U	EB<RL
C2BP-05-2.5-20220310	SW8270C	Butyl benzyl phthalate	0.049	mg/Kg	U	LB<RL
C2BP-05-2.5-20220310	SW8270C	Pentachlorophenol	0.0071	mg/Kg	UJ	LCS<LCL
C2BP-06-0.5-20220309	SW6010B	Boron	3.1	mg/Kg	U	LB<RL
C2BP-06-0.5-20220309	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2BP-06-0.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-06-0.5-20220309	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-06-0.5-20220309	SW8270C	1,2,4-Trichlorobenzene	0.035	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	1,2-Dichlorobenzene	0.029	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	1,3-Dichlorobenzene	0.028	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	1,4-Dichlorobenzene	0.049	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	1-Methylnaphthalene	0.12	mg/Kg	J	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2,4,5-Trichlorophenol	0.047	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2,4,6-Trichlorophenol	0.076	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2,4-Dinitrophenol	3.4	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2,4-Dinitrotoluene	0.25	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2,6-Dinitrotoluene	0.088	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2-Chloronaphthalene	0.029	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2-Methylnaphthalene	0.16	mg/Kg	J	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	2-Nitroaniline	0.088	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	3,3'-Dichlorobenzidine	0.49	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	3-Nitroaniline	0.59	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-06-0.5-20220309	SW8270C	4,6-Dinitro-2-methylphenol	0.59	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Bromophenyl phenyl ether	0.053	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Chloro-3-methylphenol	0.19	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Chloroaniline	0.79	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Chlorophenyl phenyl ether	0.037	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Nitroaniline	0.29	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	4-Nitrophenol	1	mg/Kg	R	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Azobenzene	0.029	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Benzyl alcohol	0.29	mg/Kg	UJ	CCV<LCL; Sur<LCL
C2BP-06-0.5-20220309	SW8270C	bis (2-chloroisopropyl) ether	0.036	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Bis(2-chloroethoxy)methane	0.11	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Bis(2-chloroethyl)ether	0.045	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.42	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Butyl benzyl phthalate	0.3	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Carbazole	0.34	mg/Kg	J	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Dibenz(a,h)anthracene	2.1	mg/Kg	J	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Dibenzofuran	0.15	mg/Kg	J	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Diethyl phthalate	0.13	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Dimethyl phthalate	0.029	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Di-n-butyl phthalate	0.16	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Di-n-octyl phthalate	0.07	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Hexachlorobenzene	0.088	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Hexachlorobutadiene	0.088	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Hexachlorocyclopentadiene	0.045	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Hexachloroethane	0.025	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Isophorone	0.049	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Nitrobenzene	0.12	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	N-Nitrosodi-n-propylamine	0.13	mg/Kg	UJ	Sur<LCL
C2BP-06-0.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.047	mg/Kg	UJ	CCV<LCL; Sur<LCL
C2BP-06-0.5-20220309	SW8270C	Pentachlorophenol	0.37	mg/Kg	R	Sur<LCL
C2BP-06-1.5-20220309	SW6010B	Boron	3.8	mg/Kg	U	LB<RL
C2BP-06-1.5-20220309	SW6020	Antimony	0.089	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Barium	160	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Chromium	30	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Cobalt	20	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Copper	27	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Selenium	3.4	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Vanadium	130	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW6020	Zinc	59	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW7471A	Mercury	0.012	mg/Kg	J	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8011	1,2,3-Trichloropropane	0.000069	mg/Kg	UJ	HTa>UCL
C2BP-06-1.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C2BP-06-1.5-20220309	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-06-1.5-20220309	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00058	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,1-Dichloroethane	0.00021	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,1-Dichloroethene	0.0012	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,1-Dichloropropene	0.00033	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,2,3-Trichlorobenzene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,2,4-Trichlorobenzene	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,2,4-Trimethylbenzene	0.0013	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,3,5-Trimethylbenzene	0.0009	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,3-Dichlorobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	2-Chlorotoluene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	2-Hexanone	0.0043	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	4-Chlorotoluene	0.0011	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Benzene	0.00043	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Carbon disulfide	0.00022	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Chlorobenzene	0.00028	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	cis-1,3-Dichloropropene	0.00022	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Ethylbenzene	0.00046	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Hexachlorobutadiene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	Isopropylbenzene	0.00051	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	m-Xylene & p-Xylene	0.00062	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Naphthalene	0.002	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	n-Butylbenzene	0.0007	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-06-1.5-20220309	SW8260B	N-Propylbenzene	0.00085	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	o-Xylene	0.001	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	p-Isopropyltoluene	0.00045	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	sec-Butylbenzene	0.00075	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Styrene	0.00082	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	tert-Butylbenzene	0.00073	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Tetrachloroethene	0.00045	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Toluene	0.0014	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	trans-1,3-Dichloropropene	0.00067	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Trichloroethene	0.00033	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Trichlorofluoromethane	0.00033	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8260B	Xylenes, Total	0.001	mg/Kg	UJ	SD<LCL
C2BP-06-1.5-20220309	SW8270C	Benzoic acid	0.14	mg/Kg	R	MS<LCL; SD<LCL
C2BP-06-1.5-20220309	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	CCV<LCL
C2BP-06-1.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.036	mg/Kg	U	LB<RL
C2BP-06-1.5-20220309	SW8270C	Di-n-butyl phthalate	0.0049	mg/Kg	U	LB<RL; MSRPD (J)
C2BP-06-1.5-20220309	SW8270C	Hexachlorocyclopentadiene	0.00091	mg/Kg	UJ	MS<LCL
C2BP-06-1.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.00094	mg/Kg	UJ	CCV<LCL
C2BP-06-1.5-20220309	SW8270C	Pyridine	0.019	mg/Kg	R	MS<LCL
C2BP-06-2.5-20220309	SW8011	1,2,3-Trichloropropane	0.00071	mg/Kg	UJ	HTa>UCL
C2BP-06-2.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.00011	mg/Kg	UJ	HTa>UCL
C2BP-06-2.5-20220309	SW8011	Ethylene Dibromide	0.00013	mg/Kg	UJ	HTa>UCL
C2BP-06-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.016	mg/Kg	U	LB<RL
C2BP-06-2.5-20220309	SW8270C	Butyl benzyl phthalate	0.0066	mg/Kg	U	LB<RL
C2BP-07-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.00076	mg/Kg	UJ	HTa>UCL
C2BP-07-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2BP-07-0.5-20220310	SW8011	Ethylene Dibromide	0.00014	mg/Kg	UJ	HTa>UCL
C2BP-07-0.5-20220310	SW8260B	Acetone	0.039	mg/Kg	J	Sur>UCL
C2BP-07-0.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0046	mg/Kg	UJ	LCS<LCL
C2BP-07-0.5-20220310	SW8270C	Benzo[a]pyrene	0.024	mg/Kg	J	ICVS>UCL
C2BP-07-0.5-20220310	SW8270C	Benzoic acid	0.43	mg/Kg	R	LCS<LCL
C2BP-07-0.5-20220310	SW8270C	Benzyl alcohol	0.018	mg/Kg	UJ	CCV<LCL
C2BP-07-0.5-20220310	SW8270C	Pentachlorophenol	0.022	mg/Kg	UJ	LCS<LCL
C2BP-07-0.5-20220310	SW8270SIM	Chrysene	0.0027	mg/Kg	U	EB<RL
C2BP-07-0.5-20220310	SW8270SIM	Fluoranthene	0.0029	mg/Kg	U	EB<RL
C2BP-07-0.5-20220310	SW8270SIM	Pyrene	0.0041	mg/Kg	U	EB<RL
C2BP-07-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.00087	mg/Kg	UJ	HTa>UCL
C2BP-07-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.00013	mg/Kg	UJ	HTa>UCL
C2BP-07-1.5-20220310	SW8011	Ethylene Dibromide	0.00016	mg/Kg	UJ	HTa>UCL
C2BP-07-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0017	mg/Kg	UJ	LCS<LCL
C2BP-07-1.5-20220310	SW8270C	Benzoic acid	0.16	mg/Kg	R	LCS<LCL
C2BP-07-1.5-20220310	SW8270C	Benzyl alcohol	0.0066	mg/Kg	UJ	CCV<LCL
C2BP-07-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.02	mg/Kg	U	EB<RL; LB<RL
C2BP-07-1.5-20220310	SW8270C	Butyl benzyl phthalate	0.013	mg/Kg	U	LB<RL
C2BP-07-1.5-20220310	SW8270C	Pentachlorophenol	0.0083	mg/Kg	UJ	LCS<LCL
C2BP-07-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.00078	mg/Kg	UJ	HTa>UCL
C2BP-07-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2BP-07-2.5-20220310	SW8011	Ethylene Dibromide	0.00014	mg/Kg	UJ	HTa>UCL
C2BP-07-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-07-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-07-2.5-20220310	SW8270C	Azobenzene	0.0014	mg/Kg	U	LB<RL
C2BP-07-2.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-07-2.5-20220310	SW8270C	Benzyl alcohol	0.006	mg/Kg	UJ	CCV<LCL
C2BP-07-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.017	mg/Kg	U	EB<RL; LB<RL
C2BP-07-2.5-20220310	SW8270C	Butyl benzyl phthalate	0.0078	mg/Kg	U	LB<RL
C2BP-07-2.5-20220310	SW8270C	Di-n-butyl phthalate	0.0033	mg/Kg	U	LB<RL
C2BP-07-2.5-20220310	SW8270C	Pentachlorophenol	0.0076	mg/Kg	UJ	LCS<LCL
C2BP-07-2.5-20220310	SW8270SIM	Benzo[a]anthracene	0.0031	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Benzo[a]pyrene	0.0067	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Benzo[b]fluoranthene	0.0074	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Benzo[g,h,i]perylene	0.0041	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Chrysene	0.0041	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Fluoranthene	0.0027	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.0059	mg/Kg	U	EB<RL
C2BP-07-2.5-20220310	SW8270SIM	Pyrene	0.0037	mg/Kg	U	EB<RL
C2BP-08-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.00076	mg/Kg	UJ	HTa>UCL
C2BP-08-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-08-0.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-08-0.5-20220310	SW8270C	2,4,5-Trichlorophenol	0.00093	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2,4-Dichlorophenol	0.0032	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2,4-Dimethylphenol	0.0069	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2,4-Dinitrophenol	0.067	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2-Chlorophenol	0.00046	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2-Methylphenol	0.0011	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	2-Nitrophenol	0.00071	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	3 & 4 Methylphenol	0.024	mg/Kg	J	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	4,6-Dinitro-2-methylphenol	0.011	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	4-Chloro-3-methylphenol	0.0038	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	4-Nitrophenol	0.02	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	Benzo[a]pyrene	0.0072	mg/Kg	J	ICVS>UCL
C2BP-08-0.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	Sur<LCL
C2BP-08-0.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.048	mg/Kg	U	EB<RL; LB<RL
C2BP-08-0.5-20220310	SW8270C	Di-n-butyl phthalate	0.011	mg/Kg	U	LB<RL
C2BP-08-0.5-20220310	SW8270C	Pentachlorophenol	0.026	mg/Kg	J	CCV<LCL; Sur<LCL
C2BP-08-0.5-20220310	SW8270C	Phenol	0.011	mg/Kg	J	Sur<LCL
C2BP-08-0.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.00004	mg/Kg	UJ	EMPC
C2BP-08-0.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000046	mg/Kg	U	EB<RL
C2BP-08-0.5-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000056	mg/Kg	U	EB<RL
C2BP-08-1.5-20220310	SW6020	Antimony	0.22	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Arsenic	74	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Barium	150	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Chromium	39	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Cobalt	7.8	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Copper	130	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Iron	11000	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Lead	30	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Manganese	580	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Molybdenum	0.19	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Nickel	9.8	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Vanadium	35	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW6020	Zinc	230	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310	SW8270C	1,2-Dichlorobenzene	0.064	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	1,3-Dichlorobenzene	0.082	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	1,4-Dichlorobenzene	0.037	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	1-Methylnaphthalene	0.058	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	2,4,5-Trichlorophenol	0.00097	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2,4-Dichlorophenol	0.0034	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2,4-Dimethylphenol	0.0072	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2,4-Dinitrophenol	0.07	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2-Chloronaphthalene	0.065	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	2-Chlorophenol	0.00048	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2-Methylnaphthalene	0.082	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	2-Methylphenol	0.0012	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	2-Nitrophenol	0.00074	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	3 & 4 Methylphenol	0.026	mg/Kg	J	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	4,6-Dinitro-2-methylphenol	0.012	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	4-Chloro-3-methylphenol	0.004	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	4-Nitrophenol	0.021	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	Acenaphthylene	0.15	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	Benzo[a]pyrene	0.039	mg/Kg	J	FD>RPD; ICVS>UCL
C2BP-08-1.5-20220310	SW8270C	Benzo[b]fluoranthene	0.047	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	Sur<LCL
C2BP-08-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.055	mg/Kg	U	EB<RL; LB<RL
C2BP-08-1.5-20220310	SW8270C	Di-n-butyl phthalate	0.014	mg/Kg	U	LB<RL
C2BP-08-1.5-20220310	SW8270C	Indeno[1,2,3-cd]pyrene	0.031	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	Naphthalene	0.42	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	Pentachlorophenol	0.0076	mg/Kg	UJ	CCV<LCL; Sur<LCL
C2BP-08-1.5-20220310	SW8270C	Phenanthrene	0.23	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8270C	Phenol	0.036	mg/Kg	J	Sur<LCL
C2BP-08-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDD	0.00039	mg/Kg	J	FD>RPD

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-08-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.000061	mg/Kg	UJ	EMPC
C2BP-08-1.5-20220310	SW8290	1,2,3,7,8,9-HxCDD	0.000031	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8290	OCDD	0.0013	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310	SW8290	OCDF	0.000074	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Antimony	2.6	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Arsenic	110	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Barium	250	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Chromium	72	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Cobalt	14	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Copper	180	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Iron	50000	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Lead	48	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Manganese	1300	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Molybdenum	1.4	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Nickel	19	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Vanadium	96	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW6020	Zinc	420	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8011	1,2,3-Trichloropropane	0.000072	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310-FD	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL; Sur<LCL
C2BP-08-1.5-20220310-FD	SW8270C	1,2-Dichlorobenzene	0.0036	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	1,3-Dichlorobenzene	0.0034	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	1,4-Dichlorobenzene	0.002	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	1-Methylnaphthalene	0.025	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	2-Chloronaphthalene	0.00061	mg/Kg	UJ	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	2-Methylnaphthalene	0.036	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Acenaphthylene	0.026	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Benzo[a]pyrene	0.0016	mg/Kg	UJ	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Benzo[b]fluoranthene	0.014	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.084	mg/Kg	U	EB<RL; LB<RL
C2BP-08-1.5-20220310-FD	SW8270C	Di-n-butyl phthalate	0.011	mg/Kg	U	LB<RL
C2BP-08-1.5-20220310-FD	SW8270C	Indeno[1,2,3-cd]pyrene	0.0015	mg/Kg	UJ	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Naphthalene	0.14	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8270C	Pentachlorophenol	0.0077	mg/Kg	UJ	CCV<LCL
C2BP-08-1.5-20220310-FD	SW8270C	Phenanthrene	0.086	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.0015	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.000071	mg/Kg	UJ	EMPC
C2BP-08-1.5-20220310-FD	SW8290	1,2,3,7,8,9-HxCDD	0.000088	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8290	OCDD	0.0045	mg/Kg	J	FD>RPD
C2BP-08-1.5-20220310-FD	SW8290	OCDF	0.00015	mg/Kg	J	FD>RPD
C2BP-08-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL
C2BP-08-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-08-2.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-08-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.025	mg/Kg	U	EB<RL; LB<RL
C2BP-08-2.5-20220310	SW8270C	Di-n-butyl phthalate	0.0076	mg/Kg	U	LB<RL
C2BP-08-2.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000096	mg/Kg	UJ	EMPC
C2BP-08-2.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000026	mg/Kg	U	EB<RL
C2BP-08-3.5-20220310	SW8011	1,2,3-Trichloropropane	0.000074	mg/Kg	UJ	HTa>UCL
C2BP-08-3.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-08-3.5-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-08-3.5-20220310	SW8270C	Benzo[a]pyrene	0.0069	mg/Kg	J	ICVS>UCL
C2BP-08-3.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.037	mg/Kg	U	EB<RL; LB<RL
C2BP-08-3.5-20220310	SW8270C	Di-n-butyl phthalate	0.01	mg/Kg	U	LB<RL
C2BP-08-3.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000087	mg/Kg	UJ	EMPC
C2BP-08-3.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000016	mg/Kg	U	EB<RL
C2BP-08-3.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000031	mg/Kg	U	EB<RL
C2BP-08-3.5-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000024	mg/Kg	U	EB<RL
C2BP-08-3.5-20220310	SW8290	2,3,7,8-TCDD	0.0000016	mg/Kg	UJ	EMPC
C2BP-08-3.5-20220310	SW8290	2,3,7,8-TCDF	0.0000087	mg/Kg	U	LB<RL
C2BP-09-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.000075	mg/Kg	UJ	HTa>UCL
C2BP-09-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-09-0.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-09-0.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.022	mg/Kg	U	EB<RL; LB<RL
C2BP-09-0.5-20220310	SW8270C	Di-n-butyl phthalate	0.0077	mg/Kg	U	LB<RL
C2BP-09-0.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.00000022	mg/Kg	UJ	EMPC; EB<RL (U)
C2BP-09-0.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000012	mg/Kg	U	EB<RL
C2BP-09-0.5-20220310	SW8290	1,2,3,7,8,9-HxCDD	0.00000054	mg/Kg	UJ	EMPC
C2BP-09-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-09-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000015	mg/Kg	J	HTa>UCL
C2BP-09-1.5-20220310	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL
C2BP-09-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-09-1.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-09-1.5-20220310	SW8270C	Benzyl alcohol	0.0063	mg/Kg	UJ	CCV<LCL
C2BP-09-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.013	mg/Kg	U	EB<RL; LB<RL
C2BP-09-1.5-20220310	SW8270C	Butyl benzyl phthalate	0.011	mg/Kg	U	LB<RL
C2BP-09-1.5-20220310	SW8270C	Pentachlorophenol	0.031	mg/Kg	J	LCS<LCL; LCSRPD
C2BP-09-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000059	mg/Kg	U	EB<RL; LB<RL
C2BP-09-1.5-20220310	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000024	mg/Kg	UJ	EMPC
C2BP-09-1.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.00000033	mg/Kg	U	EB<RL
C2BP-09-1.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.00000035	mg/Kg	U	EB<RL
C2BP-09-1.5-20220310	SW8290	OCDF	0.0000024	mg/Kg	U	EB<RL
C2BP-09-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL
C2BP-09-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-09-2.5-20220310	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL
C2BP-09-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-09-2.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-09-2.5-20220310	SW8270C	Benzyl alcohol	0.0063	mg/Kg	UJ	CCV<LCL
C2BP-09-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.022	mg/Kg	U	EB<RL; LB<RL
C2BP-09-2.5-20220310	SW8270C	Butyl benzyl phthalate	0.014	mg/Kg	U	LB<RL
C2BP-09-2.5-20220310	SW8270C	Pentachlorophenol	0.027	mg/Kg	J	LCS<LCL; LCSRPD
C2BP-09-2.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000096	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C2BP-09-2.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.00000055	mg/Kg	U	EB<RL
C2BP-09-2.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.00000043	mg/Kg	UJ	EMPC; EB<RL (U)
C2BP-09-2.5-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000041	mg/Kg	U	EB<RL
C2BP-09-3.5-20220310	SW8011	1,2,3-Trichloropropane	0.000083	mg/Kg	UJ	HTa>UCL
C2BP-09-3.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-09-3.5-20220310	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-09-3.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-09-3.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-09-3.5-20220310	SW8270C	Benzyl alcohol	0.0063	mg/Kg	UJ	CCV<LCL
C2BP-09-3.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.022	mg/Kg	U	EB<RL; LB<RL
C2BP-09-3.5-20220310	SW8270C	Butyl benzyl phthalate	0.014	mg/Kg	U	LB<RL
C2BP-09-3.5-20220310	SW8270C	Pentachlorophenol	0.008	mg/Kg	UJ	LCS<LCL
C2BP-09-3.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000001	mg/Kg	U	EB<RL; LB<RL
C2BP-09-3.5-20220310	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000015	mg/Kg	UJ	EMPC
C2BP-09-3.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.00000038	mg/Kg	U	EB<RL
C2BP-09-3.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.00000098	mg/Kg	U	EB<RL
C2BP-09-3.5-20220310	SW8290	1,2,3,7,8,9-HxCDD	0.00000048	mg/Kg	UJ	EMPC
C2BP-10-0.5-20220310	SW6020	Arsenic	5.1	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310	SW6020	Copper	24	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310	SW6020	Lead	6.8	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.000072	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310	SW8270C	3 & 4 Methylphenol	0.1	mg/Kg	J	MS<LCL; SD<LCL
C2BP-10-0.5-20220310	SW8270C	3,3'-Dichlorobenzidine	0.0091	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-10-0.5-20220310	SW8270C	4-Nitroaniline	0.0054	mg/Kg	UJ	SD<LCL
C2BP-10-0.5-20220310	SW8270C	Benzo[a]pyrene	0.002	mg/Kg	J	ICVS>UCL
C2BP-10-0.5-20220310	SW8270C	Benzoic acid	0.13	mg/Kg	R	MS<LCL; SD<LCL
C2BP-10-0.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.034	mg/Kg	U	EB<RL; LB<RL
C2BP-10-0.5-20220310	SW8270C	Dibenzofuran	0.036	mg/Kg	J	MSRPD
C2BP-10-0.5-20220310	SW8270C	Di-n-butyl phthalate	0.01	mg/Kg	U	LB<RL
C2BP-10-0.5-20220310	SW8270C	Phenol	0.11	mg/Kg	J	FD>RPD; MS<LCL; SD<LCL
C2BP-10-0.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000012	mg/Kg	UJ	EMPC
C2BP-10-0.5-20220310	SW8290	1,2,3,7,8-PeCDF	0.00000024	mg/Kg	UJ	EMPC
C2BP-10-0.5-20220310-FD	SW6020	Arsenic	7.2	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310-FD	SW6020	Copper	30	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310-FD	SW6020	Lead	9.4	mg/Kg	J	FD>RPD
C2BP-10-0.5-20220310-FD	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310-FD	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-10-0.5-20220310-FD	SW8260B	Acetone	0.039	mg/Kg	J	Sur>UCL
C2BP-10-0.5-20220310-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.031	mg/Kg	U	EB<RL; LB<RL
C2BP-10-0.5-20220310-FD	SW8270C	Di-n-butyl phthalate	0.0068	mg/Kg	U	LB<RL
C2BP-10-0.5-20220310-FD	SW8270C	Phenol	0.0026	mg/Kg	UJ	FD>RPD
C2BP-10-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-10-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-10-1.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-10-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.02	mg/Kg	U	EB<RL; LB<RL
C2BP-10-1.5-20220310	SW8270C	Di-n-butyl phthalate	0.008	mg/Kg	U	LB<RL
C2BP-10-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000023	mg/Kg	U	LB<RL
C2BP-10-1.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.00000051	mg/Kg	U	EB<RL
C2BP-10-1.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.00000096	mg/Kg	U	EB<RL
C2BP-10-1.5-20220310	SW8290	1,2,3,6,7,8-HxCDF	0.00000013	mg/Kg	UJ	EMPC
C2BP-10-1.5-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000016	mg/Kg	U	EB<RL
C2BP-10-3.5-20220310	SW8011	1,2,3-Trichloropropane	0.000083	mg/Kg	UJ	HTa>UCL
C2BP-10-3.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-10-3.5-20220310	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-10-3.5-20220310	SW8260B	Acetone	0.012	mg/Kg	J	Sur>UCL
C2BP-10-3.5-20220310	SW8260B	Dichlorodifluoromethane	0.00054	mg/Kg	UJ	CCV<LCL
C2BP-10-3.5-20220310	SW8260B	Methylene Chloride	0.011	mg/Kg	UJ	CCV<LCL
C2BP-10-3.5-20220310	SW8260B	Vinyl acetate	0.0016	mg/Kg	UJ	CCV<LCL
C2BP-10-3.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.029	mg/Kg	U	EB<RL; LB<RL
C2BP-10-3.5-20220310	SW8270C	Di-n-butyl phthalate	0.0094	mg/Kg	U	LB<RL
C2BP-10-3.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000049	mg/Kg	U	EB<RL; LB<RL
C2BP-10-3.5-20220310	SW8290	OCDF	0.0000018	mg/Kg	U	EB<RL
C2BP-10-6.0-20220310	SW8011	1,2,3-Trichloropropane	0.000075	mg/Kg	UJ	HTa>UCL
C2BP-10-6.0-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-10-6.0-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-10-6.0-20220310	SW8260B	Dichlorodifluoromethane	0.00066	mg/Kg	UJ	CCV<LCL
C2BP-10-6.0-20220310	SW8260B	Methylene Chloride	0.013	mg/Kg	UJ	CCV<LCL
C2BP-10-6.0-20220310	SW8260B	Vinyl acetate	0.002	mg/Kg	UJ	CCV<LCL
C2BP-10-6.0-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.028	mg/Kg	U	EB<RL; LB<RL
C2BP-10-6.0-20220310	SW8270C	Di-n-butyl phthalate	0.0085	mg/Kg	U	LB<RL
C2BP-10-6.0-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000087	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C2BP-10-6.0-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.00000037	mg/Kg	U	EB<RL
C2BP-10-6.0-20220310	SW8290	1,2,3,6,7,8-HxCDF	0.00000011	mg/Kg	UJ	EMPC
C2BP-10-6.0-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000016	mg/Kg	U	EB<RL
C2BP-10-6.0-20220310	SW8290	OCDF	0.0000021	mg/Kg	U	EB<RL
C2BP-11-0.5-20220310	SW6010B	Boron	12	mg/Kg	J	SD<LCL
C2BP-11-0.5-20220310	SW6020	Barium	180	mg/Kg	J	SD>UCL
C2BP-11-0.5-20220310	SW6020	Vanadium	91	mg/Kg	J	MS>UCL; SD>UCL
C2BP-11-0.5-20220310	SW6020	Zinc	79	mg/Kg	J	SD>UCL
C2BP-11-0.5-20220310	SW8011	1,2,3-Trichloropropane	0.000072	mg/Kg	UJ	HTa>UCL
C2BP-11-0.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-11-0.5-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-11-0.5-20220310	SW8270C	2,4,5-Trichlorophenol	0.00094	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2,4-Dichlorophenol	0.0033	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2,4-Dimethylphenol	0.007	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2,4-Dinitrophenol	0.068	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2-Chlorophenol	0.00047	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2-Methylphenol	0.0011	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	2-Nitrophenol	0.00072	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	3 & 4 Methylphenol	0.0017	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	4,6-Dinitro-2-methylphenol	0.012	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	4-Chloro-3-methylphenol	0.0038	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	4-Nitrophenol	0.02	mg/Kg	UJ	Sur<LCL
C2BP-11-0.5-20220310	SW8270C	Benzo[a]pyrene	0.0021	mg/Kg	J	ICVS>UCL
C2BP-11-0.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL; Sur<LCL (UJ)
C2BP-11-0.5-20220310	SW8270C	Benzyl alcohol	0.0058	mg/Kg	UJ	CCV<LCL
C2BP-11-0.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	EB<RL; LB<RL
C2BP-11-0.5-20220310	SW8270C	Butyl benzyl phthalate	0.017	mg/Kg	U	LB<RL
C2BP-11-0.5-20220310	SW8270C	Pentachlorophenol	0.0073	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2BP-11-0.5-20220310	SW8270C	Phenol	0.006	mg/Kg	J	Sur<LCL
C2BP-11-0.5-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.0000012	mg/Kg	U	EB<RL
C2BP-11-1.5-20220310	SW8011	1,2,3-Trichloropropane	0.000073	mg/Kg	UJ	HTa>UCL
C2BP-11-1.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-11-1.5-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-11-1.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-11-1.5-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL
C2BP-11-1.5-20220310	SW8270C	Benzyl alcohol	0.0058	mg/Kg	UJ	CCV<LCL
C2BP-11-1.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.0093	mg/Kg	U	EB<RL; LB<RL
C2BP-11-1.5-20220310	SW8270C	Butyl benzyl phthalate	0.0093	mg/Kg	U	LB<RL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-11-1.5-20220310	SW8270C	Carbazole	0.0015	mg/Kg	J	LCS>UCL
C2BP-11-1.5-20220310	SW8270C	Pentachlorophenol	0.0073	mg/Kg	UJ	LCS<LCL
C2BP-11-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000063	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
C2BP-11-1.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000063	mg/Kg	UJ	EMPC
C2BP-11-1.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000073	mg/Kg	UJ	EMPC; EB<RL (U)
C2BP-11-1.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000098	mg/Kg	UJ	EMPC; EB<RL (U)
C2BP-11-1.5-20220310	SW8290	OCDF	0.0000019	mg/Kg	U	EB<RL
C2BP-11-2.5-20220310	SW8011	1,2,3-Trichloropropane	0.000077	mg/Kg	UJ	HTa>UCL
C2BP-11-2.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-11-2.5-20220310	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-11-2.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-11-2.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-11-2.5-20220310	SW8270C	Benzyl alcohol	0.0062	mg/Kg	UJ	CCV<LCL
C2BP-11-2.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	U	EB<RL; LB<RL
C2BP-11-2.5-20220310	SW8270C	Butyl benzyl phthalate	0.014	mg/Kg	U	LB<RL
C2BP-11-2.5-20220310	SW8270C	Pentachlorophenol	0.0078	mg/Kg	UJ	LCS<LCL
C2BP-11-2.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000037	mg/Kg	U	EB<RL; LB<RL
C2BP-11-2.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000051	mg/Kg	UJ	EMPC; EB<RL (U)
C2BP-11-2.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000067	mg/Kg	U	EB<RL
C2BP-11-2.5-20220310	SW8290	1,2,3,7,8,9-HxCDD	0.0000047	mg/Kg	UJ	EMPC
C2BP-11-2.5-20220310	SW8290	OCDF	0.0000088	mg/Kg	U	EB<RL
C2BP-11-3.5-20220310	SW8011	1,2,3-Trichloropropane	0.000081	mg/Kg	UJ	HTa>UCL
C2BP-11-3.5-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2BP-11-3.5-20220310	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-11-3.5-20220310	SW8260B	Acetone	0.012	mg/Kg	J	Sur>UCL
C2BP-11-3.5-20220310	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2BP-11-3.5-20220310	SW8270C	Benzoic acid	0.15	mg/Kg	R	LCS<LCL
C2BP-11-3.5-20220310	SW8270C	Benzyl alcohol	0.0062	mg/Kg	UJ	CCV<LCL
C2BP-11-3.5-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.021	mg/Kg	U	EB<RL; LB<RL
C2BP-11-3.5-20220310	SW8270C	Butyl benzyl phthalate	0.015	mg/Kg	UJ	LB<RL
C2BP-11-3.5-20220310	SW8270C	Pentachlorophenol	0.0078	mg/Kg	UJ	LCS<LCL
C2BP-11-3.5-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000059	mg/Kg	U	EB<RL; LB<RL
C2BP-11-3.5-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000051	mg/Kg	U	EB<RL
C2BP-11-3.5-20220310	SW8290	1,2,3,6,7,8-HxCDD	0.0000081	mg/Kg	U	EB<RL
C2BP-11-3.5-20220310	SW8290	OCDF	0.000002	mg/Kg	U	EB<RL
C2BP-12-0.5-20220309	SW6010B	Boron	6.9	mg/Kg	J	SD<LCL
C2BP-12-0.5-20220309	SW6020	Antimony	0.13	mg/Kg	J	MS<LCL; MSRPD
C2BP-12-0.5-20220309	SW6020	Barium	280	mg/Kg	J	LabDupRPD
C2BP-12-0.5-20220309	SW6020	Beryllium	1	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Cadmium	0.32	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Chromium	57	mg/Kg	J	SD<LCL
C2BP-12-0.5-20220309	SW6020	Cobalt	26	mg/Kg	J	LabDupRPD
C2BP-12-0.5-20220309	SW6020	Copper	41	mg/Kg	J	SD<LCL
C2BP-12-0.5-20220309	SW6020	Manganese	1400	mg/Kg	J	LabDupRPD
C2BP-12-0.5-20220309	SW6020	Molybdenum	0.25	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Selenium	3.3	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Silver	0.065	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Thallium	0.29	mg/Kg	J	MSRPD
C2BP-12-0.5-20220309	SW6020	Vanadium	120	mg/Kg	J	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8011	1,2,3-Trichloropropane	0.0001	mg/Kg	UJ	HTa>UCL
C2BP-12-0.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000015	mg/Kg	UJ	HTa>UCL
C2BP-12-0.5-20220309	SW8011	Ethylene Dibromide	0.000018	mg/Kg	UJ	HTa>UCL
C2BP-12-0.5-20220309	SW8260B	1,1,1,2-Tetrachloroethane	0.00082	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,1,1-Trichloroethane	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1,2,2-Tetrachloroethane	0.0013	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00072	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1,2-Trichloroethane	0.00035	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1-Dichloroethane	0.00026	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1-Dichloroethene	0.0015	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,1-Dichloropropene	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,2,3-Trichlorobenzene	0.00084	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,2,3-Trichloropropane	0.0014	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,2,4-Trichlorobenzene	0.00059	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,2,4-Trimethylbenzene	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,2-Dibromo-3-Chloropropane	0.0022	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,2-Dibromoethane	0.00028	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,2-Dichlorobenzene	0.0018	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,2-Dichloroethane	0.00028	mg/Kg	UJ	MS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-12-0.5-20220309	SW8260B	1,2-Dichloropropane	0.00056	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,3,5-Trimethylbenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,3-Dichlorobenzene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	1,3-Dichloropropane	0.00032	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	1,4-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	2,2-Dichloropropane	0.00046	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	2-Butanone (MEK)	0.012	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	2-Chlorotoluene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	2-Hexanone	0.0054	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	4-Chlorotoluene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0084	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Benzene	0.00054	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Bromobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Bromochloromethane	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Bromoform	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Bromomethane	0.00029	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Carbon disulfide	0.00028	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Carbon tetrachloride	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Chlorobenzene	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Chloroform	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	cis-1,2-Dichloroethene	0.00084	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	cis-1,3-Dichloropropene	0.00028	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Dibromochloromethane	0.00038	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Dibromomethane	0.00024	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Ethylbenzene	0.00057	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Hexachlorobutadiene	0.00084	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Isopropylbenzene	0.00064	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Methyl tert-butyl ether	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	m-Xylene & p-Xylene	0.00078	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Naphthalene	0.0025	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	n-Butylbenzene	0.00088	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	N-Propylbenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	o-Xylene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	p-Isopropyltoluene	0.00056	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	sec-Butylbenzene	0.00093	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Styrene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	tert-Butylbenzene	0.00092	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Tetrachloroethene	0.00056	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Toluene	0.0018	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	trans-1,2-Dichloroethene	0.00056	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	trans-1,3-Dichloropropene	0.00084	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Trichloroethene	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Trichlorofluoromethane	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Vinyl acetate	0.0021	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8260B	Vinyl chloride	0.00042	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8260B	Xylenes, Total	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	3,3'-Dichlorobenzidine	0.012	mg/Kg	R	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	3-Nitroaniline	0.014	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	4-Chloroaniline	0.019	mg/Kg	R	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	4-Nitroaniline	0.0072	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	Benzo[a]pyrene	0.0019	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8270C	Benzo[g,h,i]perylene	0.0026	mg/Kg	UJ	MS<LCL
C2BP-12-0.5-20220309	SW8270C	Benzoic acid	0.18	mg/Kg	R	MS<LCL; SD<LCL
C2BP-12-0.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.032	mg/Kg	U	LB<RL
C2BP-12-0.5-20220309	SW8270C	Butyl benzyl phthalate	0.019	mg/Kg	U	LB<RL
C2BP-12-0.5-20220309	SW8270C	Hexachlorocyclopentadiene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-12-1.5-20220309	SW8011	1,2,3-Trichloropropane	0.000094	mg/Kg	UJ	HTa>UCL
C2BP-12-1.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-12-1.5-20220309	SW8011	Ethylene Dibromide	0.000017	mg/Kg	UJ	HTa>UCL
C2BP-12-1.5-20220309	SW8270C	Benzyl alcohol	0.0061	mg/Kg	UJ	CCV<LCL
C2BP-12-1.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.04	mg/Kg	U	LB<RL
C2BP-12-1.5-20220309	SW8270C	Di-n-butyl phthalate	0.0037	mg/Kg	U	LB<RL
C2BP-12-1.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.00097	mg/Kg	UJ	CCV<LCL
C2BP-12-2.5-20220309	SW6020	Arsenic	2.1	mg/Kg	J	FD>RPD
C2BP-12-2.5-20220309	SW6020	Manganese	1200	mg/Kg	J	FD>RPD
C2BP-12-2.5-20220309	SW8011	1,2,3-Trichloropropane	0.000086	mg/Kg	UJ	HTa>UCL
C2BP-12-2.5-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-12-2.5-20220309	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-12-2.5-20220309	SW8270C	Benzyl alcohol	0.0068	mg/Kg	UJ	CCV<LCL
C2BP-12-2.5-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.025	mg/Kg	U	LB<RL
C2BP-12-2.5-20220309	SW8270C	Butyl benzyl phthalate	0.0071	mg/Kg	U	LB<RL
C2BP-12-2.5-20220309	SW8270C	N-Nitrosodiphenylamine	0.0011	mg/Kg	UJ	CCV<LCL
C2BP-12-2.5-20220309-FD	SW6020	Arsenic	1.7	mg/Kg	J	FD>RPD
C2BP-12-2.5-20220309-FD	SW6020	Manganese	920	mg/Kg	J	FD>RPD
C2BP-12-2.5-20220309-FD	SW8011	1,2,3-Trichloropropane	0.000091	mg/Kg	UJ	HTa>UCL
C2BP-12-2.5-20220309-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.000014	mg/Kg	UJ	HTa>UCL
C2BP-12-2.5-20220309-FD	SW8011	Ethylene Dibromide	0.000017	mg/Kg	UJ	HTa>UCL
C2BP-12-2.5-20220309-FD	SW8270C	Benzyl alcohol	0.0067	mg/Kg	UJ	CCV<LCL
C2BP-12-2.5-20220309-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.043	mg/Kg	U	LB<RL
C2BP-12-2.5-20220309-FD	SW8270C	Butyl benzyl phthalate	0.0069	mg/Kg	U	LB<RL
C2BP-12-2.5-20220309-FD	SW8270C	N-Nitrosodiphenylamine	0.0011	mg/Kg	UJ	CCV<LCL
C2BP-20220310-EB	SW8270C	Benzyl alcohol	0.18	ug/L	UJ	CCV<LCL
C2BP-20220310-TB-S	SW8260B	Dichlorodifluoromethane	0.00049	mg/Kg	UJ	CCV<LCL
C2BP-20220310-TB-S	SW8260B	Methylene Chloride	0.0099	mg/Kg	UJ	CCV<LCL
C2BP-20220310-TB-S	SW8260B	Vinyl acetate	0.0015	mg/Kg	UJ	CCV<LCL
C2BP-WC-20220310	SW8011	1,2,3-Trichloropropane	0.000072	mg/Kg	UJ	HTa>UCL
C2BP-WC-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-WC-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-WC-20220310	SW8260B	Dichlorodifluoromethane	0.00059	mg/Kg	UJ	CCV<LCL
C2BP-WC-20220310	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	CCV<LCL
C2BP-WC-20220310	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	CCV<LCL
C2BP-WC-20220310	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2BP-WC-20220310	SW8270C	Benzo[a]pyrene	0.0069	mg/Kg	J	ICVS>UCL
C2BP-WC-20220310	SW8270C	Benzoic acid	0.14	mg/Kg	R	LCS<LCL
C2BP-WC-20220310	SW8270C	Benzyl alcohol	0.0057	mg/Kg	UJ	CCV<LCL
C2BP-WC-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	0.021	mg/Kg	U	EB<RL; LB<RL
C2BP-WC-20220310	SW8270C	Butyl benzyl phthalate	0.012	mg/Kg	U	LB<RL
C2BP-WC-20220310	SW8270C	Carbazole	0.0019	mg/Kg	J	LCS>UCL
C2BP-WC-20220310	SW8270C	Pentachlorophenol	0.0072	mg/Kg	UJ	LCS<LCL
C2BP-WC-20220310	SW8270C	Pyridine	0.024	mg/Kg	J	LCSRPD
C2BP-WC-20220310	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000077	mg/Kg	UJ	EMPC
C2BP-WC-20220310	SW8290	1,2,3,4,7,8-HxCDD	0.0000043	mg/Kg	U	EB<RL
C2BP-WC-20220310	SW8290	1,2,3,7,8,9-HxCDF	0.00000043	mg/Kg	U	EB<RL
C2BP-WC2-20220309	SW8011	1,2,3-Trichloropropane	0.000062	mg/Kg	UJ	HTa>UCL
C2BP-WC2-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.0000093	mg/Kg	UJ	HTa>UCL
C2BP-WC2-20220309	SW8011	Ethylene Dibromide	0.000011	mg/Kg	UJ	HTa>UCL
C2BP-WC2-20220309	SW8270C	Benzyl alcohol	0.0055	mg/Kg	UJ	CCV<LCL
C2BP-WC2-20220309	SW8270C	Bis(2-ethylhexyl) phthalate	0.037	mg/Kg	U	LB<RL
C2BP-WC2-20220309	SW8270C	Butyl benzyl phthalate	0.0094	mg/Kg	U	LB<RL
C2BP-WC2-20220309	SW8270C	Di-n-butyl phthalate	0.0064	mg/Kg	U	LB<RL
C2BP-WC2-20220309	SW8270C	N-Nitrosodiphenylamine	0.00088	mg/Kg	UJ	CCV<LCL
C2BP-WC3-20220310	SW8011	1,2,3-Trichloropropane	0.000074	mg/Kg	UJ	HTa>UCL
C2BP-WC3-20220310	SW8011	1,2-Dibromo-3-Chloropropane	0.000019	mg/Kg	UJ	HTa>UCL
C2BP-WC3-20220310	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2BP-WC3-20220310	SW8260B	Dichlorodifluoromethane	0.00058	mg/Kg	UJ	CCV<LCL
C2BP-WC3-20220310	SW8260B	Ethylbenzene	0.00083	mg/Kg	J	Sur>UCL
C2BP-WC3-20220310	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	CCV<LCL
C2BP-WC3-20220310	SW8260B	o-Xylene	0.0015	mg/Kg	J	Sur>UCL
C2BP-WC3-20220310	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	CCV<LCL
C2BP-WC3-20220310	SW8260B	Xylenes, Total	0.0015	mg/Kg	J	Sur>UCL
C2BP-WC3-20220310	SW8270C	2,4,6-Trichlorophenol	0.0068	mg/Kg	UJ	LCS<LCL
C2BP-WC3-20220310	SW8270C	2,4-Dinitrophenol	0.31	mg/Kg	R	MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270C	3,3'-Dichlorobenzidine	0.044	mg/Kg	R	MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270C	4-Chloroaniline	0.071	mg/Kg	R	MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270C	4-Nitroaniline	0.026	mg/Kg	UJ	MS<LCL
C2BP-WC3-20220310	SW8270C	Benzo[a]pyrene	0.0068	mg/Kg	R	MS<LCL
C2BP-WC3-20220310	SW8270C	Benzo[g,h,i]perylene	0.0095	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270C	Benzoic acid	0.64	mg/Kg	R	LCS<LCL; MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270C	Benzyl alcohol	0.026	mg/Kg	UJ	CCV<LCL
C2BP-WC3-20220310	SW8270C	Bis(2-ethylhexyl) phthalate	4.6	mg/Kg	U	EB<RL; LB<RL
C2BP-WC3-20220310	SW8270C	Butyl benzyl phthalate	1.1	mg/Kg	J	MS>UCL; SD>UCL
C2BP-WC3-20220310	SW8270C	Dibenz(a,h)anthracene	0.0063	mg/Kg	UJ	MS<LCL
C2BP-WC3-20220310	SW8270C	Di-n-butyl phthalate	0.044	mg/Kg	U	LB<RL; MS>UCL; SD>UCL (J)
C2BP-WC3-20220310	SW8270C	Pentachlorophenol	0.033	mg/Kg	UJ	LCS<LCL
C2BP-WC3-20220310	SW8270SIM	1-Methylnaphthalene	0.0056	mg/Kg	J	Sur>UCL
C2BP-WC3-20220310	SW8270SIM	Acenaphthene	0.0006	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2BP-WC3-20220310	SW8270SIM	Acenaphthylene	0.0005	mg/Kg	UJ	MS<LCL; SD<LCL
C2BP-WC3-20220310	SW8270SIM	Benzo[g,h,i]perylene	0.0005	mg/Kg	UJ	SD<LCL
C2BP-WC-W-20220325	SW6010B	Boron	170	ug/L	U	LB<RL
C2BP-WC-W-20220325	SW8082	PCB-1016	0.061	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1221	0.075	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1232	0.063	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1242	0.059	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1248	0.052	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1254	0.075	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1260	0.061	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1262	0.063	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8082	PCB-1268	0.059	ug/L	UJ	Sur<LCL
C2BP-WC-W-20220325	SW8260B	Chloroethane	9.6	ug/L	UJ	CCV<LCL
C2BP-WC-W-20220325	SW8260B	m-Xylene & p-Xylene	26	ug/L	J	CCV>UCL
C2BP-WC-W-20220325	SW8260B	o-Xylene	29	ug/L	J	CCV>UCL
C2BP-WC-W-20220325	SW8260B	Styrene	29	ug/L	J	CCV>UCL
C2BP-WC-W-20220325	SW8260B	Vinyl acetate	74	ug/L	J	CCV>UCL
C2BP-WC-W-20220325	SW8270C	4-Nitrophenol	1.6	ug/L	UJ	CCV<LCL
C2BP-WC-W-20220325	SW8270C	Benzoic acid	1.3	ug/L	UJ	CCV<LCL
C2BP-WC-W-20220325	SW8270C	Hexachlorocyclopentadiene	0.13	ug/L	UJ	LCS<LCL
C2BP-WC-W-20220325	SW8270C	Pyridine	1	ug/L	R	LCS<LCL
C2BP-WC-W-20220325	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000016	ug/L	UJ	EMPC
C2BP-WC-W-20220325	SW8290	OCDD	0.000011	ug/L	UJ	EMPC
C2CB-08-0.0-5.0-20220511	SW8015B-E	CA Diesel Range Organics (C10-C28)	14	mg/Kg	U	EB>RL
C2CB-08-0.0-5.0-20220511	SW8260B	1,1-Dichloropropene	0.00061	mg/Kg	UJ	LCS<LCL
C2CB-08-0.0-5.0-20220511	SW8260B	Tetrachloroethene	0.00081	mg/Kg	UJ	LCS<LCL
C2CB-08-0.0-5.0-20220511	SW8270SIM	Fluoranthene	0.0025	mg/Kg	J	Sur>UCL
C2CB-08-0.0-5.0-20220511	SW8270SIM	Naphthalene	0.002	mg/Kg	J	Sur>UCL
C2CB-08-0.0-5.0-20220511	SW8270SIM	Pyrene	0.0024	mg/Kg	J	Sur>UCL
C2CB-08-10.0-15.0-20220511	SW8015B-E	CA Diesel Range Organics (C10-C28)	76	mg/Kg	J	MS>UCL; MSRPD
C2CB-08-10.0-15.0-20220511	SW8015B-E	CA Extended Range Organics (>C28-C40)	380	mg/Kg	J	MS>UCL; MSRPD
C2CB-08-10.0-15.0-20220511	SW8260B	1,1,1,2-Tetrachloroethane	0.00054	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00047	mg/Kg	UJ	MS<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,2,3-Trichlorobenzene	0.00055	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,2,4-Trichlorobenzene	0.00038	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,2-Dichlorobenzene	0.00012	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,3-Dichlorobenzene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,3-Dichloropropane	0.00021	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	1,4-Dichlorobenzene	0.00089	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	2-Butanone (MEK)	0.0081	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	2-Chlorotoluene	0.00085	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Bromobenzene	0.00091	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	cis-1,3-Dichloropropene	0.00018	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Ethylbenzene	0.00037	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Hexachlorobutadiene	0.00055	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Isopropylbenzene	0.00042	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Methylene Chloride	0.009	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	m-Xylene & p-Xylene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	o-Xylene	0.00084	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Styrene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	tert-Butylbenzene	0.0006	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Tetrachloroethene	0.00036	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Toluene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	trans-1,3-Dichloropropene	0.00055	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Trichloroethene	0.00027	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Vinyl acetate	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-08-10.0-15.0-20220511	SW8260B	Xylenes, Total	0.00084	mg/Kg	UJ	SD<LCL
C2CB-08-10.0-15.0-20220511	SW8270SIM	Benzo[g,h,i]perylene	0.0028	mg/Kg	J	Sur>UCL
C2CB-08-10.0-15.0-20220511	SW8270SIM	Pyrene	0.002	mg/Kg	J	Sur>UCL
C2CB-08-5.0-10.0-20220511	SW8015B-E	CA Diesel Range Organics (C10-C28)	18	mg/Kg	U	EB>RL
C2CB-08-5.0-10.0-20220511	SW8270SIM	Benzo[b]fluoranthene	0.0044	mg/Kg	J	Sur>UCL
C2CB-08-5.0-10.0-20220511	SW8270SIM	Benzo[g,h,i]perylene	0.0033	mg/Kg	J	Sur>UCL
C2CB-08-5.0-10.0-20220511	SW8270SIM	Fluoranthene	0.0023	mg/Kg	J	Sur>UCL
C2CB-08-5.0-10.0-20220511	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.0021	mg/Kg	J	Sur>UCL
C2CB-08-5.0-10.0-20220511	SW8270SIM	Pyrene	0.0028	mg/Kg	J	Sur>UCL
C2CB-08-GW-20220511	SW8015B-E	CA Extended Range Organics (>C28-C40)	200	ug/L	J	LCS<LCL; MS<LCL
C2CB-08-GW-20220511	SW8260B	Chloroform	0.14	ug/L	U	EB>RL
C2CB-08-GW-20220511	SW8260B	Toluene	0.062	ug/L	U	EB>RL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2CB-09-0.0-5.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00073	mg/Kg	UJ	LCS<LCL
C2CB-09-0.0-5.0-20220510	SW8260B	Ethylbenzene	0.00051	mg/Kg	UJ	LCS<LCL
C2CB-09-0.0-5.0-20220510	SW8260B	Isopropylbenzene	0.00057	mg/Kg	UJ	LCS<LCL
C2CB-09-0.0-5.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0015	mg/Kg	UJ	LCS<LCL
C2CB-09-0.0-5.0-20220510	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	LCS<LCL
C2CB-09-0.0-5.0-20220510	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00073	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	Ethylbenzene	0.00051	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	Isopropylbenzene	0.00057	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0015	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	LCS<LCL
C2CB-09-5.0-10.0-20220510	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.0006	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	Ethylbenzene	0.00042	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	Isopropylbenzene	0.00047	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0012	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	o-Xylene	0.00094	mg/Kg	UJ	LCS<LCL
C2CB-10-0.0-5.0-20220510	SW8260B	Xylenes, Total	0.00094	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00078	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	Ethylbenzene	0.00054	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	Isopropylbenzene	0.00061	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0016	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	LCS<LCL
C2CB-10-10.0-15.0-20220510	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00084	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	Ethylbenzene	0.00058	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	Isopropylbenzene	0.00065	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0017	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	o-Xylene	0.0013	mg/Kg	UJ	LCS<LCL
C2CB-10-15.0-20.0-20220510	SW8260B	Xylenes, Total	0.0013	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00079	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	Ethylbenzene	0.00055	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	Isopropylbenzene	0.00062	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0016	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	LCS<LCL
C2CB-10-20.0-25.0-20220510	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00064	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	Ethylbenzene	0.00044	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	Isopropylbenzene	0.0005	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0013	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	o-Xylene	0.00099	mg/Kg	UJ	LCS<LCL
C2CB-10-5.0-10.0-20220510	SW8260B	Xylenes, Total	0.00099	mg/Kg	UJ	LCS<LCL
C2CB-10-GW-20220511	SW8015B-E	CA Extended Range Organics (>C28-C40)	190	ug/L	UJ	LCS<LCL
C2CB-10-GW-20220511-FD	SW8015B-E	CA Extended Range Organics (>C28-C40)	190	ug/L	UJ	LCS<LCL
C2CB-10-GW-20220511-FD	SW8260B	Toluene	0.13	ug/L	UJ	EB>RL
C2CB-13-15.0-20.0-20220511	SW8270SIM	1-Methylnaphthalene	0.0007	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	2-Methylnaphthalene	0.0023	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Acenaphthene	0.00067	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Acenaphthylene	0.00056	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Anthracene	0.00067	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Benzo[a]anthracene	0.002	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Benzo[a]pyrene	0.00094	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Benzo[b]fluoranthene	0.0013	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Benzo[g,h,i]perylene	0.00056	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Benzo[k]fluoranthene	0.00067	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Chrysene	0.0017	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Dibenz(a,h)anthracene	0.0008	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Fluoranthene	0.0016	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Fluorene	0.00056	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.00067	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Naphthalene	0.0018	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Phenanthrene	0.0018	mg/Kg	UJ	HTp>UCL
C2CB-13-15.0-20.0-20220511	SW8270SIM	Pyrene	0.0011	mg/Kg	UJ	HTp>UCL
C2CB-13-5.0-10.0-20220511	SW8015B-E	CA Diesel Range Organics (C10-C28)	9.7	mg/Kg	UJ	Sur>UCL
C2CB-13-5.0-10.0-20220511	SW8015B-E	CA Extended Range Organics (>C28-C40)	20	mg/Kg	UJ	Sur<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,1,1,2-Tetrachloroethane	0.00066	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,1,2-Trichloroethane	0.00059	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,1-Dichloropropene	0.00033	mg/Kg	UJ	SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2CB-13-5.0-10.0-20220511	SW8260B	1,2,3-Trichlorobenzene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2,3-Trichloropropane	0.0011	mg/Kg	UJ	MS<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2,4-Trichlorobenzene	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2,4-Trimethylbenzene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2-Dibromoethane	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2-Dichloroethane	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,2-Dichloropropane	0.00045	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,3,5-Trimethylbenzene	0.0009	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,3-Dichlorobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,3-Dichloropropane	0.00026	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	2-Butanone (MEK)	0.0099	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	2-Chlorotoluene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	2-Hexanone	0.0043	mg/Kg	UJ	MS<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	4-Chlorotoluene	0.0011	mg/Kg	UJ	MS<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Benzene	0.00043	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Bromochloromethane	0.00028	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Bromodichloromethane	0.0002	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Bromoform	0.00094	mg/Kg	UJ	MS<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Chlorobenzene	0.00028	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	cis-1,2-Dichloroethene	0.00067	mg/Kg	UJ	SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	cis-1,3-Dichloropropene	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Dibromochloromethane	0.00062	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Dibromomethane	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Ethylbenzene	0.00046	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Hexachlorobutadiene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Isopropylbenzene	0.00051	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	m-Xylene & p-Xylene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Naphthalene	0.002	mg/Kg	UJ	MS<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	n-Butylbenzene	0.0007	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	N-Propylbenzene	0.00085	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	o-Xylene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	p-Isopropyltoluene	0.00045	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	sec-Butylbenzene	0.00075	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Styrene	0.00083	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	tert-Butylbenzene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Tetrachloroethene	0.00045	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Toluene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	trans-1,3-Dichloropropene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Trichloroethene	0.00033	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Trichlorofluoromethane	0.00033	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-13-5.0-10.0-20220511	SW8260B	Xylenes, Total	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2CB-WC-S-20220325	SW8082	PCB-1016	0.00082	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1221	0.00047	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1232	0.00054	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1242	0.00039	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1248	0.00032	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1254	0.00041	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1260	0.00082	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1262	0.00052	mg/Kg	UJ	Sur<LCL
C2CB-WC-S-20220325	SW8082	PCB-1268	0.00028	mg/Kg	UJ	Sur<LCL
C2CB-WC-W-20220325	SW8015B-E	CA Diesel Range Organics (C10-C28)	2400	ug/L	J	Sur<LCL
C2CB-WC-W-20220325	SW8260B	Chloroethane	9.6	ug/L	UJ	CCV<LCL
C2TF-01-1.0-20220309	SW8015B-E	CA Diesel Range Organics (C10-C28)	90	mg/Kg	U	EB>RL
C2TF-01-1.0-20220309	SW8015B-E	CA Extended Range Organics (>C28-C40)	200	mg/Kg	U	EB>RL
C2TF-01-1.0-20220309	SW8082	PCB-1016	0.00082	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1221	0.00047	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1232	0.00055	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1242	0.00039	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1248	0.00032	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1254	0.00041	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1260	0.00082	mg/Kg	UJ	Sur<LCL
C2TF-01-1.0-20220309	SW8082	PCB-1268	0.00028	mg/Kg	UJ	Sur<LCL
C2TF-01-2.0-20220309	SW8260B	Ethylbenzene	0.00043	mg/Kg	UJ	SD<LCL
C2TF-01-2.0-20220309	SW8260B	m-Xylene & p-Xylene	0.00059	mg/Kg	UJ	SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2TF-01-2.0-20220309	SW8260B	o-Xylene	0.00097	mg/Kg	UJ	MS<LCL; SD<LCL
C2TF-WC-S-20220325	SW8082	PCB-1016	0.00075	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1221	0.00043	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1232	0.0005	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1242	0.00036	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1248	0.00029	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1254	0.00038	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1260	0.02	mg/Kg	J	LCSRPD
C2TF-WC-S-20220325	SW8082	PCB-1260	0.02	mg/Kg	J	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1262	0.00048	mg/Kg	UJ	Sur<LCL
C2TF-WC-S-20220325	SW8082	PCB-1268	0.00025	mg/Kg	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1016	0.06	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1221	0.074	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1232	0.062	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1242	0.058	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1248	0.052	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1254	0.074	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1260	0.06	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1262	0.062	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8082	PCB-1268	0.058	ug/L	UJ	Sur<LCL
C2TF-WC-W-20220325	SW8260B	Benzene	15	ug/L	J	Sur<LCL
C2TF-WC-W-20220325	SW8260B	Ethylbenzene	8.2	ug/L	J	Sur<LCL
C2TF-WC-W-20220325	SW8260B	m-Xylene & p-Xylene	26	ug/L	J	CCV>UCL; Sur<LCL
C2TF-WC-W-20220325	SW8260B	o-Xylene	29	ug/L	J	CCV>UCL; Sur<LCL
C2TF-WC-W-20220325	SW8260B	Toluene	5	ug/L	UJ	Sur<LCL
C2UT-02-12-20220308	SW8011	1,2,3-Trichloropropane	0.000086	mg/Kg	UJ	HTa>UCL
C2UT-02-12-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2UT-02-12-20220308	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL
C2UT-02-12-20220308	SW8260B	2-Butanone (MEK)	0.018	mg/Kg	J	Sur>UCL
C2UT-02-12-20220308	SW8260B	Acetone	0.1	mg/Kg	J	Sur>UCL
C2UT-02-12-20220308	SW8260B	Isopropylbenzene	0.00055	mg/Kg	UJ	LCS<LCL
C2UT-02-12-20220308	SW8270SIM	Fluorene	0.0024	mg/Kg	U	LB<RL
C2UT-02-16-20220308	SW8011	1,2,3-Trichloropropane	0.000081	mg/Kg	UJ	HTa>UCL
C2UT-02-16-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2UT-02-16-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2UT-02-16-20220308	SW8260B	1,1,1,2-Tetrachloroethane	0.00064	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1,1-Trichloroethane	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1,2,2-Tetrachloroethane	0.00097	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00056	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1,2-Trichloroethane	0.00027	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1-Dichloroethane	0.00021	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1-Dichloroethene	0.0012	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,1-Dichloropropene	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2,3-Trichlorobenzene	0.00065	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2,3-Trichloropropane	0.0011	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2,4-Trichlorobenzene	0.00045	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2,4-Trimethylbenzene	0.0013	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2-Dibromo-3-Chloropropane	0.0017	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2-Dibromoethane	0.00022	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,2-Dichloropropane	0.00043	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,3,5-Trimethylbenzene	0.00088	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,3-Dichlorobenzene	0.0012	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,3-Dichloropropane	0.00025	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	2,2-Dichloropropane	0.00036	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	2-Butanone (MEK)	0.0096	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	2-Chlorotoluene	0.001	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	2-Hexanone	0.0042	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	4-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0065	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Acetone	0.044	mg/Kg	J	Sur>UCL
C2UT-02-16-20220308	SW8260B	Benzene	0.00042	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Bromochloromethane	0.00027	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Bromodichloromethane	0.00019	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Bromoform	0.00091	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2UT-02-16-20220308	SW8260B	Bromomethane	0.00023	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Carbon disulfide	0.00022	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Carbon tetrachloride	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Chlorobenzene	0.00027	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Chloroethane	0.00081	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Chloroform	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Chloromethane	0.001	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	cis-1,2-Dichloroethene	0.00065	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	cis-1,3-Dichloropropene	0.00022	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Dibromochloromethane	0.00029	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Dibromomethane	0.00018	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Dichlorodifluoromethane	0.00053	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Ethylbenzene	0.00044	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Hexachlorobutadiene	0.00065	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Isopropylbenzene	0.0005	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2UT-02-16-20220308	SW8260B	Methyl tert-butyl ether	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Methylene Chloride	0.011	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	m-Xylene & p-Xylene	0.00061	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Naphthalene	0.0019	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	n-Butylbenzene	0.00068	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	N-Propylbenzene	0.00082	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	o-Xylene	0.001	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	p-Isopropyltoluene	0.00043	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	sec-Butylbenzene	0.00073	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Styrene	0.0008	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	tert-Butylbenzene	0.00071	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Tetrachloroethene	0.00043	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Toluene	0.0014	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	trans-1,2-Dichloroethene	0.00043	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	trans-1,3-Dichloropropene	0.00065	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Trichloroethene	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Trichlorofluoromethane	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Vinyl acetate	0.0016	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Vinyl chloride	0.00032	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8260B	Xylenes, Total	0.001	mg/Kg	UJ	Sur<LCL
C2UT-02-16-20220308	SW8270SIM	Fluorene	0.0013	mg/Kg	U	LB<RL
C2UT-02-18-20220308	SW8011	1,2,3-Trichloropropane	0.000081	mg/Kg	UJ	HTa>UCL
C2UT-02-18-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2UT-02-18-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2UT-02-18-20220308	SW8260B	Isopropylbenzene	0.00044	mg/Kg	UJ	LCS<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1016	0.00093	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1221	0.00053	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1232	0.00061	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1242	0.00044	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1248	0.00036	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1254	0.00046	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1260	0.00093	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1262	0.00059	mg/Kg	UJ	Sur<LCL
C2UT-02-PCB-20220308	SW8082	PCB-1268	0.00031	mg/Kg	UJ	Sur<LCL
C2UT-02W-17.5-20220308	SW8015B-E	CA Diesel Range Organics (C10-C28)	11	mg/Kg	UJ	HTp>UCL
C2UT-02W-17.5-20220308	SW8015B-E	CA Extended Range Organics (>C28-C40)	29	mg/Kg	J	HTp>UCL
C2UT-02W-17.5-20220308-FD	SW8015B-E	CA Diesel Range Organics (C10-C28)	28	mg/Kg	J	HTp>UCL
C2UT-02W-17.5-20220308-FD	SW8015B-E	CA Extended Range Organics (>C28-C40)	89	mg/Kg	J	HTp>UCL; SD<LCL
C2UT-02W-20220309	SW8011	1,2,3-Trichloropropane	0.005	ug/L	UJ	HTa>UCL
C2UT-02W-20220309	SW8011	1,2-Dibromo-3-Chloropropane	0.002	ug/L	UJ	HTa>UCL
C2UT-02W-20220309	SW8011	Ethylene Dibromide	0.002	ug/L	UJ	HTa>UCL
C2UT-02W-20220309	SW8015B-E	CA Diesel Range Organics (C10-C28)	420	ug/L	J	Sur<LCL
C2UT-02W-20220309	SW8260B	Acetone	4.1	ug/L	U	EB>RL
C2UT-02W-20220309	SW8260B	Carbon disulfide	0.36	ug/L	U	EB>RL
C2UT-02W-20220309	SW8260B	Ethylbenzene	0.052	ug/L	U	EB<RL
C2UT-02W-20220309	SW8260B	Toluene	0.079	ug/L	U	EB>RL
C2UT-02W-20220309	SW8270SIM	1-Methylnaphthalene	0.021	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	2-Methylnaphthalene	0.043	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Acenaphthene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Acenaphthylene	0.0098	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Anthracene	0.024	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Benzo[a]anthracene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Benzo[a]pyrene	0.012	ug/L	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2UT-02W-20220309	SW8270SIM	Benzo[b]fluoranthene	0.012	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Benzo[g,h,i]perylene	0.013	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Benzo[k]fluoranthene	0.013	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Chrysene	0.018	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Dibenz(a,h)anthracene	0.016	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Fluoranthene	0.02	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Fluorene	0.019	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Naphthalene	0.034	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Phenanthrene	0.034	ug/L	UJ	HTp>UCL
C2UT-02W-20220309	SW8270SIM	Pyrene	0.036	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8015B-E	CA Diesel Range Organics (C10-C28)	360	ug/L	U	EB>RL
C2UT-02W-20220309-FD	SW8260B	Carbon disulfide	0.31	ug/L	U	EB>RL
C2UT-02W-20220309-FD	SW8260B	o-Xylene	0.3	ug/L	U	EB>RL
C2UT-02W-20220309-FD	SW8260B	Toluene	0.059	ug/L	U	EB>RL
C2UT-02W-20220309-FD	SW8260B	Xylenes, Total	0.3	ug/L	U	EB>RL
C2UT-02W-20220309-FD	SW8270SIM	1-Methylnaphthalene	0.021	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	2-Methylnaphthalene	0.042	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Acenaphthene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Acenaphthylene	0.0097	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Anthracene	0.024	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Benzo[a]anthracene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Benzo[a]pyrene	0.012	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Benzo[b]fluoranthene	0.012	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Benzo[g,h,i]perylene	0.013	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Benzo[k]fluoranthene	0.013	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Chrysene	0.017	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Dibenz(a,h)anthracene	0.016	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Fluoranthene	0.019	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Fluorene	0.018	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.015	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Naphthalene	0.034	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Phenanthrene	0.034	ug/L	UJ	HTp>UCL
C2UT-02W-20220309-FD	SW8270SIM	Pyrene	0.036	ug/L	UJ	HTp>UCL
C2UT-10-15.0-17.0-20220509	SW8260B	Acetone	0.15	mg/Kg	J	LCS>UCL
C2UT-12-10.0-15.0-20220509	SW8260B	2-Butanone (MEK)	0.029	mg/Kg	J	LCS>UCL
C2UT-12-10.0-15.0-20220509	SW8260B	Acetone	0.16	mg/Kg	J	LCS>UCL
C2UT-12-15.0-20.0-20220509-FD	SW8260B	2-Butanone (MEK)	0.02	mg/Kg	J	LCS>UCL
C2UT-12-15.0-20.0-20220509-FD	SW8260B	Acetone	0.14	mg/Kg	J	LCS>UCL
C2UT-12-GW-20220510	SW8270SIM	Anthracene	0.3	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Benzo[a]anthracene	1.5	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Benzo[a]pyrene	1.1	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Benzo[b]fluoranthene	0.69	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Benzo[g,h,i]perylene	0.52	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Benzo[k]fluoranthene	0.12	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Chrysene	2.2	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Fluoranthene	0.9	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.22	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Phenanthrene	0.83	ug/L	J	FD>RPD
C2UT-12-GW-20220510	SW8270SIM	Pyrene	4.3	ug/L	J	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Anthracene	0.023	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Benzo[a]anthracene	0.015	ug/L	J	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Benzo[a]pyrene	0.023	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Benzo[b]fluoranthene	0.023	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Benzo[g,h,i]perylene	0.012	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Benzo[k]fluoranthene	0.012	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Chrysene	0.038	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Fluoranthene	0.056	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Indeno[1,2,3-cd]pyrene	0.014	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Phenanthrene	0.032	ug/L	UJ	FD>RPD
C2UT-12-GW-20220510-FD	SW8270SIM	Pyrene	0.034	ug/L	J	FD>RPD
C2UT-13-10.0-15.0-20220510	SW8260B	1,2-Dichloroethane	0.00021	mg/Kg	UJ	LCS<LCL
C2UT-13-10.0-15.0-20220510	SW8260B	cis-1,3-Dichloropropene	0.00021	mg/Kg	UJ	LCS<LCL
C2UT-13-10.0-15.0-20220510	SW8260B	Methylene Chloride	0.01	mg/Kg	UJ	LCS<LCL
C2UT-13-10.0-15.0-20220510	SW8260B	trans-1,3-Dichloropropene	0.00062	mg/Kg	UJ	LCS<LCL
C2UT-13-10.0-15.0-20220510	SW8260B	Vinyl chloride	0.00031	mg/Kg	UJ	LCS<LCL
C2UT-13-15.0-20.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00082	mg/Kg	UJ	LCS<LCL
C2UT-13-15.0-20.0-20220510	SW8260B	Ethylbenzene	0.00057	mg/Kg	UJ	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2UT-13-15.0-20.0-20220510	SW8260B	Isopropylbenzene	0.00064	mg/Kg	UJ	LCS<LCL
C2UT-13-15.0-20.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0016	mg/Kg	UJ	LCS<LCL
C2UT-13-15.0-20.0-20220510	SW8260B	o-Xylene	0.0013	mg/Kg	UJ	LCS<LCL
C2UT-13-15.0-20.0-20220510	SW8260B	Xylenes, Total	0.0013	mg/Kg	UJ	LCS<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1,1,2-Tetrachloroethane	0.00069	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1,1-Trichloroethane	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1,2,2-Tetrachloroethane	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00061	mg/Kg	UJ	SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1,2-Trichloroethane	0.00062	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1-Dichloroethane	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1-Dichloroethene	0.0013	mg/Kg	UJ	MS<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,1-Dichloropropene	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2,3-Trichlorobenzene	0.00071	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2,3-Trichloropropane	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2,4-Trichlorobenzene	0.00049	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2,4-Trimethylbenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2-Dibromoethane	0.00024	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2-Dichlorobenzene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2-Dichloroethane	0.00024	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,2-Dichloropropane	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,3,5-Trimethylbenzene	0.00095	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,3-Dichlorobenzene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,3-Dichloropropane	0.00027	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	2,2-Dichloropropane	0.00091	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	2-Hexanone	0.0046	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0071	mg/Kg	UJ	MS<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Benzene	0.00046	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Bromochloromethane	0.00029	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Bromodichloromethane	0.00021	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Bromoform	0.00099	mg/Kg	UJ	MS<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Bromomethane	0.00025	mg/Kg	UJ	SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Carbon disulfide	0.00024	mg/Kg	UJ	SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Carbon tetrachloride	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Chlorobenzene	0.00029	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Chloroform	0.00035	mg/Kg	UJ	MS<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	cis-1,2-Dichloroethene	0.00071	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	cis-1,3-Dichloropropene	0.00024	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Dibromochloromethane	0.00066	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Dibromomethane	0.00049	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Ethylbenzene	0.00048	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Hexachlorobutadiene	0.00071	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Isopropylbenzene	0.00054	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Methyl tert-butyl ether	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Naphthalene	0.0021	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	n-Butylbenzene	0.00074	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	N-Propylbenzene	0.00089	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	p-Isopropyltoluene	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	sec-Butylbenzene	0.00079	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Styrene	0.00087	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	tert-Butylbenzene	0.00078	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Tetrachloroethene	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Toluene	0.0015	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	trans-1,2-Dichloroethene	0.00047	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	trans-1,3-Dichloropropene	0.00071	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Trichloroethene	0.00035	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Trichlorofluoromethane	0.00035	mg/Kg	UJ	SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-13-20.0-25.0-20220510	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-13-GW-20220510	SW8015B-E	CA Extended Range Organics (>C28-C40)	200	ug/L	UJ	LCS<LCL
C2UT-14-0.0-5.0-20220509	SW8260B	1,1,1,2-Tetrachloroethane	0.00071	mg/Kg	UJ	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2UT-14-0-0-5.0-20220509	SW8260B	Ethylbenzene	0.0005	mg/Kg	UJ	LCS<LCL
C2UT-14-0-0-5.0-20220509	SW8260B	Isopropylbenzene	0.00056	mg/Kg	UJ	LCS<LCL
C2UT-14-0-0-5.0-20220509	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	LCS<LCL
C2UT-14-0-0-5.0-20220509	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	LCS<LCL
C2UT-14-0-0-5.0-20220509	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	LCS<LCL
C2UT-14-10-0-15.0-20220509	SW8260B	1,1,1,2-Tetrachloroethane	0.00064	mg/Kg	UJ	LCS<LCL
C2UT-14-10-0-15.0-20220509	SW8260B	Ethylbenzene	0.00044	mg/Kg	UJ	LCS<LCL
C2UT-14-10-0-15.0-20220509	SW8260B	Isopropylbenzene	0.0005	mg/Kg	UJ	LCS<LCL
C2UT-14-10-0-15.0-20220509	SW8260B	m-Xylene & p-Xylene	0.0013	mg/Kg	UJ	LCS<LCL
C2UT-14-10-0-15.0-20220509	SW8260B	o-Xylene	0.001	mg/Kg	UJ	LCS<LCL
C2UT-14-10-0-15.0-20220509	SW8260B	Xylenes, Total	0.001	mg/Kg	UJ	LCS<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,1,1,2-Tetrachloroethane	0.00099	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,1,1-Trichloroethane	0.0005	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,1,2,2-Tetrachloroethane	0.0015	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00087	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,1,2-Trichloroethane	0.00089	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,1-Dichloroethane	0.00032	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,1-Dichloroethene	0.0019	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,1-Dichloropropene	0.0005	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,2,3-Trichlorobenzene	0.001	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,2,3-Trichloropropane	0.0017	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,2,4-Trichlorobenzene	0.00071	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,2,4-Trimethylbenzene	0.002	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,2-Dibromoethane	0.00034	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,2-Dichlorobenzene	0.0022	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,2-Dichloroethane	0.00034	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,2-Dichloropropane	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,3,5-Trimethylbenzene	0.0014	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,3-Dichlorobenzene	0.0019	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,3-Dichloropropane	0.00039	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	1,4-Dichlorobenzene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	2,2-Dichloropropane	0.0013	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	2-Butanone (MEK)	0.015	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	2-Chlorotoluene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	2-Hexanone	0.0066	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Benzene	0.00066	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Bromobenzene	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Bromochloromethane	0.00042	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Bromodichloromethane	0.0003	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Bromoform	0.0014	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Carbon disulfide	0.00034	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Carbon tetrachloride	0.0005	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Chlorobenzene	0.00042	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Chloroform	0.0005	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	cis-1,2-Dichloroethene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	cis-1,3-Dichloropropene	0.00034	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Dibromochloromethane	0.00094	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Dibromomethane	0.00071	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Ethylbenzene	0.00069	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Hexachlorobutadiene	0.001	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Isopropylbenzene	0.00077	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Methyl tert-butyl ether	0.0005	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Methylene Chloride	0.017	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	m-Xylene & p-Xylene	0.002	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	n-Butylbenzene	0.0011	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	N-Propylbenzene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	o-Xylene	0.0015	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	p-Isopropyltoluene	0.00067	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	sec-Butylbenzene	0.0011	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Styrene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	tert-Butylbenzene	0.0011	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Tetrachloroethene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Toluene	0.0022	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	trans-1,2-Dichloroethene	0.00067	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	trans-1,3-Dichloropropene	0.001	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Trichloroethene	0.0005	mg/Kg	UJ	MS<LCL; SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Vinyl acetate	0.0025	mg/Kg	UJ	SD<LCL
C2UT-14-15-0-20.0-20220509	SW8260B	Xylenes, Total	0.0015	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2UT-14-20.0-23.0-20220509	SW8260B	1,1,1,2-Tetrachloroethane	0.00075	mg/Kg	UJ	LCS<LCL
C2UT-14-20.0-23.0-20220509	SW8260B	Ethylbenzene	0.00052	mg/Kg	UJ	LCS<LCL
C2UT-14-20.0-23.0-20220509	SW8260B	Isopropylbenzene	0.00058	mg/Kg	UJ	LCS<LCL
C2UT-14-20.0-23.0-20220509	SW8260B	m-Xylene & p-Xylene	0.0015	mg/Kg	UJ	LCS<LCL
C2UT-14-20.0-23.0-20220509	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	LCS<LCL
C2UT-14-20.0-23.0-20220509	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	1,1,1,2-Tetrachloroethane	0.00071	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	Ethylbenzene	0.0005	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	Isopropylbenzene	0.00056	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	LCS<LCL
C2UT-14-5.0-10.0-20220509	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	LCS<LCL
C2UT-14-GW-20220509	SW8015B-E	CA Diesel Range Organics (C10-C28)	450	ug/L	J	HTp>UCL
C2UT-14-GW-20220509	SW8015B-E	CA Diesel Range Organics (C10-C28)	180	ug/L	J	Sur<LCL
C2UT-14-GW-20220509	SW8015B-E	CA Extended Range Organics (>C28-C40)	210	ug/L	UJ	Sur<LCL
C2UT-14-GW-20220509	SW8270SIM	Benzo[a]pyrene	0.026	ug/L	UJ	MS<LCL
C2UT-WC-W-20220325	SW8260B	Chloroethane	9.6	ug/L	UJ	CCV<LCL
C2UT-WC-W-20220325	SW8260B	m-Xylene & p-Xylene	26	ug/L	J	CCV>UCL
C2UT-WC-W-20220325	SW8260B	o-Xylene	37	ug/L	J	CCV>UCL
C2UT-WC-W-20220325	SW8260B	Styrene	29	ug/L	J	CCV>UCL
C2UT-WC-W-20220325	SW8260B	Vinyl chloride	5.1	ug/L	J	ICVS>UCL
C2WP-01-0.5-20220308	SW6010B	Boron	5.2	mg/Kg	U	LB<RL
C2WP-01-0.5-20220308	SW6010B-STLC	Beryllium	0.0046	mg/L	U	LB<RL
C2WP-01-0.5-20220308	SW6010B-STLC	Copper	0.3	mg/L	U	LB<RL
C2WP-01-0.5-20220308	SW6020	Barium	190	mg/Kg	J	SD>UCL
C2WP-01-0.5-20220308	SW6020	Beryllium	0.79	mg/Kg	J	MSRPD
C2WP-01-0.5-20220308	SW6020	Chromium	62	mg/Kg	J	MS<LCL
C2WP-01-0.5-20220308	SW6020	Zinc	71	mg/Kg	J	MS<LCL
C2WP-01-0.5-20220308	SW7470A	Mercury, STLC	0.0008	mg/L	UJ	HTa>UCL
C2WP-01-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL
C2WP-01-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-01-0.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-01-0.5-20220308	SW8260B	1,1,1,2-Tetrachloroethane	0.00064	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1,1-Trichloroethane	0.00032	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1,2,2-Tetrachloroethane	0.00097	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00056	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1,2-Trichloroethane	0.00027	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1-Dichloroethane	0.00021	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1-Dichloroethene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,1-Dichloropropene	0.00032	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2,3-Trichlorobenzene	0.00065	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2,3-Trichloropropane	0.0011	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2,4-Trichlorobenzene	0.00045	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2,4-Trimethylbenzene	0.0013	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2-Dibromoethane	0.00022	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2-Dichloroethane	0.00022	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,2-Dichloropropane	0.00043	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,3,5-Trimethylbenzene	0.00088	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,3-Dichlorobenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,3-Dichloropropane	0.00025	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	2,2-Dichloropropane	0.00036	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	2-Butanone (MEK)	0.0096	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	2-Chlorotoluene	0.001	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	2-Hexanone	0.0042	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	4-Chlorotoluene	0.0011	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0065	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Benzene	0.00042	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromochloromethane	0.00027	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromodichloromethane	0.00019	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromoform	0.00091	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Bromomethane	0.00023	mg/Kg	UJ	MS<LCL
C2WP-01-0.5-20220308	SW8260B	Carbon disulfide	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Carbon tetrachloride	0.00032	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Chlorobenzene	0.00027	mg/Kg	UJ	SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-01-0.5-20220308	SW8260B	Chloroform	0.00032	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	cis-1,2-Dichloroethene	0.00065	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	cis-1,3-Dichloropropene	0.00022	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Dibromochloromethane	0.00029	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Dibromomethane	0.00018	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Ethylbenzene	0.00044	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Isopropylbenzene	0.00005	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Methyl tert-butyl ether	0.00032	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Methylene Chloride	0.011	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	m-Xylene & p-Xylene	0.00061	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Naphthalene	0.00019	mg/Kg	UJ	MS<LCL
C2WP-01-0.5-20220308	SW8260B	n-Butylbenzene	0.00068	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	N-Propylbenzene	0.00082	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	o-Xylene	0.00099	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	p-Isopropyltoluene	0.00043	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	sec-Butylbenzene	0.00072	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Styrene	0.00008	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	tert-Butylbenzene	0.00071	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Tetrachloroethene	0.00043	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Toluene	0.0014	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	trans-1,2-Dichloroethene	0.00043	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	trans-1,3-Dichloropropene	0.00065	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Trichloroethene	0.00032	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8260B	Trichlorofluoromethane	0.00032	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Vinyl acetate	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8260B	Xylenes, Total	0.00099	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00076	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	1,2-Dichlorobenzene	0.00063	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	1,3-Dichlorobenzene	0.00067	mg/Kg	J	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	1-Methylnaphthalene	0.00066	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	2,4,5-Trichlorophenol	0.001	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2,4-Dichlorophenol	0.0035	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2,4-Dimethylphenol	0.0076	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2,4-Dinitrotoluene	0.0054	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2,6-Dinitrotoluene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Chloronaphthalene	0.00063	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Chlorophenol	0.00061	mg/Kg	J	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Methylnaphthalene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Methylphenol	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Nitroaniline	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	2-Nitrophenol	0.00079	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	3 & 4 Methylphenol	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	3,3'-Dichlorobenzidine	0.011	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8270C	3-Nitroaniline	0.013	mg/Kg	UJ	SD<LCL
C2WP-01-0.5-20220308	SW8270C	4-Bromophenyl phenyl ether	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	4-Chloro-3-methylphenol	0.0042	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	4-Chloroaniline	0.017	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8270C	4-Chlorophenyl phenyl ether	0.0008	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	4-Nitroaniline	0.0063	mg/Kg	UJ	MS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8270C	Acenaphthene	0.00058	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Acenaphthylene	0.0011	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Anthracene	0.0033	mg/Kg	UJ	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Azobenzene	0.00063	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Benzo[a]anthracene	0.0055	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Benzo[a]pyrene	0.012	mg/Kg	J	ICV>UCL; LCS<LCL; MSRPD; SD<LCL
C2WP-01-0.5-20220308	SW8270C	Benzo[b]fluoranthene	0.069	mg/Kg	J	LCS<LCL; MS<LCL; SD<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Benzo[k]fluoranthene	0.021	mg/Kg	J	MSRPD
C2WP-01-0.5-20220308	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Bis(2-chloroethyl)ether	0.00098	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.037	mg/Kg	U	LB<RL; MSRPD (J)
C2WP-01-0.5-20220308	SW8270C	Carbazole	0.0047	mg/Kg	J	CCV>UCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Chrysene	0.065	mg/Kg	J	LCS<LCL; MS<LCL; SD<LCL; MSRPD

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-01-0.5-20220308	SW8270C	Dibenz(a,h)anthracene	0.0039	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Dibenzofuran	0.00093	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Diethyl phthalate	0.0028	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Dimethyl phthalate	0.00063	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Di-n-butyl phthalate	0.0085	mg/Kg	U	LB<RL; LCS<LCL; MSRPD (J)
C2WP-01-0.5-20220308	SW8270C	Fluoranthene	0.052	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Fluorene	0.00084	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Hexachlorobenzene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Hexachlorobutadiene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Hexachloroethane	0.00054	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Isophorone	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Naphthalene	0.00098	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-0.5-20220308	SW8270C	Nitrobenzene	0.0025	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0028	mg/Kg	UJ	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	N-Nitrosodiphenylamine	0.001	mg/Kg	UJ	LCS<LCL; SD<LCL
C2WP-01-0.5-20220308	SW8270C	Pentachlorophenol	0.012	mg/Kg	J	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Phenanthrene	0.01	mg/Kg	J	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Phenol	0.0039	mg/Kg	J	LCS<LCL
C2WP-01-0.5-20220308	SW8270C	Pyrene	0.049	mg/Kg	J	LCS<LCL; MSRPD
C2WP-01-2.5-20220308	SW6010B	Boron	5.3	mg/Kg	U	LB<RL
C2WP-01-2.5-20220308	SW8011	1,2,3-Trichloropropane	0.00008	mg/Kg	UJ	HTa>UCL
C2WP-01-2.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-01-2.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-01-2.5-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00077	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	1,2-Dichlorobenzene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	1,3-Dichlorobenzene	0.00061	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	1-Methylnaphthalene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,4,5-Trichlorophenol	0.001	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,4,6-Trichlorophenol	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,4-Dichlorophenol	0.0036	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,4-Dimethylphenol	0.0077	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,4-Dinitrotoluene	0.0055	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2,6-Dinitrotoluene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Chloronaphthalene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Chlorophenol	0.00051	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Methylnaphthalene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Methylphenol	0.0013	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Nitroaniline	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	2-Nitrophenol	0.00079	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	3 & 4 Methylphenol	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	4-Bromophenyl phenyl ether	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	4-Chloro-3-methylphenol	0.0042	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	4-Chlorophenyl phenyl ether	0.00081	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Acenaphthene	0.00059	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Acenaphthylene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Anthracene	0.002	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Azobenzene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Benzo[a]anthracene	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Benzo[a]pyrene	0.0017	mg/Kg	UJ	ICVS<LCL; LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Benzo[b]fluoranthene	0.0013	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Benzoic acid	0.16	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Bis(2-chloroethyl)ether	0.00098	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.044	mg/Kg	U	LB<RL
C2WP-01-2.5-20220308	SW8270C	Chrysene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Dibenz(a,h)anthracene	0.0015	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Dibenzofuran	0.00075	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Diethyl phthalate	0.0028	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Dimethyl phthalate	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Di-n-butyl phthalate	0.01	mg/Kg	U	LB<RL; LCS<LCL (J)
C2WP-01-2.5-20220308	SW8270C	Fluoranthene	0.0015	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Fluorene	0.00064	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Hexachlorobenzene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Hexachlorobutadiene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Hexachloroethane	0.00055	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Isophorone	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Naphthalene	0.00064	mg/Kg	UJ	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-01-2.5-20220308	SW8270C	Nitrobenzene	0.0026	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0028	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	N-Nitrosodiphenylamine	0.001	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Pentachlorophenol	0.0081	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Phenanthrene	0.00074	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Phenol	0.0029	mg/Kg	UJ	LCS<LCL
C2WP-01-2.5-20220308	SW8270C	Pyrene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW6010B	Boron	4.1	mg/Kg	U	LB<RL
C2WP-01-5.0-20220308	SW8011	1,2,3-Trichloropropane	0.00079	mg/Kg	UJ	HTa>UCL
C2WP-01-5.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2WP-01-5.0-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-01-5.0-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00069	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	1,2-Dichlorobenzene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	1,3-Dichlorobenzene	0.00055	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	1,4-Dichlorobenzene	0.00095	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	1-Methylnaphthalene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,4,5-Trichlorophenol	0.00093	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,4-Dichlorophenol	0.0032	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,4-Dimethylphenol	0.0069	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,4-Dinitrotoluene	0.0049	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2,6-Dinitrotoluene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Chloronaphthalene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Chlorophenol	0.00046	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Methylnaphthalene	0.001	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Methylphenol	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Nitroaniline	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	2-Nitrophenol	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	3 & 4 Methylphenol	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	4-Bromophenyl phenyl ether	0.001	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	4-Chloro-3-methylphenol	0.0038	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	4-Chlorophenyl phenyl ether	0.00072	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Acenaphthene	0.00053	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Acenaphthylene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Anthracene	0.0018	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Azobenzene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Benzo[a]anthracene	0.0013	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICV5<LCL; LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Benzo[b]fluoranthene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Bis(2-chloroethyl)ether	0.00088	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.04	mg/Kg	U	LB<RL
C2WP-01-5.0-20220308	SW8270C	Chrysene	0.0015	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Dibenz(a,h)anthracene	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Dibenzofuran	0.00068	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Diethyl phthalate	0.0025	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Dimethyl phthalate	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Di-n-butyl phthalate	0.0092	mg/Kg	U	LB<RL; LCS<LCL (J)
C2WP-01-5.0-20220308	SW8270C	Fluoranthene	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Fluorene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Hexachlorobenzene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Hexachlorobutadiene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Hexachloroethane	0.00049	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Isophorone	0.00096	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Naphthalene	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Nitrobenzene	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0025	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	N-Nitrosodiphenylamine	0.00092	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Pentachlorophenol	0.0083	mg/Kg	J	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Phenanthrene	0.00066	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Phenol	0.0026	mg/Kg	UJ	LCS<LCL
C2WP-01-5.0-20220308	SW8270C	Pyrene	0.0015	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW6010B	Boron	4.1	mg/Kg	U	LB<RL
C2WP-02-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.00082	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00078	mg/Kg	UJ	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-02-0.5-20220308	SW8270C	1,2-Dichlorobenzene	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	1,3-Dichlorobenzene	0.00062	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	1-Methylnaphthalene	0.0014	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,4,5-Trichlorophenol	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,4,6-Trichlorophenol	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,4-Dichlorophenol	0.0036	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,4-Dimethylphenol	0.0078	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,4-Dinitrotoluene	0.0056	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2,6-Dinitrotoluene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Chloronaphthalene	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Chlorophenol	0.00052	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Methylnaphthalene	0.0014	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Methylphenol	0.003	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Nitroaniline	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	2-Nitrophenol	0.0008	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	3 & 4 Methylphenol	0.0079	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	4-Bromophenyl phenyl ether	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	4-Chloro-3-methylphenol	0.0043	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	4-Chlorophenyl phenyl ether	0.00082	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Acenaphthene	0.0006	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Acenaphthylene	0.0013	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Anthracene	0.0023	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Azobenzene	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Benzo[a]anthracene	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Benzo[a]pyrene	0.012	mg/Kg	J	ICVS>UCL; LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Benzo[b]fluoranthene	0.073	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Benzo[b]fluoranthene	0.073	mg/Kg	J	FD>RPD
C2WP-02-0.5-20220308	SW8270C	Benzoic acid	0.16	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Bis(2-chloroethyl)ether	0.001	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.036	mg/Kg	U	LB<RL
C2WP-02-0.5-20220308	SW8270C	Carbazole	0.0062	mg/Kg	J	CCV>UCL
C2WP-02-0.5-20220308	SW8270C	Chrysene	0.069	mg/Kg	J	FD>RPD; LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Dibenz(a,h)anthracene	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Dibenzofuran	0.00077	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Diethyl phthalate	0.0029	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Dimethyl phthalate	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Di-n-butyl phthalate	0.0079	mg/Kg	U	LB<RL; LCS<LCL (J)
C2WP-02-0.5-20220308	SW8270C	Fluoranthene	0.08	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Fluorene	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Hexachlorobenzene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Hexachlorobutadiene	0.0019	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Hexachloroethane	0.00056	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Isophorone	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Naphthalene	0.0016	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Nitrobenzene	0.0026	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0029	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	N-Nitrosodiphenylamine	0.001	mg/Kg	UJ	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Pentachlorophenol	0.01	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Phenanthrene	0.013	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Phenol	0.025	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308	SW8270C	Pyrene	0.071	mg/Kg	J	LCS<LCL
C2WP-02-0.5-20220308-FD	SW6010B-STLC	Chromium	0.045	mg/L	U	LB<RL
C2WP-02-0.5-20220308-FD	SW6010B-STLC	Zinc	0.074	mg/L	U	LB<RL
C2WP-02-0.5-20220308-FD	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-02-0.5-20220308-FD	SW8011	1,2,3-Trichloropropane	0.000083	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308-FD	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-02-0.5-20220308-FD	SW8270C	Benzo[a]pyrene	0.018	mg/Kg	J	ICVS>UCL
C2WP-02-0.5-20220308-FD	SW8270C	Benzo[b]fluoranthene	0.17	mg/Kg	J	FD>RPD
C2WP-02-0.5-20220308-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.011	mg/Kg	U	LB<RL
C2WP-02-0.5-20220308-FD	SW8270C	Butyl benzyl phthalate	0.009	mg/Kg	U	LB<RL
C2WP-02-0.5-20220308-FD	SW8270C	Chrysene	0.12	mg/Kg	J	FD>RPD
C2WP-02-0.5-20220308-FD	SW8270C	Di-n-butyl phthalate	0.0036	mg/Kg	U	LB<RL
C2WP-02-0.5-20220308-FD	SW8270C	Fluoranthene	0.13	mg/Kg	J	FD>RPD
C2WP-02-0.5-20220308-FD	SW8270C	Pyrene	0.1	mg/Kg	J	FD>RPD
C2WP-02-1.5-20220308	SW6010B	Boron	5.4	mg/Kg	U	LB<RL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-02-1.5-20220308	SW6010B-STLC	Beryllium	0.0016	mg/L	U	LB<RL
C2WP-02-1.5-20220308	SW6010B-STLC	Copper	0.2	mg/L	U	LB<RL
C2WP-02-1.5-20220308	SW7470A	Mercury, STLC	0.0008	mg/L	UJ	HTa>UCL
C2WP-02-1.5-20220308	SW8011	1,2,3-Trichloropropane	0.000093	mg/Kg	UJ	HTa>UCL
C2WP-02-1.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-02-1.5-20220308	SW8011	Ethylene Dibromide	0.000017	mg/Kg	UJ	HTa>UCL
C2WP-02-1.5-20220308	SW8260B	Acetone	0.017	mg/Kg	J	Sur>UCL
C2WP-02-1.5-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00085	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	1,2-Dichlorobenzene	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	1,3-Dichlorobenzene	0.00068	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	1-Methylnaphthalene	0.00075	mg/Kg	J	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,4,5-Trichlorophenol	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,4,6-Trichlorophenol	0.0018	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,4-Dichlorophenol	0.004	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,4-Dimethylphenol	0.0085	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,4-Dinitrotoluene	0.0061	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2,6-Dinitrotoluene	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Chloronaphthalene	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Chlorophenol	0.00057	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Methylnaphthalene	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Methylphenol	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Nitroaniline	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	2-Nitrophenol	0.00088	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	3 & 4 Methylphenol	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	4-Bromophenyl phenyl ether	0.0013	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	4-Chloro-3-methylphenol	0.0047	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	4-Chlorophenyl phenyl ether	0.00089	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Acenaphthene	0.00065	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Acenaphthylene	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Anthracene	0.0023	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Azobenzene	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Benzo[a]anthracene	0.0016	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Benzo[a]pyrene	0.0018	mg/Kg	UJ	ICVS<LCL; LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Benzo[b]fluoranthene	0.0014	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Benzoic acid	0.17	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0025	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Bis(2-chloroethyl)ether	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.054	mg/Kg	U	LB<RL
C2WP-02-1.5-20220308	SW8270C	Chrysene	0.0018	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Dibenz(a,h)anthracene	0.0017	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Dibenzofuran	0.00083	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Diethyl phthalate	0.0031	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Dimethyl phthalate	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Di-n-butyl phthalate	0.0097	mg/Kg	U	LB<RL; LCS<LCL (I)
C2WP-02-1.5-20220308	SW8270C	Fluoranthene	0.0024	mg/Kg	J	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Fluorene	0.00071	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Hexachlorobenzene	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Hexachlorobutadiene	0.0021	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Hexachloroethane	0.00061	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Isophorone	0.0012	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Naphthalene	0.00098	mg/Kg	J	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Nitrobenzene	0.0028	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0031	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	N-Nitrosodiphenylamine	0.0011	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Pentachlorophenol	0.0089	mg/Kg	UJ	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Phenanthrene	0.0014	mg/Kg	J	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Phenol	0.01	mg/Kg	J	LCS<LCL
C2WP-02-1.5-20220308	SW8270C	Pyrene	0.0024	mg/Kg	J	LCS<LCL
C2WP-02-3.5-20220308	SW6010B	Boron	4.3	mg/Kg	U	LB<RL
C2WP-02-3.5-20220308	SW6010B-STLC	Chromium	0.038	mg/L	U	LB<RL
C2WP-02-3.5-20220308	SW6010B-STLC	Selenium	0.082	mg/L	U	LB<RL
C2WP-02-3.5-20220308	SW6010B-STLC	Silver	0.005	mg/L	U	LB<RL
C2WP-02-3.5-20220308	SW6010B-STLC	Zinc	0.041	mg/L	U	LB<RL
C2WP-02-3.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-02-3.5-20220308	SW8011	1,2,3-Trichloropropane	0.000079	mg/Kg	UJ	HTa>UCL
C2WP-02-3.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-02-3.5-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-02-3.5-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-02-3.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.013	mg/Kg	U	LB<RL
C2WP-02-3.5-20220308	SW8270C	Butyl benzyl phthalate	0.014	mg/Kg	U	LB<RL
C2WP-02-3.5-20220308	SW8270C	Di-n-butyl phthalate	0.0034	mg/Kg	U	LB<RL
C2WP-02-6.0-20220308	SW6010B-STLC	Chromium	0.042	mg/L	U	LB<RL
C2WP-02-6.0-20220308	SW6010B-STLC	Zinc	0.043	mg/L	U	LB<RL
C2WP-02-6.0-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-02-6.0-20220308	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2WP-02-6.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-02-6.0-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-02-6.0-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-02-6.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	LB<RL
C2WP-02-6.0-20220308	SW8270C	Butyl benzyl phthalate	0.0066	mg/Kg	U	LB<RL
C2WP-02-6.0-20220308	SW8270C	Di-n-butyl phthalate	0.0032	mg/Kg	U	LB<RL
C2WP-03-0.5-20220308	SW6010B-STLC	Chromium	0.16	mg/L	U	LB<RL
C2WP-03-0.5-20220308	SW6010B-STLC	Zinc	0.72	mg/L	U	LB<RL
C2WP-03-0.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-03-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000087	mg/Kg	UJ	HTa>UCL
C2WP-03-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-03-0.5-20220308	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL
C2WP-03-0.5-20220308	SW8260B	Isopropylbenzene	0.00055	mg/Kg	UJ	LCs<LCL
C2WP-03-0.5-20220308	SW8270C	Benzo[a]pyrene	0.0017	mg/Kg	UJ	ICVS<LCL
C2WP-03-0.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	LB<RL
C2WP-03-0.5-20220308	SW8270C	Butyl benzyl phthalate	0.0075	mg/Kg	U	LB<RL
C2WP-03-0.5-20220308	SW8270C	Di-n-butyl phthalate	0.0051	mg/Kg	U	LB<RL
C2WP-03-2.5-20220308	SW6010B-STLC	Chromium	0.13	mg/L	U	LB<RL
C2WP-03-2.5-20220308	SW6010B-STLC	Zinc	0.16	mg/L	U	LB<RL
C2WP-03-2.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-03-2.5-20220308	SW8011	1,2,3-Trichloropropane	0.000079	mg/Kg	UJ	HTa>UCL
C2WP-03-2.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-03-2.5-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-03-2.5-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-03-2.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.011	mg/Kg	U	LB<RL
C2WP-03-2.5-20220308	SW8270C	Butyl benzyl phthalate	0.0073	mg/Kg	U	LB<RL
C2WP-03-2.5-20220308	SW8270C	Di-n-butyl phthalate	0.0044	mg/Kg	U	LB<RL
C2WP-03-5.0-20220308	SW6010B	Boron	5.2	mg/Kg	U	LB<RL
C2WP-03-5.0-20220308	SW8011	1,2,3-Trichloropropane	0.000074	mg/Kg	UJ	HTa>UCL
C2WP-03-5.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-03-5.0-20220308	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-03-5.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.031	mg/Kg	U	LB<RL
C2WP-03-5.0-20220308	SW8270C	Butyl benzyl phthalate	0.0065	mg/Kg	U	LB<RL
C2WP-03-5.0-20220308	SW8270C	Di-n-butyl phthalate	0.0062	mg/Kg	U	LB<RL
C2WP-04-0.5-20220308	SW6010B-STLC	Chromium	0.12	mg/L	U	LB<RL
C2WP-04-0.5-20220308	SW6010B-STLC	Selenium	0.066	mg/L	U	LB<RL
C2WP-04-0.5-20220308	SW6010B-STLC	Zinc	0.65	mg/L	U	LB<RL
C2WP-04-0.5-20220308	SW7470A	Mercury, STLC	0.0013	mg/L	J	HTa>UCL; SD<LCL
C2WP-04-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL
C2WP-04-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-04-0.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-04-0.5-20220308	SW8270C	Benzo[a]pyrene	0.0017	mg/Kg	UJ	ICVS<LCL
C2WP-04-0.5-20220308	SW8270C-STLC	1,2,4-Trichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	1,2-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	1,3-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	1,4-Dichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4,5-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4,6-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4-Dichlorophenol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4-Dimethylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4-Dinitrophenol	0.1	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,4-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2,6-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Chloronaphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Chlorophenol	0.008	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Methylnaphthalene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Methylphenol	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Nitroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	2-Nitrophenol	0.0038	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	3,3'-Dichlorobenzidine	0.0048	mg/L	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-04-0.5-20220308	SW8270C-STLC	3-Methylphenol & 4-Methylphenol	0.05	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	3-Nitroaniline	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4,6-Dinitro-2-methylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Bromophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Chloro-3-methylphenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Chloroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Chlorophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Nitroaniline	0.0015	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	4-Nitrophenol	0.03	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Acenaphthene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Acenaphthylene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Anthracene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzo[a]anthracene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzo[a]pyrene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzo[b]fluoranthene	0.006	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzo[g,h,i]perylene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzo[k]fluoranthene	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzoic acid	0.1	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Benzyl alcohol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	bis (2-chloroisopropyl) ether	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Bis(2-chloroethoxy)methane	0.005	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Bis(2-chloroethyl)ether	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Bis(2-ethylhexyl) phthalate	0.005	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Butyl benzyl phthalate	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Chrysene	0.0035	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Dibenz(a,h)anthracene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Dibenzofuran	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Diethyl phthalate	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Dimethyl phthalate	0.0044	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Di-n-butyl phthalate	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Di-n-octyl phthalate	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Fluoranthene	0.0033	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Fluorene	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Hexachlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Hexachlorobutadiene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Hexachlorocyclopentadiene	0.025	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Hexachloroethane	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Indeno[1,2,3-cd]pyrene	0.017	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Isophorone	0.005	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Naphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Nitrobenzene	0.008	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	N-Nitrosodi-n-propylamine	0.007	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	N-Nitrosodiphenylamine	0.0027	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Pentachlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Phenanthrene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Phenol	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Pyrene	0.0014	mg/L	UJ	HTp>UCL
C2WP-04-0.5-20220308	SW8270C-STLC	Pyridine	0.004	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW6010B-STLC	Chromium	0.12	mg/L	U	LB<RL
C2WP-04-1.5-20220308	SW6010B-STLC	Zinc	0.081	mg/L	U	LB<RL
C2WP-04-1.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-04-1.5-20220308	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL
C2WP-04-1.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-04-1.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-04-1.5-20220308	SW8270C	2,4,5-Trichlorophenol	0.0011	mg/Kg	R	Sur<LCL
C2WP-04-1.5-20220308	SW8270C	2,4,6-Trichlorophenol	0.0078	mg/Kg	J	LCSRPD; Sur<LCL
C2WP-04-1.5-20220308	SW8270C	2,4-Dinitrophenol	0.076	mg/Kg	R	Sur<LCL
C2WP-04-1.5-20220308	SW8270C	4,6-Dinitro-2-methylphenol	0.013	mg/Kg	R	Sur<LCL
C2WP-04-1.5-20220308	SW8270C	4-Chloro-3-methylphenol	0.0043	mg/Kg	R	Sur<LCL
C2WP-04-1.5-20220308	SW8270C	4-Nitrophenol	0.022	mg/Kg	R	Sur<LCL
C2WP-04-1.5-20220308	SW8270C	Benzo[a]pyrene	0.0017	mg/Kg	UJ	ICVS<LCL
C2WP-04-1.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.097	mg/Kg	U	LB<RL
C2WP-04-1.5-20220308	SW8270C	Di-n-butyl phthalate	0.0052	mg/Kg	U	LB<RL
C2WP-04-1.5-20220308	SW8270C-STLC	1,2,4-Trichlorobenzene	0.007	mg/L	UJ	Sur<UCL
C2WP-04-1.5-20220308	SW8270C-STLC	1,2-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	1,3-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	1,4-Dichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,4,5-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-04-1.5-20220308	SW8270C-STLC	2,4,6-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,4-Dichlorophenol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,4-Dimethylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,4-Dinitrophenol	0.1	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,4-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2,6-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Chloronaphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Chlorophenol	0.008	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Methylnaphthalene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Methylphenol	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Nitroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	2-Nitrophenol	0.0038	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	3,3'-Dichlorobenzidine	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	3-Methylphenol & 4-Methylphenol	0.05	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	3-Nitroaniline	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4,6-Dinitro-2-methylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Bromophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Chloro-3-methylphenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Chloroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Chlorophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Nitroaniline	0.0015	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	4-Nitrophenol	0.03	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Acenaphthene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Acenaphthylene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Anthracene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzo[a]anthracene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzo[a]pyrene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzo[b]fluoranthene	0.006	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzo[g,h,i]perylene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzo[k]fluoranthene	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzoic acid	0.1	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Benzyl alcohol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	bis (2-chloroisopropyl) ether	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Bis(2-chloroethoxy)methane	0.005	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Bis(2-chloroethyl)ether	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Bis(2-ethylhexyl) phthalate	0.005	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Butyl benzyl phthalate	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Chrysene	0.0035	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Dibenz(a,h)anthracene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Dibenzofuran	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Diethyl phthalate	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Dimethyl phthalate	0.0044	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Di-n-butyl phthalate	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Di-n-octyl phthalate	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Fluoranthene	0.0033	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Fluorene	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Hexachlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Hexachlorobutadiene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Hexachlorocyclopentadiene	0.025	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Hexachloroethane	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Indeno[1,2,3-cd]pyrene	0.017	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Isophorone	0.005	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Naphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Nitrobenzene	0.008	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	N-Nitrosodi-n-propylamine	0.007	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	N-Nitrosodiphenylamine	0.0027	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Pentachlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Phenanthrene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Phenol	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Pyrene	0.0014	mg/L	UJ	HTp>UCL
C2WP-04-1.5-20220308	SW8270C-STLC	Pyridine	0.004	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW6010B	Boron	5.8	mg/Kg	U	LB<RL
C2WP-04-3.5-20220308	SW8011	1,2,3-Trichloropropane	0.000071	mg/Kg	UJ	HTa>UCL
C2WP-04-3.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-04-3.5-20220308	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-04-3.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.018	mg/Kg	U	LB<RL
C2WP-04-3.5-20220308	SW8270C-STLC	1,2,4-Trichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	1,2-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-04-3.5-20220308	SW8270C-STLC	1,3-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	1,4-Dichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4,5-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4,6-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4-Dichlorophenol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4-Dimethylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4-Dinitrophenol	0.1	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,4-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2,6-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Chloronaphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Chlorophenol	0.008	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Methylnaphthalene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Methylphenol	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Nitroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	2-Nitrophenol	0.0038	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	3,3'-Dichlorobenzidine	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	3-Methylphenol & 4-Methylphenol	0.05	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	3-Nitroaniline	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4,6-Dinitro-2-methylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Bromophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Chloro-3-methylphenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Chloroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Chlorophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Nitroaniline	0.0015	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	4-Nitrophenol	0.03	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Acenaphthene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Acenaphthylene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Anthracene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzo[a]anthracene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzo[a]pyrene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzo[b]fluoranthene	0.006	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzo[g,h,i]perylene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzo[k]fluoranthene	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzoic acid	0.1	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Benzyl alcohol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	bis (2-chloroisopropyl) ether	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Bis(2-chloroethoxy)methane	0.005	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Bis(2-chloroethyl)ether	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Bis(2-ethylhexyl) phthalate	0.005	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Butyl benzyl phthalate	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Chrysene	0.0035	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Dibenz(a,h)anthracene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Dibenzofuran	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Diethyl phthalate	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Dimethyl phthalate	0.0044	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Di-n-butyl phthalate	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Di-n-octyl phthalate	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Fluoranthene	0.0033	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Fluorene	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Hexachlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Hexachlorobutadiene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Hexachlorocyclopentadiene	0.025	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Hexachloroethane	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Indeno[1,2,3-cd]pyrene	0.017	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Isophorone	0.005	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Naphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Nitrobenzene	0.008	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	N-Nitrosodi-n-propylamine	0.007	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	N-Nitrosodiphenylamine	0.0027	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Pentachlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Phenanthrene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Phenol	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Pyrene	0.0014	mg/L	UJ	HTp>UCL
C2WP-04-3.5-20220308	SW8270C-STLC	Pyridine	0.004	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW6010B-STLC	Chromium	0.07	mg/L	U	LB<RL
C2WP-04-6.0-20220308	SW6010B-STLC	Selenium	0.096	mg/L	U	LB<RL
C2WP-04-6.0-20220308	SW6010B-STLC	Selenium	0.096	mg/L	U	LB<RL
C2WP-04-6.0-20220308	SW6010B-STLC	Zinc	0.22	mg/L	U	LB<RL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-04-6.0-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-04-6.0-20220308	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2WP-04-6.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-04-6.0-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-04-6.0-20220308	SW8270C	Benzo[a]pyrene	0.0085	mg/Kg	J	ICVS>UCL
C2WP-04-6.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.011	mg/Kg	U	LB<RL
C2WP-04-6.0-20220308	SW8270C	Butyl benzyl phthalate	0.0061	mg/Kg	U	LB<RL
C2WP-04-6.0-20220308	SW8270C	Di-n-butyl phthalate	0.0061	mg/Kg	U	LB<RL
C2WP-04-6.0-20220308	SW8270C-STLC	1,2,4-Trichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	1,2-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	1,3-Dichlorobenzene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	1,4-Dichlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4,5-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4,6-Trichlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4-Dichlorophenol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4-Dimethylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4-Dinitrophenol	0.1	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,4-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2,6-Dinitrotoluene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Chloronaphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Chlorophenol	0.008	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Methylnaphthalene	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Methylphenol	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Nitroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	2-Nitrophenol	0.0038	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	3,3'-Dichlorobenzidine	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	3-Methylphenol & 4-Methylphenol	0.05	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	3-Nitroaniline	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4,6-Dinitro-2-methylphenol	0.011	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Bromophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Chloro-3-methylphenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Chloroaniline	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Chlorophenyl phenyl ether	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Nitroaniline	0.0015	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	4-Nitrophenol	0.03	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Acenaphthene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Acenaphthylene	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Anthracene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzo[a]anthracene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzo[a]pyrene	0.0034	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzo[b]fluoranthene	0.006	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzo[g,h,i]perylene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzo[k]fluoranthene	0.0048	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzoic acid	0.1	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Benzyl alcohol	0.013	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	bis (2-chloroisopropyl) ether	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Bis(2-chloroethoxy)methane	0.005	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Bis(2-chloroethyl)ether	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Bis(2-ethylhexyl) phthalate	0.005	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Butyl benzyl phthalate	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Chrysene	0.0035	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Dibenz(a,h)anthracene	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Dibenzofuran	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Diethyl phthalate	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Dimethyl phthalate	0.0044	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Di-n-butyl phthalate	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Di-n-octyl phthalate	0.0075	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Fluoranthene	0.0033	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Fluorene	0.0047	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Hexachlorobenzene	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Hexachlorobutadiene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Hexachlorocyclopentadiene	0.025	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Hexachloroethane	0.007	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Indeno[1,2,3-cd]pyrene	0.017	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Isophorone	0.005	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Naphthalene	0.0065	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Nitrobenzene	0.008	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	N-Nitrosodi-n-propylamine	0.007	mg/L	UJ	HTp>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-04-6.0-20220308	SW8270C-STLC	N-Nitrosodiphenylamine	0.0027	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Pentachlorophenol	0.01	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Phenanthrene	0.005	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Phenol	0.0055	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Pyrene	0.0014	mg/L	UJ	HTp>UCL
C2WP-04-6.0-20220308	SW8270C-STLC	Pyridine	0.004	mg/L	UJ	HTp>UCL
C2WP-05-0.5-20220308	SW6010B-STLC	Chromium	0.084	mg/L	U	LB<RL
C2WP-05-0.5-20220308	SW6010B-STLC	Silver	0.0044	mg/L	U	LB<RL
C2WP-05-0.5-20220308	SW6010B-STLC	Zinc	0.31	mg/L	U	LB<RL
C2WP-05-0.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-05-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2WP-05-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-05-0.5-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-05-0.5-20220308	SW8270C	Benzo[a]pyrene	0.0016	mg/Kg	UJ	ICVS<LCL
C2WP-05-0.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.015	mg/Kg	U	LB<RL
C2WP-05-0.5-20220308	SW8270C	Butyl benzyl phthalate	0.0064	mg/Kg	U	LB<RL
C2WP-05-2.5-20220308	SW6010B-STLC	Chromium	0.1	mg/L	U	LB<RL
C2WP-05-2.5-20220308	SW6010B-STLC	Selenium	0.069	mg/L	U	LB<RL
C2WP-05-2.5-20220308	SW6010B-STLC	Zinc	0.059	mg/L	U	LB<RL
C2WP-05-2.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-05-2.5-20220308	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2WP-05-2.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-05-2.5-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-05-2.5-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-05-2.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.025	mg/Kg	U	LB<RL
C2WP-05-2.5-20220308	SW8270C	Butyl benzyl phthalate	0.0097	mg/Kg	U	LB<RL
C2WP-05-2.5-20220308	SW8270C	Di-n-butyl phthalate	0.0035	mg/Kg	U	LB<RL
C2WP-05-5.0-20220308	SW6010B-STLC	Chromium	0.085	mg/L	U	LB<RL
C2WP-05-5.0-20220308	SW6010B-STLC	Zinc	0.04	mg/L	U	LB<RL
C2WP-05-5.0-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-05-5.0-20220308	SW8011	1,2,3-Trichloropropane	0.000078	mg/Kg	UJ	HTa>UCL
C2WP-05-5.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-05-5.0-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-05-5.0-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-05-5.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.011	mg/Kg	U	LB<RL
C2WP-05-5.0-20220308	SW8270C	Di-n-butyl phthalate	0.0033	mg/Kg	U	LB<RL
C2WP-06-0.5-20220308	SW6010B-STLC	Chromium	0.12	mg/L	U	LB<RL
C2WP-06-0.5-20220308	SW6010B-STLC	Selenium	0.075	mg/L	U	LB<RL
C2WP-06-0.5-20220308	SW6010B-STLC	Vanadium	1.1	mg/L	J	FD>RPD
C2WP-06-0.5-20220308	SW6010B-STLC	Zinc	0.32	mg/L	U	LB<RL
C2WP-06-0.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-06-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000083	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308	SW8270C	Benzo[a]pyrene	0.0016	mg/Kg	UJ	ICVS<LCL
C2WP-06-0.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.018	mg/Kg	U	LB<RL
C2WP-06-0.5-20220308	SW8270C	Butyl benzyl phthalate	0.0085	mg/Kg	U	LB<RL
C2WP-06-0.5-20220308-FD	SW6010B-STLC	Vanadium	0.88	mg/L	J	FD>RPD
C2WP-06-0.5-20220308-FD	SW6010B-STLC	Zinc	0.46	mg/L	U	LB<RL
C2WP-06-0.5-20220308-FD	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-06-0.5-20220308-FD	SW8011	1,2,3-Trichloropropane	0.000081	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308-FD	SW8011	1,2-Dibromo-3-Chloropropane	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308-FD	SW8011	Ethylene Dibromide	0.000015	mg/Kg	UJ	HTa>UCL
C2WP-06-0.5-20220308-FD	SW8260B	Isopropylbenzene	0.00049	mg/Kg	UJ	LCS<LCL
C2WP-06-0.5-20220308-FD	SW8270C	1,2,4-Trichlorobenzene	0.00075	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	1,2-Dichlorobenzene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	1,3-Dichlorobenzene	0.0006	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	1,4-Dichlorobenzene	0.001	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	1-Methylnaphthalene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4,5-Trichlorophenol	0.001	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4-Dichlorophenol	0.0035	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4-Dimethylphenol	0.0075	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4-Dinitrophenol	0.073	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,4-Dinitrotoluene	0.0054	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2,6-Dinitrotoluene	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2-Chloronaphthalene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2-Chlorophenol	0.0005	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-06-0.5-20220308-FD	SW8270C	2-Methylnaphthalene	0.0011	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2-Methylphenol	0.0012	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2-Nitroaniline	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	2-Nitrophenol	0.00078	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	3 & 4 Methylphenol	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	3,3'-Dichlorobenzidine	0.011	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	3-Nitroaniline	0.013	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4,6-Dinitro-2-methylphenol	0.013	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Bromophenyl phenyl ether	0.0011	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Chloro-3-methylphenol	0.0041	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Chloroaniline	0.017	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Chlorophenyl phenyl ether	0.00079	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Nitroaniline	0.0063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	4-Nitrophenol	0.022	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Acenaphthene	0.00058	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Acenaphthylene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Anthracene	0.002	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Azobenzene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzo[a]anthracene	0.0014	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzo[a]pyrene	0.0016	mg/Kg	UJ	ICVS<LCL; Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzo[b]fluoranthene	0.0013	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzo[g,h,i]perylene	0.0023	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzo[k]fluoranthene	0.0018	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Benzyl alcohol	0.0063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	bis (2-chloroisopropyl) ether	0.00076	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Bis(2-chloroethoxy)methane	0.0023	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Bis(2-chloroethyl)ether	0.00096	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.023	mg/Kg	U	LB<RL; Sur<LCL (J)
C2WP-06-0.5-20220308-FD	SW8270C	Butyl benzyl phthalate	0.0086	mg/Kg	U	LB<RL; Sur<LCL (J)
C2WP-06-0.5-20220308-FD	SW8270C	Carbazole	0.00091	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Chrysene	0.0064	mg/Kg	J	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Dibenz(a,h)anthracene	0.0015	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Dibenzofuran	0.00074	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Diethyl phthalate	0.0028	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Dimethyl phthalate	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Di-n-butyl phthalate	0.0058	mg/Kg	U	LB<RL; Sur<LCL (J)
C2WP-06-0.5-20220308-FD	SW8270C	Di-n-octyl phthalate	0.014	mg/Kg	U	LB<RL; Sur<LCL (J)
C2WP-06-0.5-20220308-FD	SW8270C	Fluoranthene	0.0025	mg/Kg	J	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Fluorene	0.00063	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Hexachlorobenzene	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Hexachlorobutadiene	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Hexachlorocyclopentadiene	0.00096	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Hexachloroethane	0.00054	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Indeno[1,2,3-cd]pyrene	0.0015	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Isophorone	0.0011	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Naphthalene	0.00081	mg/Kg	J	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Nitrobenzene	0.0025	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	N-Nitrosodi-n-propylamine	0.0028	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	N-Nitrosodiphenylamine	0.001	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Pentachlorophenol	0.53	mg/Kg	J	LCS<LCL; Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Phenanthrene	0.0029	mg/Kg	J	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Phenol	0.0029	mg/Kg	UJ	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Pyrene	0.0045	mg/Kg	J	Sur<LCL
C2WP-06-0.5-20220308-FD	SW8270C	Pyridine	0.02	mg/Kg	UJ	Sur<LCL
C2WP-06-1.5-20220308	SW6010B-STLC	Zinc	0.14	mg/L	U	LB<RL
C2WP-06-1.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-06-1.5-20220308	SW8011	1,2,3-Trichloropropane	0.00079	mg/Kg	UJ	HTa>UCL
C2WP-06-1.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2WP-06-1.5-20220308	SW8011	Ethylene Dibromide	0.00014	mg/Kg	UJ	HTa>UCL
C2WP-06-1.5-20220308	SW8270C	4-Nitroaniline	0.0083	mg/Kg	J	LCS>UCL
C2WP-06-1.5-20220308	SW8270C	Benzo[a]pyrene	0.0016	mg/Kg	UJ	ICVS<LCL
C2WP-06-1.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.014	mg/Kg	U	LB<RL
C2WP-06-1.5-20220308	SW8270C	Butyl benzyl phthalate	0.007	mg/Kg	U	LB<RL
C2WP-06-1.5-20220308	SW8270C	Di-n-butyl phthalate	0.0038	mg/Kg	U	LB<RL
C2WP-06-3.5-20220308	SW6010B-STLC	Zinc	0.042	mg/L	U	LB<RL
C2WP-06-3.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-06-3.5-20220308	SW8011	1,2,3-Trichloropropane	0.00079	mg/Kg	UJ	HTa>UCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-06-3.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00012	mg/Kg	UJ	HTa>UCL
C2WP-06-3.5-20220308	SW8011	Ethylene Dibromide	0.00014	mg/Kg	UJ	HTa>UCL
C2WP-06-3.5-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-06-3.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	U	LB<RL
C2WP-06-3.5-20220308	SW8270C	Butyl benzyl phthalate	0.0093	mg/Kg	U	LB<RL
C2WP-06-3.5-20220308	SW8270C	Di-n-butyl phthalate	0.0041	mg/Kg	U	LB<RL
C2WP-06-6.0-20220308	SW6010B-STLC	Zinc	0.057	mg/L	U	LB<RL
C2WP-06-6.0-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-06-6.0-20220308	SW8011	1,2,3-Trichloropropane	0.00068	mg/Kg	UJ	HTa>UCL
C2WP-06-6.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C2WP-06-6.0-20220308	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-06-6.0-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-06-6.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.015	mg/Kg	U	LB<RL
C2WP-06-6.0-20220308	SW8270C	Butyl benzyl phthalate	0.0065	mg/Kg	U	LB<RL
C2WP-07-0.5-20220308	SW6010B-STLC	Zinc	0.3	mg/L	U	LB<RL
C2WP-07-0.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-07-0.5-20220308	SW8011	1,2,3-Trichloropropane	0.000085	mg/Kg	UJ	HTa>UCL
C2WP-07-0.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-07-0.5-20220308	SW8011	Ethylene Dibromide	0.000016	mg/Kg	UJ	HTa>UCL
C2WP-07-0.5-20220308	SW8260B	Isopropylbenzene	0.00067	mg/Kg	UJ	LCS<LCL
C2WP-07-0.5-20220308	SW8270C	Benzo[a]pyrene	0.0017	mg/Kg	UJ	ICVS<LCL
C2WP-07-0.5-20220308	SW8270C	Butyl benzyl phthalate	0.01	mg/Kg	U	LB<RL
C2WP-07-0.5-20220308	SW8270C	Di-n-butyl phthalate	0.0047	mg/Kg	U	LB<RL
C2WP-07-2.5-20220308	SW6010B-STLC	Zinc	0.25	mg/L	U	LB<RL
C2WP-07-2.5-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-07-2.5-20220308	SW8011	1,2,3-Trichloropropane	0.000076	mg/Kg	UJ	HTa>UCL
C2WP-07-2.5-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-07-2.5-20220308	SW8011	Ethylene Dibromide	0.000014	mg/Kg	UJ	HTa>UCL
C2WP-07-2.5-20220308	SW8260B	Isopropylbenzene	0.00051	mg/Kg	UJ	LCS<LCL
C2WP-07-2.5-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-07-2.5-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.054	mg/Kg	U	LB<RL
C2WP-07-2.5-20220308	SW8270C	Butyl benzyl phthalate	0.016	mg/Kg	U	LB<RL
C2WP-07-2.5-20220308	SW8270C	Di-n-butyl phthalate	0.0057	mg/Kg	U	LB<RL
C2WP-07-5.0-20220308	SW6010B-STLC	Zinc	0.065	mg/L	U	LB<RL
C2WP-07-5.0-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-07-5.0-20220308	SW8011	1,2,3-Trichloropropane	0.000068	mg/Kg	UJ	HTa>UCL
C2WP-07-5.0-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
C2WP-07-5.0-20220308	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
C2WP-07-5.0-20220308	SW8260B	Isopropylbenzene	0.00063	mg/Kg	UJ	LCS<LCL
C2WP-07-5.0-20220308	SW8270C	Benzo[a]pyrene	0.0015	mg/Kg	UJ	ICVS<LCL
C2WP-07-5.0-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.019	mg/Kg	U	LB<RL
C2WP-07-5.0-20220308	SW8270C	Butyl benzyl phthalate	0.0086	mg/Kg	U	LB<RL
C2WP-WC-20220308	SW6010B-STLC	Zinc	0.12	mg/L	U	LB<RL
C2WP-WC-20220308	SW7470A	Mercury, STLC	0.0003	mg/L	UJ	HTa>UCL
C2WP-WC-20220308	SW8011	1,2,3-Trichloropropane	0.00007	mg/Kg	UJ	HTa>UCL
C2WP-WC-20220308	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
C2WP-WC-20220308	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
C2WP-WC-20220308	SW8260B	Isopropylbenzene	0.00068	mg/Kg	UJ	LCS<LCL
C2WP-WC-20220308	SW8270C	1,2,4-Trichlorobenzene	0.00071	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	1,2-Dichlorobenzene	0.00059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	1,3-Dichlorobenzene	0.00056	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	1,4-Dichlorobenzene	0.00098	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	2,4,5-Trichlorophenol	0.00095	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2WP-WC-20220308	SW8270C	2,4-Dinitrophenol	0.069	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	4,6-Dinitro-2-methylphenol	0.012	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	4-Chloro-3-methylphenol	0.0039	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	4-Chloroaniline	0.016	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	4-Nitrophenol	0.02	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Acenaphthene	0.00054	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Acenaphthylene	0.00059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Anthracene	0.0019	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Azobenzene	0.00059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Benzo[a]anthracene	0.0013	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Benzo[a]pyrene	0.0057	mg/Kg	J	ICVS>UCL; Sur<LCL
C2WP-WC-20220308	SW8270C	Benzo[b]fluoranthene	0.016	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Benzo[g,h,i]perylene	0.0047	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Benzo[k]fluoranthene	0.0059	mg/Kg	J	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-WC-20220308	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	LCS<LCL
C2WP-WC-20220308	SW8270C	Benzyl alcohol	0.0059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	bis (2-chloroisopropyl) ether	0.00072	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Bis(2-chloroethoxy)methane	0.0021	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Bis(2-chloroethyl)ether	0.00091	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Bis(2-ethylhexyl) phthalate	0.018	mg/Kg	U	LB<RL
C2WP-WC-20220308	SW8270C	Butyl benzyl phthalate	0.027	mg/Kg	U	LB<RL
C2WP-WC-20220308	SW8270C	Chrysene	0.017	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Di-n-butyl phthalate	0.0041	mg/Kg	U	LB<RL
C2WP-WC-20220308	SW8270C	Fluoranthene	0.011	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Fluorene	0.00059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Hexachlorobutadiene	0.0018	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Hexachloroethane	0.00051	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Indeno[1,2,3-cd]pyrene	0.0061	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Isophorone	0.00099	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Naphthalene	0.00059	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Nitrobenzene	0.0024	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	N-Nitrosodi-n-propylamine	0.0026	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Pentachlorophenol	0.94	mg/Kg	J	LCS<LCL; Sur<LCL
C2WP-WC-20220308	SW8270C	Phenanthrene	0.0064	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Phenol	0.0027	mg/Kg	UJ	Sur<LCL
C2WP-WC-20220308	SW8270C	Pyrene	0.013	mg/Kg	J	Sur<LCL
C2WP-WC-20220308	SW8270C	Pyridine	0.019	mg/Kg	UJ	Sur<LCL
C2WP-WC-W-20220325	SW6010B	Boron	210	ug/L	U	LB<RL
C2WP-WC-W-20220325	SW8082	PCB-1016	0.062	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1221	0.076	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1232	0.064	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1242	0.06	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1248	0.053	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1254	0.076	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1260	0.062	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1262	0.064	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8082	PCB-1268	0.06	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1,1,2-Tetrachloroethane	3.8	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1,1-Trichloroethane	2.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1,2,2-Tetrachloroethane	5.6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	8.8	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1,2-Trichloroethane	7	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1-Dichloroethane	2.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1-Dichloroethene	3.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,1-Dichloropropene	8.4	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2,3-Trichlorobenzene	82	ug/L	J	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2,3-Trichloropropane	5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2,4-Trichlorobenzene	17	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2,4-Trimethylbenzene	20	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2-Dibromo-3-Chloropropane	17	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2-Dibromoethane	2.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2-Dichlorobenzene	3.8	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2-Dichloroethane	4.3	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,2-Dichloropropane	6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,3,5-Trimethylbenzene	15	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,3-Dichlorobenzene	5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,3-Dichloropropane	2.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	1,4-Dichlorobenzene	5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	2,2-Dichloropropane	6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	2-Butanone (MEK)	250	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	2-Chlorotoluene	12	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	2-Hexanone	94	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	4-Chlorotoluene	12	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	4-Methyl-2-pentanone (MIBK)	170	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Acetone	360	ug/L	J	ICVS>UCL; Sur<LCL
C2WP-WC-W-20220325	SW8260B	Benzene	11	ug/L	J	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Bromobenzene	3.8	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Bromochloromethane	5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Bromodichloromethane	6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Bromoform	16	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Bromomethane	13	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Carbon disulfide	8.3	ug/L	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WP-WC-W-20220325	SW8260B	Carbon tetrachloride	2.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Chlorobenzene	6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Chloroethane	9.6	ug/L	UJ	CCV<LCL; Sur<LCL
C2WP-WC-W-20220325	SW8260B	Chloroform	3.2	ug/L	J	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Chloromethane	14	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	cis-1,2-Dichloroethene	5.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	cis-1,3-Dichloropropene	9	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Dibromochloromethane	5.5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Dibromomethane	6.2	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Dichlorodifluoromethane	13	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Ethylbenzene	8.1	ug/L	J	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Hexachlorobutadiene	6.7	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Isopropylbenzene	19	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Methyl tert-butyl ether	7	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Methylene Chloride	120	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	m-Xylene & p-Xylene	26	ug/L	J	CCV>UCL; Sur<LCL
C2WP-WC-W-20220325	SW8260B	Naphthalene	22	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	n-Butylbenzene	23	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	N-Propylbenzene	9.1	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	o-Xylene	15	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	p-Isopropyltoluene	15	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	sec-Butylbenzene	27	ug/L	U	LB<RL; TB<RL; Sur<LCL (J)
C2WP-WC-W-20220325	SW8260B	Styrene	19	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	tert-Butylbenzene	26	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Tetrachloroethene	8.4	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Toluene	5	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	trans-1,2-Dichloroethene	3.3	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	trans-1,3-Dichloropropene	9.2	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Trichloroethene	6.6	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Trichlorofluoromethane	12	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Vinyl acetate	44	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Vinyl chloride	1.3	ug/L	UJ	Sur<LCL
C2WP-WC-W-20220325	SW8260B	Xylenes, Total	26	ug/L	J	Sur<LCL
C2WP-WC-W-20220325	SW8270C	4-Nitrophenol	1.7	ug/L	UJ	CCV<LCL
C2WP-WC-W-20220325	SW8270C	Benzoic acid	1.3	ug/L	UJ	CCV<LCL
C2WP-WC-W-20220325	SW8270C	Hexachlorocyclopentadiene	0.14	ug/L	UJ	LCS<LCL
C2WP-WC-W-20220325	SW8270C	Pyridine	1	ug/L	R	LCS<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0079	mg/Kg	UJ	LCS<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2,4-Dichlorophenol	0.017	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2,4-Dimethylphenol	0.037	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2-Chlorophenol	0.0024	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2-Methylphenol	0.006	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	2-Nitrophenol	0.0038	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	3 & 4 Methylphenol	0.0091	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	Benzoic acid	0.74	mg/Kg	UJ	Sur<LCL
C2WS-02-0.0-0.5-20220512	SW8270C	Phenol	0.014	mg/Kg	UJ	Sur<LCL
C2WS-02-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2WS-04-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.036	mg/Kg	UJ	LCS<LCL
C2WS-04-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0014	mg/Kg	UJ	LCS<LCL
C2WS-05-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.015	mg/Kg	UJ	LCS<LCL
C2WS-05-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	1,2,4-Trichlorobenzene	0.0069	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	1,2-Dichlorobenzene	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	1,3-Dichlorobenzene	0.0055	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	1,4-Dichlorobenzene	0.0095	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	1-Methylnaphthalene	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.015	mg/Kg	UJ	LCS<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2,4-Dichlorophenol	0.032	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2,4-Dimethylphenol	0.069	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2,4-Dinitrotoluene	0.049	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2,6-Dinitrotoluene	0.017	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Chloronaphthalene	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Chlorophenol	0.0046	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Methylnaphthalene	0.01	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Methylphenol	0.011	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Nitroaniline	0.017	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	2-Nitrophenol	0.0071	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	3 & 4 Methylphenol	0.017	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WS-06-0.0-0.5-20220512	SW8270C	3,3'-Dichlorobenzidine	0.097	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	3-Nitroaniline	0.11	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	4-Bromophenyl phenyl ether	0.01	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	4-Chloroaniline	0.15	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	4-Chlorophenyl phenyl ether	0.0072	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	4-Nitroaniline	0.057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Azobenzene	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Benzoic acid	1.4	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Benzyl alcohol	0.057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	bis (2-chloroisopropyl) ether	0.007	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Bis(2-chloroethoxy)methane	0.021	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Bis(2-chloroethyl)ether	0.0089	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Bis(2-ethylhexyl) phthalate	0.082	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Butyl benzyl phthalate	0.059	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Carbazole	0.33	mg/Kg	J	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Dibenz(a,h)anthracene	0.043	mg/Kg	J	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Dibenzofuran	0.014	mg/Kg	J	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Diethyl phthalate	0.025	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Dimethyl phthalate	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Di-n-butyl phthalate	0.031	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Di-n-octyl phthalate	0.075	mg/Kg	J	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Hexachlorobenzene	0.017	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Hexachlorobutadiene	0.017	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Hexachlorocyclopentadiene	0.0089	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Hexachloroethane	0.0049	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Isophorone	0.0097	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Nitrobenzene	0.023	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	N-Nitrosodi-n-propylamine	0.025	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	N-Nitrosodiphenylamine	0.0092	mg/Kg	UJ	Sur<LCL
C2WS-06-0.0-0.5-20220512	SW8270C	Phenol	0.026	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW6020	Arsenic	8.9	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW6020	Barium	270	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW6020	Beryllium	0.62	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW6020	Iron	36000	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW6020	Manganese	1700	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	1,2,4-Trichlorobenzene	0.0079	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	1,2-Dichlorobenzene	0.0066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	1,3-Dichlorobenzene	0.0063	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	1,4-Dichlorobenzene	0.011	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	1-Methylnaphthalene	0.025	mg/Kg	J	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.017	mg/Kg	UJ	LCS<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2,4-Dichlorophenol	0.037	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2,4-Dimethylphenol	0.079	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2,4-Dinitrotoluene	0.057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2,6-Dinitrotoluene	0.02	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Chloronaphthalene	0.0066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Chlorophenol	0.0053	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Methylnaphthalene	0.016	mg/Kg	J	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Methylphenol	0.013	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Nitroaniline	0.02	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	2-Nitrophenol	0.0082	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	3 & 4 Methylphenol	0.02	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	3,3'-Dichlorobenzidine	0.11	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	3-Nitroaniline	0.13	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	4-Bromophenyl phenyl ether	0.012	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	4-Chloroaniline	0.18	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	4-Chlorophenyl phenyl ether	0.0083	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	4-Nitroaniline	0.066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Acenaphthylene	0.22	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Anthracene	0.69	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Azobenzene	0.0066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Benzo[a]anthracene	1.1	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Benzo[b]fluoranthene	1.3	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Benzoic acid	1.6	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Benzyl alcohol	0.066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	bis (2-chloroisopropyl) ether	0.008	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Bis(2-chloroethoxy)methane	0.024	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Bis(2-chloroethyl)ether	0.01	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WS-06-0.5-1.5-20220512	SW8270C	Bis(2-ethylhexyl) phthalate	0.094	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Butyl benzyl phthalate	0.067	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Carbazole	1.2	mg/Kg	J	FD>RPD; Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Chrysene	3.2	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Dibenz(a,h)anthracene	0.073	mg/Kg	J	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Dibenzofuran	0.096	mg/Kg	J	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Diethyl phthalate	0.029	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Dimethyl phthalate	0.0066	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Di-n-butyl phthalate	0.036	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Di-n-octyl phthalate	0.016	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Fluoranthene	11	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Fluorene	0.16	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Hexachlorobenzene	0.02	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Hexachlorobutadiene	0.02	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Hexachlorocyclopentadiene	0.01	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Hexachloroethane	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Isophorone	0.011	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Nitrobenzene	0.026	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	N-Nitrosodi-n-propylamine	0.029	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	N-Nitrosodiphenylamine	0.011	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Pentachlorophenol	4.2	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Phenanthrene	5.4	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512	SW8270C	Phenol	0.03	mg/Kg	UJ	Sur<LCL
C2WS-06-0.5-1.5-20220512	SW8270C	Pyrene	6.7	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW6020	Arsenic	6.2	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW6020	Barium	190	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW6020	Beryllium	0.45	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW6020	Iron	28000	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW6020	Manganese	1100	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	2,4,6-Trichlorophenol	0.0078	mg/Kg	UJ	LCS<LCL
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Acenaphthylene	0.084	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Anthracene	0.11	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Benzo[a]anthracene	0.32	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Benzo[b]fluoranthene	0.53	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Carbazole	0.24	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Chrysene	0.88	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Fluoranthene	2.7	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Fluorene	0.019	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Pentachlorophenol	1.4	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Phenanthrene	0.54	mg/Kg	J	FD>RPD
C2WS-06-0.5-1.5-20220512-FD	SW8270C	Pyrene	1.8	mg/Kg	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Arsenic	8.6	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Barium	110	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Beryllium	0.55	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Chromium	14	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Cobalt	7.5	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Copper	31	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Iron	26000	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Lead	24	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Manganese	590	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Molybdenum	1.2	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Nickel	11	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Vanadium	60	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW6020	Zinc	54	ug/L	J	FD>RPD
C2WS-06-GW-20220512	SW8270C	Benzo[b]fluoranthene	0.28	ug/L	J	LCSRPD
C2WS-06-GW-20220512	SW8270C	Benzoic acid	1.3	ug/L	UJ	LCS<LCL
C2WS-06-GW-20220512-FD	SW6020	Arsenic	37	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Barium	770	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Beryllium	3.1	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Chromium	80	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Cobalt	51	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Copper	160	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Iron	120000	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Lead	240	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Manganese	4700	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Molybdenum	3.5	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Nickel	63	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW6020	Vanadium	330	ug/L	J	FD>RPD

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WS-06-GW-20220512-FD	SW6020	Zinc	270	ug/L	J	FD>RPD
C2WS-06-GW-20220512-FD	SW8270C	Benzo[b]fluoranthene	0.23	ug/L	J	LCSRPD
C2WS-06-GW-20220512-FD	SW8270C	Benzoic acid	1.4	ug/L	UJ	LCS<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2,4,5-Trichlorophenol	0.0045	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0071	mg/Kg	UJ	LCS<LCL; Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2,4-Dichlorophenol	0.015	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2,4-Dimethylphenol	0.033	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2,4-Dinitrophenol	0.32	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2-Chlorophenol	0.0022	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2-Methylphenol	0.0054	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	2-Nitrophenol	0.0034	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	3 & 4 Methylphenol	0.0082	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	4,6-Dinitro-2-methylphenol	0.055	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	4-Chloro-3-methylphenol	0.018	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	4-Nitrophenol	0.095	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	Benzoic acid	0.67	mg/Kg	UJ	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	Pentachlorophenol	0.18	mg/Kg	J	Sur<LCL
C2WS-07-0.0-0.5-20220512	SW8270C	Phenol	0.013	mg/Kg	UJ	Sur<LCL
C2WS-08-0.0-0.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0017	mg/Kg	UJ	LCS<LCL
C2WS-08-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2WS-08-1.5-2.5-20220512	SW6020	Barium	220	mg/Kg	J	MS<LCL
C2WS-08-1.5-2.5-20220512	SW6020	Iron	27000	mg/Kg	J	MS>UCL; SD>UCL
C2WS-08-1.5-2.5-20220512	SW6020	Manganese	230	mg/Kg	J	MS>UCL; SD>UCL
C2WS-08-1.5-2.5-20220512	SW6020	Vanadium	63	mg/Kg	J	SD>UCL
C2WS-08-1.5-2.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2WS-08-1.5-2.5-20220512	SW8270C	2,4-Dinitrophenol	0.073	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-08-1.5-2.5-20220512	SW8270C	4-Chloroaniline	0.017	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-08-1.5-2.5-20220512	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-08-1.5-2.5-20220512	SW8270C	Pyridine	0.02	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-09-0.0-0.5-20220512	SW8270C	Diethyl phthalate	0.0051	mg/Kg	U	LB<RL
C2WS-09-0.0-0.5-20220512	SW8270C	Pyridine	0.025	mg/Kg	UJ	LCS<LCL
C2WS-10-0.0-0.5-20220512	SW8270C	Benzo[b]fluoranthene	0.011	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512	SW8270C	Chrysene	0.014	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512	SW8270C	Diethyl phthalate	0.0039	mg/Kg	U	LB<RL
C2WS-10-0.0-0.5-20220512	SW8270C	Fluoranthene	0.031	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512	SW8270C	Phenanthrene	0.0045	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512	SW8270C	Pyrene	0.022	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512	SW8270C	Pyridine	0.018	mg/Kg	UJ	LCS<LCL
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Benzo[b]fluoranthene	0.031	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Chrysene	0.047	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Fluoranthene	0.17	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Phenanthrene	0.05	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Pyrene	0.1	mg/Kg	J	FD>RPD
C2WS-10-0.0-0.5-20220512-FD	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
C2WS-11-0.0-0.5-20220511	SW6020	Iron	27000	mg/Kg	J	MS<LCL; SD>UCL
C2WS-11-0.0-0.5-20220511	SW6020	Manganese	200	mg/Kg	J	SD>UCL
C2WS-11-0.0-0.5-20220511	SW8270C	2,4,6-Trichlorophenol	0.0016	mg/Kg	UJ	LCS<LCL
C2WS-11-0.0-0.5-20220511	SW8270C	4-Chloroaniline	0.016	mg/Kg	UJ	MS<LCL
C2WS-11-0.0-0.5-20220511	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-11-0.0-0.5-20220511	SW8270C	Hexachlorocyclopentadiene	0.00092	mg/Kg	UJ	SD<LCL
C2WS-11-0.5-1.5-20220511	SW8270C	2,4,6-Trichlorophenol	0.0015	mg/Kg	UJ	LCS<LCL
C2WS-12-0.0-0.5-20220511	SW8270C	2,4,6-Trichlorophenol	0.0014	mg/Kg	UJ	LCS<LCL
C2WS-12-0.5-1.5-20220511	SW8270C	2,4,6-Trichlorophenol	0.0014	mg/Kg	UJ	LCS<LCL
C2WS-12-2.5-3.5-20220511	SW8270C	2,4,6-Trichlorophenol	0.0014	mg/Kg	UJ	LCS<LCL
C2WS-12-5.0-6.0-20220511	SW8270C	2,4,6-Trichlorophenol	0.0013	mg/Kg	UJ	LCS<LCL
C2WS-13-0.0-0.5-20220512	SW8270C	Chrysene	2	mg/Kg	J	Sur<LCL
C2WS-13-0.0-0.5-20220512	SW8270C	Fluoranthene	6.2	mg/Kg	J	Sur<LCL
C2WS-13-0.0-0.5-20220512	SW8270C	Phenanthrene	1.5	mg/Kg	J	Sur<LCL
C2WS-13-0.0-0.5-20220512	SW8270C	Pyrene	3.8	mg/Kg	J	Sur<LCL
C2WS-13-0.0-0.5-20220512	SW8270C	Pyridine	0.02	mg/Kg	UJ	LCS<LCL
C2WS-13-0.5-2.0-20220512	SW6020	Barium	130	mg/Kg	J	MS>UCL
C2WS-13-0.5-2.0-20220512	SW6020	Iron	32000	mg/Kg	J	MS>UCL; SD>UCL
C2WS-13-0.5-2.0-20220512	SW6020	Manganese	1100	mg/Kg	J	MS>UCL; SD<LCL
C2WS-13-0.5-2.0-20220512	SW6020	Vanadium	50	mg/Kg	J	MS>UCL; SD>UCL
C2WS-13-0.5-2.0-20220512	SW8270C	4-Chloroaniline	0.017	mg/Kg	UJ	MS<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	Azobenzene	0.00063	mg/Kg	UJ	SD<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	Benzoic acid	0.15	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	Benzyl alcohol	0.0063	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WS-13-0.5-2.0-20220512	SW8270C	Diethyl phthalate	0.007	mg/Kg	U	LB<RL
C2WS-13-0.5-2.0-20220512	SW8270C	Fluoranthene	0.041	mg/Kg	J	MS>UCL; SD>UCL
C2WS-13-0.5-2.0-20220512	SW8270C	Hexachlorocyclopentadiene	0.00097	mg/Kg	UJ	MS<LCL; SD<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	Hexachloroethane	0.00054	mg/Kg	UJ	SD<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	N-Nitrosodi-n-propylamine	0.0028	mg/Kg	UJ	SD<LCL
C2WS-13-0.5-2.0-20220512	SW8270C	Pyrene	0.021	mg/Kg	J	MS>UCL; SD>UCL
C2WS-13-0.5-2.0-20220512	SW8270C	Pyridine	0.02	mg/Kg	UJ	LCS<LCL; SD<LCL
C2WS-13-2.0-3.0-20220512	SW8270C	Pyridine	0.021	mg/Kg	UJ	LCS<LCL
C2WS-14-0.0-0.5-20220512	SW8270C	Pyridine	0.4	mg/Kg	UJ	LCS<LCL
C2WS-15-0.0-0.5-20220512	SW8270C	Diethyl phthalate	0.003	mg/Kg	U	LB<RL
C2WS-15-0.0-0.5-20220512	SW8270C	Pyridine	0.018	mg/Kg	UJ	LCS<LCL
C2WS-15-0.5-1.5-20220512	SW6020	Chromium	12	mg/Kg	J	FD>RPD
C2WS-15-0.5-1.5-20220512	SW6020	Lead	12	mg/Kg	J	FD>RPD
C2WS-15-0.5-1.5-20220512	SW8270C	2,4,6-Trichlorophenol	0.016	mg/Kg	UJ	LCS<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	2,4-Dichlorophenol	0.035	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	2,4-Dimethylphenol	0.075	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	2-Chlorophenol	0.005	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	2-Methylphenol	0.012	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	2-Nitrophenol	0.0077	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	3 & 4 Methylphenol	0.019	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	Benzoic acid	1.5	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512	SW8270C	Phenol	0.029	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW6020	Chromium	15	mg/Kg	J	FD>RPD
C2WS-15-0.5-1.5-20220512-FD	SW6020	Lead	19	mg/Kg	J	FD>RPD
C2WS-15-0.5-1.5-20220512-FD	SW8270C	1,2,4-Trichlorobenzene	0.0072	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	1,2-Dichlorobenzene	0.006	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	1,3-Dichlorobenzene	0.0057	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	1,4-Dichlorobenzene	0.0099	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	1-Methylnaphthalene	0.016	mg/Kg	J	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2,4,6-Trichlorophenol	0.016	mg/Kg	UJ	LCS<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2,4-Dichlorophenol	0.034	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2,4-Dimethylphenol	0.072	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2,4-Dinitrotoluene	0.052	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2,6-Dinitrotoluene	0.018	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Chloronaphthalene	0.006	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Chlorophenol	0.0048	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Methylnaphthalene	0.011	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Methylphenol	0.012	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Nitroaniline	0.018	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	2-Nitrophenol	0.0074	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	3 & 4 Methylphenol	0.018	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	3,3'-Dichlorobenzidine	0.1	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	3-Nitroaniline	0.12	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	4-Bromophenyl phenyl ether	0.011	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	4-Chloroaniline	0.16	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	4-Chlorophenyl phenyl ether	0.0075	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	4-Nitroaniline	0.06	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Azobenzene	0.006	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Benzoic acid	1.5	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Benzyl alcohol	0.06	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	bis (2-chloroisopropyl) ether	0.0073	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Bis(2-chloroethoxy)methane	0.022	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Bis(2-chloroethyl)ether	0.0092	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.085	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Butyl benzyl phthalate	0.061	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Carbazole	0.99	mg/Kg	J	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Dibenz(a,h)anthracene	0.069	mg/Kg	J	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Dibenzofuran	0.051	mg/Kg	J	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Diethyl phthalate	0.026	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Dimethyl phthalate	0.006	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Di-n-butyl phthalate	0.032	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Di-n-octyl phthalate	0.014	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Fluoranthene	25	mg/Kg	J	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Hexachlorobenzene	0.018	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Hexachlorobutadiene	0.018	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Hexachlorocyclopentadiene	0.0092	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Hexachloroethane	0.0052	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Isophorone	0.01	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Nitrobenzene	0.024	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	N-Nitrosodi-n-propylamine	0.026	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	N-Nitrosodiphenylamine	0.0096	mg/Kg	UJ	Sur<LCL
C2WS-15-0.5-1.5-20220512-FD	SW8270C	Phenol	0.028	mg/Kg	UJ	Sur<LCL
C2WS-15-1.5-2.5-20220512	SW8270C	Pyridine	0.34	mg/Kg	UJ	LCS<LCL
C2WS-16-0.0-0.5-20220512	SW8270C	Diethyl phthalate	0.0029	mg/Kg	U	LB<RL
C2WS-16-0.0-0.5-20220512	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
C2WS-16-0.5-1.5-20220512	SW8270C	Diethyl phthalate	0.0035	mg/Kg	U	LB<RL
C2WS-16-0.5-1.5-20220512	SW8270C	Pyridine	0.017	mg/Kg	UJ	LCS<LCL
C2WS-WC-S-20220513	SW8270C	Benzoic acid	0.75	mg/Kg	UJ	LCS<LCL
C2WS-WC-S-20220513	SW8270C	Diethyl phthalate	0.015	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW6020	Arsenic	6.9	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502	SW6020	Barium	120	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502	SW6020	Chromium	40	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502	SW6020	Nickel	10	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502	SW6020	Zinc	78	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502	SW8260B	1,2,4-Trimethylbenzene	25	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8260B	1,3,5-Trimethylbenzene	13	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8260B	Isopropylbenzene	13	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8260B	m-Xylene & p-Xylene	21	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8260B	o-Xylene	13	ug/Kg	U	LB<RL; TB<RL
IGBP-01-0.0-0.5-20220502	SW8260B	Vinyl chloride	26	ug/Kg	UJ	ICVS<LCL
IGBP-01-0.0-0.5-20220502	SW8260B	Xylenes, Total	34	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8270C	1-Methylnaphthalene	0.0071	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502	SW8270C	2,4-Dinitrophenol	0.67	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270C	4-Chloroaniline	0.15	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270C	Benzoic acid	1.4	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270C	Bis(2-ethylhexyl) phthalate	0.18	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502	SW8270C	Hexachlorocyclopentadiene	0.0088	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270C	Naphthalene	0.011	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502	SW8270C	Pyridine	0.18	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	1-Methylnaphthalene	0.0055	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	2-Methylnaphthalene	0.014	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Acenaphthene	0.00069	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Acenaphthylene	0.00057	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Benzo[a]anthracene	0.002	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Benzo[a]pyrene	0.00096	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Naphthalene	0.0099	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8270SIM	Phenanthrene	0.0038	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000024	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,4,7,8-HxCDD	0.0000089	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,4,7,8-HxCDF	0.0000031	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,6,7,8-HxCDF	0.0000024	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,7,8,9-HxCDF	0.0000029	mg/Kg	U	EB<RL; LB<RL
IGBP-01-0.0-0.5-20220502	SW8290	1,2,3,7,8-PeCDF	0.0000016	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-0.0-0.5-20220502-FD	SW6020	Arsenic	9	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502-FD	SW6020	Barium	150	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502-FD	SW6020	Chromium	57	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502-FD	SW6020	Nickel	14	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502-FD	SW6020	Zinc	130	mg/Kg	J	FD>RPD
IGBP-01-0.0-0.5-20220502-FD	SW8260B	1,2,4-Trimethylbenzene	30	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	1,3,5-Trimethylbenzene	13	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	Isopropylbenzene	15	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	m-Xylene & p-Xylene	42	ug/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	o-Xylene	21	ug/Kg	U	LB<RL; TB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	p-Isopropyltoluene	28	ug/Kg	U	LB<RL; TB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	tert-Butylbenzene	13	ug/Kg	U	LB<RL; TB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	Vinyl chloride	29	ug/Kg	UJ	ICVS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8260B	Xylenes, Total	63	ug/Kg	UJ	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	1-Methylnaphthalene	0.015	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2,4-Dichlorophenol	0.03	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2,4-Dimethylphenol	0.065	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2,4-Dinitrophenol	0.64	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2-Chlorophenol	0.0043	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2-Methylphenol	0.011	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	2-Nitrophenol	0.0067	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	3 & 4 Methylphenol	0.016	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	4-Chloroaniline	0.15	mg/Kg	UJ	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Benzoic acid	1.3	mg/Kg	UJ	LCS<LCL; Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Bis(2-ethylhexyl) phthalate	0.13	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Hexachlorocyclopentadiene	0.0084	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Naphthalene	0.018	mg/Kg	J	LCSRPD
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Phenol	0.025	mg/Kg	UJ	Sur<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270C	Pyridine	0.17	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	1-Methylnaphthalene	0.0099	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	2-Methylnaphthalene	0.024	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Acenaphthene	0.00065	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Acenaphthylene	0.00054	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Benzo[a]anthracene	0.0019	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Benzo[a]pyrene	0.00091	mg/Kg	UJ	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Naphthalene	0.017	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8270SIM	Phenanthrene	0.006	mg/Kg	J	LCS<LCL
IGBP-01-0.0-0.5-20220502-FD	SW8290	1,2,3,4,7,8-HxCDD	0.0000009	mg/Kg	U	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8290	1,2,3,4,7,8-HxCDF	0.00000043	mg/Kg	UJ	LB<RL
IGBP-01-0.0-0.5-20220502-FD	SW8290	1,2,3,6,7,8-HxCDF	0.00000024	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-0.0-0.5-20220502-FD	SW8290	1,2,3,7,8,9-HxCDF	0.00000032	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
IGBP-01-0.0-0.5-20220502-FD	SW8290	1,2,3,7,8-PeCDD	0.00000056	mg/Kg	UJ	EMPC
IGBP-01-0.0-0.5-20220502-FD	SW8290	2,3,4,6,7,8-HxCDF	0.00000021	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW6020	Nickel	7.5	mg/Kg	U	EB<RL
IGBP-01-0.5-1.5-20220502	SW8015B-E	CA Diesel Range Organics (C10-C28)	15	mg/Kg	U	EB>RL
IGBP-01-0.5-1.5-20220502	SW8260B	Vinyl chloride	22	ug/Kg	UJ	ICVS<LCL
IGBP-01-0.5-1.5-20220502	SW8270C	2,4-Dinitrophenol	0.067	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270C	4-Chloroaniline	0.015	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270C	Hexachlorocyclopentadiene	0.00088	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270C	Naphthalene	0.00072	mg/Kg	J	LCSRPD
IGBP-01-0.5-1.5-20220502	SW8270C	Pyridine	0.018	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	1-Methylnaphthalene	0.0003	mg/Kg	J	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	2-Methylnaphthalene	0.00062	mg/Kg	J	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Acenaphthene	0.000069	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Acenaphthylene	0.000057	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Benzo[a]anthracene	0.0002	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Benzo[a]pyrene	0.000096	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Naphthalene	0.00055	mg/Kg	J	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8270SIM	Phenanthrene	0.00019	mg/Kg	UJ	LCS<LCL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000015	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000039	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000027	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,4,7,8-HxCDF	0.00000002	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,6,7,8-HxCDF	0.00000015	mg/Kg	U	LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	1,2,3,7,8,9-HxCDF	0.00000029	mg/Kg	U	EB<RL; LB<RL
IGBP-01-0.5-1.5-20220502	SW8290	OCDF	0.00000052	mg/Kg	U	EB<RL; LB<RL
IGBP-01-2.5-3.5-20220513	SW8011	1,2,3-Trichloropropane	0.000065	mg/Kg	UJ	HTa>UCL
IGBP-01-2.5-3.5-20220513	SW8011	1,2-Dibromo-3-Chloropropane	0.0000098	mg/Kg	UJ	HTa>UCL
IGBP-01-2.5-3.5-20220513	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
IGBP-01-2.5-3.5-20220513	SW8270C	2,6-Dinitrotoluene	0.0017	mg/Kg	UJ	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	2-Chlorophenol	0.00044	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	2-Methylnaphthalene	0.00098	mg/Kg	UJ	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	2-Nitroaniline	0.0017	mg/Kg	UJ	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	3,3'-Dichlorobenzidine	0.0093	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	4-Chloroaniline	0.015	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	4-Chlorophenyl phenyl ether	0.0007	mg/Kg	UJ	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	4-Nitroaniline	0.0056	mg/Kg	UJ	SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Acenaphthylene	0.00056	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Azobenzene	0.00056	mg/Kg	UJ	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Benzoic acid	0.14	mg/Kg	UJ	LCS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Diethyl phthalate	0.0025	mg/Kg	UJ	LB<RL
IGBP-01-2.5-3.5-20220513	SW8270C	N-Nitrosodi-n-propylamine	0.0024	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Phenanthrene	0.00077	mg/Kg	J	MS<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Phenol	0.0026	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8270C	Pyridine	0.018	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000028	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000021	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,4,7,8-HxCDD	0.00000042	mg/Kg	U	EB<RL; LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,4,7,8-HxCDF	0.00000058	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,6,7,8-HxCDF	0.00000037	mg/Kg	UJ	EMPC; LB<RL (U)

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,7,8,9-HxCDD	0.00000043	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,7,8,9-HxCDF	0.00000028	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
IGBP-01-2.5-3.5-20220513	SW8290	1,2,3,7,8-PeCDF	0.00000036	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	2,3,4,6,7,8-HxCDF	0.00000028	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	OCDD	0.000011	mg/Kg	U	LB<RL
IGBP-01-2.5-3.5-20220513	SW8290	OCDF	0.0000047	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8011	1,2,3-Trichloropropane	0.000067	mg/Kg	UJ	HTa>UCL
IGBP-01-5.0-6.0-20220513	SW8011	1,2-Dibromo-3-Chloropropane	0.00001	mg/Kg	UJ	HTa>UCL
IGBP-01-5.0-6.0-20220513	SW8011	Ethylene Dibromide	0.000012	mg/Kg	UJ	HTa>UCL
IGBP-01-5.0-6.0-20220513	SW8270C	2,4-Dichlorophenol	0.015	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	2,4-Dimethylphenol	0.033	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	2-Chlorophenol	0.0022	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	2-Methylphenol	0.0054	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	2-Nitrophenol	0.0034	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	3 & 4 Methylphenol	0.0082	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	Benzoic acid	0.67	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL; Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270C	Phenol	0.013	mg/Kg	UJ	Sur<LCL
IGBP-01-5.0-6.0-20220513	SW8270SIM	1-Methylnaphthalene	0.0011	mg/Kg	J	Sur>UCL
IGBP-01-5.0-6.0-20220513	SW8270SIM	2-Methylnaphthalene	0.0029	mg/Kg	J	Sur>UCL
IGBP-01-5.0-6.0-20220513	SW8270SIM	Naphthalene	0.0017	mg/Kg	J	Sur>UCL
IGBP-01-5.0-6.0-20220513	SW8270SIM	Pyrene	0.0018	mg/Kg	J	Sur>UCL
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000014	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000036	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,4,7,8-HxCDD	0.00000044	mg/Kg	U	EB<RL; LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,4,7,8-HxCDF	0.00000031	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,6,7,8-HxCDD	0.00000067	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,6,7,8-HxCDF	0.00000031	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,7,8,9-HxCDD	0.00000061	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,7,8,9-HxCDF	0.00000003	mg/Kg	U	EB<RL; LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	1,2,3,7,8-PeCDF	0.00000035	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	2,3,4,6,7,8-HxCDF	0.00000021	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	2,3,4,7,8-PeCDF	0.00000022	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	OCDD	0.000042	mg/Kg	U	LB<RL
IGBP-01-5.0-6.0-20220513	SW8290	OCDF	0.0000021	mg/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8015B-E	CA Diesel Range Organics (C10-C28)	53	mg/Kg	U	EB>RL
IGBP-02-0.0-0.5-20220502	SW8260B	1,2,4-Trimethylbenzene	30	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	1,3,5-Trimethylbenzene	24	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	Isopropylbenzene	16	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	m-Xylene & p-Xylene	51	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	o-Xylene	34	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	p-Isopropyltoluene	40	ug/Kg	U	LB<RL; TB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	sec-Butylbenzene	22	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	tert-Butylbenzene	18	ug/Kg	U	LB<RL; TB<RL
IGBP-02-0.0-0.5-20220502	SW8260B	Vinyl chloride	26	ug/Kg	UJ	ICVS<LCL
IGBP-02-0.0-0.5-20220502	SW8260B	Xylenes, Total	85	ug/Kg	U	LB<RL
IGBP-02-0.0-0.5-20220502	SW8270C	1-Methylnaphthalene	0.016	mg/Kg	UJ	LCSRPD
IGBP-02-0.0-0.5-20220502	SW8270C	2,4-Dichlorophenol	0.031	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	2,4-Dimethylphenol	0.067	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	2,4-Dinitrophenol	0.66	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	2-Chlorophenol	0.0045	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	2-Methylphenol	0.011	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	2-Nitrophenol	0.007	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	3 & 4 Methylphenol	0.017	mg/Kg	UJ	Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	4-Chloroaniline	0.15	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	Benzoic acid	1.4	mg/Kg	UJ	LCS<LCL; Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	Dibenzofuran	0.035	mg/Kg	J	LCSRPD
IGBP-02-0.0-0.5-20220502	SW8270C	Hexachlorocyclopentadiene	0.0086	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	Naphthalene	0.078	mg/Kg	J	LCSRPD
IGBP-02-0.0-0.5-20220502	SW8270C	Phenol	0.04	mg/Kg	J	LCSRPD; Sur<LCL
IGBP-02-0.0-0.5-20220502	SW8270C	Pyridine	0.18	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	1-Methylnaphthalene	0.013	mg/Kg	J	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	2-Methylnaphthalene	0.014	mg/Kg	J	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	Acenaphthene	0.00067	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	Acenaphthylene	0.0011	mg/Kg	J	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	Benzo[a]anthracene	0.002	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	Benzo[a]pyrene	0.00094	mg/Kg	UJ	LCS<LCL
IGBP-02-0.0-0.5-20220502	SW8270SIM	Naphthalene	0.075	mg/Kg	J	LCS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
IGBP-02-0-0-0.5-20220502	SW8270SIM	Phenanthrene	0.026	mg/Kg	J	LCS<LCL
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,4,6,7,8-HpCDF	0.00004	mg/Kg	J	EMPC
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,4,7,8-HxCDF	0.0000048	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,6,7,8-HxCDF	0.0000051	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,7,8,9-HxCDD	0.0000047	mg/Kg	J	Sur<LCL
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,7,8,9-HxCDF	0.000001	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
IGBP-02-0-0-0.5-20220502	SW8290	1,2,3,7,8-PeCDF	0.0000067	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-02-0-0-0.5-20220502	SW8290	2,3,4,6,7,8-HxCDF	0.0000031	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-02-0-0-0.5-20220502	SW8290	2,3,7,8-TCDD	0.0000081	mg/Kg	UJ	EMPC
IGBP-02-0-0-0.5-20220502	SW8290	OCDF	0.0000038	mg/Kg	UJ	EMPC
IGBP-20220502-EB	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000021	ug/L	UJ	EMPC
IGBP-20220502-EB	SW8290	1,2,3,4,7,8-HxCDD	0.0000017	ug/L	UJ	EMPC
IGBP-20220502-EB	SW8290	1,2,3,7,8,9-HxCDD	0.0000046	ug/L	UJ	EMPC
IGBP-C1-0-0-0.5-20220502	SW8015B-E	CA Diesel Range Organics (C10-C28)	69	mg/Kg	U	EB>RL
IGBP-C1-0-0-0.5-20220502	SW8260B	1,2,4-Trimethylbenzene	28	ug/Kg	U	LB<RL
IGBP-C1-0-0-0.5-20220502	SW8260B	1,3,5-Trimethylbenzene	15	ug/Kg	U	LB<RL
IGBP-C1-0-0-0.5-20220502	SW8260B	m-Xylene & p-Xylene	45	ug/Kg	U	LB<RL
IGBP-C1-0-0-0.5-20220502	SW8260B	o-Xylene	21	ug/Kg	U	LB<RL; TB<RL
IGBP-C1-0-0-0.5-20220502	SW8260B	p-Isopropyltoluene	18	ug/Kg	U	LB<RL; TB<RL
IGBP-C1-0-0-0.5-20220502	SW8260B	Vinyl chloride	25	ug/Kg	UJ	ICVS<LCL
IGBP-C1-0-0-0.5-20220502	SW8260B	Xylenes, Total	66	ug/Kg	U	LB<RL
IGBP-C1-0-0-0.5-20220502	SW8270C	2,4-Dinitrophenol	0.65	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270C	4-Chloroaniline	0.15	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270C	Benzoic acid	1.4	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270C	Hexachlorocyclopentadiene	0.0085	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270C	Naphthalene	0.019	mg/Kg	J	LCSRPD
IGBP-C1-0-0-0.5-20220502	SW8270C	Pyridine	0.17	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	1-Methylnaphthalene	0.0027	mg/Kg	J	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	2-Methylnaphthalene	0.0065	mg/Kg	J	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Acenaphthene	0.00066	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Acenaphthylene	0.00055	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Benzo[a]anthracene	0.002	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Benzo[a]pyrene	0.00093	mg/Kg	UJ	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Naphthalene	0.018	mg/Kg	J	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8270SIM	Phenanthrene	0.0035	mg/Kg	J	LCS<LCL
IGBP-C1-0-0-0.5-20220502	SW8290	1,2,3,7,8,9-HxCDF	0.0000032	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
IGBP-C1-0-0-0.5-20220502	SW8290	1,2,3,7,8-PeCDF	0.0000062	mg/Kg	U	LB<RL
IGBP-C1-0-0-0.5-20220502	SW8290	2,3,7,8-TCDD	0.0000059	mg/Kg	UJ	EMPC
IGBP-C2-0-0-0.5-20220502	SW6020	Antimony	3.2	mg/Kg	J	LabDupRPD
IGBP-C2-0-0-0.5-20220502	SW6020	Arsenic	86	mg/Kg	J	MS<LCL; SD<LCL; LabDupRPD
IGBP-C2-0-0-0.5-20220502	SW6020	Chromium	130	mg/Kg	J	MS<LCL; SD<LCL; LabDupRPD
IGBP-C2-0-0-0.5-20220502	SW6020	Copper	200	mg/Kg	J	MS<LCL; SD<LCL; LabDupRPD
IGBP-C2-0-0-0.5-20220502	SW6020	Lead	25	mg/Kg	J	LabDupRPD
IGBP-C2-0-0-0.5-20220502	SW8260B	1,1,2,2-Tetrachloroethane	13	ug/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8260B	1,3,5-Trimethylbenzene	17	ug/Kg	U	LB<RL
IGBP-C2-0-0-0.5-20220502	SW8260B	m-Xylene & p-Xylene	32	ug/Kg	U	LB<RL
IGBP-C2-0-0-0.5-20220502	SW8260B	o-Xylene	16	ug/Kg	U	LB<RL; TB<RL
IGBP-C2-0-0-0.5-20220502	SW8260B	p-Isopropyltoluene	29	ug/Kg	U	LB<RL; TB<RL
IGBP-C2-0-0-0.5-20220502	SW8260B	Vinyl acetate	77	ug/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8260B	Vinyl chloride	31	ug/Kg	UJ	ICVS<LCL
IGBP-C2-0-0-0.5-20220502	SW8260B	Xylenes, Total	48	ug/Kg	U	LB<RL
IGBP-C2-0-0-0.5-20220502	SW8270C	1,4-Dichlorobenzene	0.0098	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	1-Methylnaphthalene	0.0091	mg/Kg	J	LCSRPD
IGBP-C2-0-0-0.5-20220502	SW8270C	2,4-Dichlorophenol	0.033	mg/Kg	UJ	SD<LCL; Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2,4-Dimethylphenol	0.071	mg/Kg	UJ	SD<LCL; Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2,4-Dinitrophenol	0.69	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2,6-Dinitrotoluene	0.018	mg/Kg	UJ	LCSRPD; MS<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2-Chlorophenol	0.0047	mg/Kg	UJ	MS<LCL; Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2-Methylnaphthalene	0.014	mg/Kg	J	SD>UCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2-Methylphenol	0.012	mg/Kg	UJ	Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	2-Nitrophenol	0.0073	mg/Kg	UJ	MS<LCL; Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	3 & 4 Methylphenol	0.018	mg/Kg	UJ	MS<LCL; Sur<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	3,3'-Dichlorobenzidine	0.099	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	3-Nitroaniline	0.12	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	4-Chloroaniline	0.16	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
IGBP-C2-0-0-0.5-20220502	SW8270C	4-Nitroaniline	0.059	mg/Kg	UJ	MS<LCL; SD<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
IGBP-C2-0.0-0.5-20220502	SW8270C	Azobenzene	0.0059	mg/Kg	UJ	LCSRPD; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Benzoic acid	1.4	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL; Sur<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Carbazole	0.0086	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Hexachlorocyclopentadiene	0.0091	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Naphthalene	0.043	mg/Kg	J	LCSRPD; MSRPD; SD>UCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Nitrobenzene	0.024	mg/Kg	UJ	MS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	N-Nitrosodi-n-propylamine	0.026	mg/Kg	UJ	MS<LCL; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Phenol	0.027	mg/Kg	UJ	Sur<LCL
IGBP-C2-0.0-0.5-20220502	SW8270C	Pyridine	0.19	mg/Kg	UJ	LCS<LCL; MS<LCL; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	1-Methylnaphthalene	0.0071	mg/Kg	J	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	2-Methylnaphthalene	0.011	mg/Kg	J	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Acenaphthene	0.00071	mg/Kg	UJ	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Acenaphthylene	0.0029	mg/Kg	J	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Benzo[a]anthracene	0.0021	mg/Kg	UJ	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Benzo[a]pyrene	0.00099	mg/Kg	UJ	LCS<LCL; SD<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Naphthalene	0.042	mg/Kg	J	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8270SIM	Phenanthrene	0.012	mg/Kg	J	LCS<LCL
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,4,6,7,8-HpCDD	0.000042	mg/Kg	J	MS>UCL; MSRPD
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,4,6,7,8-HxCDF	0.000004	mg/Kg	UJ	EMPC
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,4,7,8-HxCDD	0.00000086	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,4,7,8-HxCDF	0.00000089	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,6,7,8-HxCDF	0.00000034	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,7,8,9-HxCDF	0.00000029	mg/Kg	UJ	EMPC; EB<RL; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	1,2,3,7,8-PeCDF	0.00000032	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	2,3,4,6,7,8-HxCDF	0.00000029	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-C2-0.0-0.5-20220502	SW8290	OCDD	0.00019	mg/Kg	J	MS>UCL; MSRPD; SD>UCL
IGBP-WC-5-20220513	SW8011	1,2,3-Trichloropropane	0.00007	mg/Kg	UJ	HTa>UCL
IGBP-WC-5-20220513	SW8011	1,2-Dibromo-3-Chloropropane	0.000011	mg/Kg	UJ	HTa>UCL
IGBP-WC-5-20220513	SW8011	Ethylene Dibromide	0.000013	mg/Kg	UJ	HTa>UCL
IGBP-WC-5-20220513	SW8270C	Benzoic acid	0.68	mg/Kg	UJ	LCS<LCL
IGBP-WC-5-20220513	SW8270SIM	1-Methylnaphthalene	0.014	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	2-Methylnaphthalene	0.029	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Acenaphthylene	0.0068	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Anthracene	0.0037	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Benzo[a]anthracene	0.0023	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Chrysene	0.0042	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Fluoranthene	0.012	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Naphthalene	0.072	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Phenanthrene	0.022	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8270SIM	Pyrene	0.017	mg/Kg	J	Sur>UCL
IGBP-WC-5-20220513	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000019	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-WC-5-20220513	SW8290	1,2,3,4,7,8-HxCDD	0.00000073	mg/Kg	U	EB<RL; LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,4,7,8-HxCDF	0.0000004	mg/Kg	U	LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,6,7,8-HxCDD	0.0000015	mg/Kg	U	LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,6,7,8-HxCDF	0.00000029	mg/Kg	U	LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,7,8,9-HxCDD	0.0000016	mg/Kg	U	LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,7,8,9-HxCDF	0.00000036	mg/Kg	UJ	LB<RL
IGBP-WC-5-20220513	SW8290	1,2,3,7,8-PeCDF	0.00000033	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-WC-5-20220513	SW8290	2,3,4,6,7,8-HxCDF	0.00000024	mg/Kg	U	LB<RL
IGBP-WC-5-20220513	SW8290	2,3,7,8-TCDF	0.00000037	mg/Kg	UJ	EMPC; LB<RL (U)
IGBP-WC-5-20220513	SW8290	OCDF	0.0000025	mg/Kg	U	LB<RL
IGSR-01-0.0-0.5-20220503	SW6020	Antimony	0.099	mg/Kg	J	MS<LCL; SD<LCL
IGSR-01-0.0-0.5-20220503	SW6020	Silver	0.03	mg/Kg	J	MSRPD; SD<LCL
IGSR-02-5.0-6.0-20220513	SW6020	Zinc	41	mg/Kg	J	FD>RPD
IGSR-02-5.0-6.0-20220513-FD	SW6020	Zinc	29	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW1311/SW6010B	Lead, TCLP	8.3	mg/L	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6010B-STLC	Lead	240	mg/L	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Arsenic	2.4	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Barium	120	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Chromium	7.8	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Cobalt	11	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Iron	33000	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Lead	1100	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Manganese	860	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Nickel	7.4	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Vanadium	89	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW6020	Zinc	230	mg/Kg	J	FD>RPD

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
IGSR-03-0.0-0.5-20220503	SW8270SIM	Benzo[a]pyrene	0.047	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW8270SIM	Benzo[b]fluoranthene	0.046	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503	SW8270SIM	Fluoranthene	0.047	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW1311/SW6010B	Lead, TCLP	4	mg/L	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6010B-STLC	Lead	190	mg/L	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Arsenic	3.1	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Barium	180	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Chromium	11	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Cobalt	17	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Iron	47000	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Lead	840	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Manganese	1200	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Nickel	11	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Vanadium	130	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW6020	Zinc	560	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW8270SIM	Benzo[a]pyrene	0.022	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW8270SIM	Benzo[b]fluoranthene	0.017	mg/Kg	J	FD>RPD
IGSR-03-0.0-0.5-20220503-FD	SW8270SIM	Fluoranthene	0.024	mg/Kg	J	FD>RPD
IGSR-03-5.0-6.0-20220513	SW6020	Barium	240	mg/Kg	J	FD>RPD
IGSR-03-5.0-6.0-20220513	SW6020	Manganese	2700	mg/Kg	J	FD>RPD
IGSR-03-5.0-6.0-20220513-FD	SW6020	Barium	110	mg/Kg	J	FD>RPD
IGSR-03-5.0-6.0-20220513-FD	SW6020	Manganese	1600	mg/Kg	J	FD>RPD
IGSR-05-0.0-0.5-20220503	SW6010B	Boron	6.8	mg/Kg	J	MS<LCL; SD<LCL
IGSR-05-0.0-0.5-20220503	SW6020	Antimony	0.05	mg/Kg	J	MS<LCL; MSRPD; SD<LCL
IGSR-05-0.0-0.5-20220503	SW6020	Arsenic	3.1	mg/Kg	J	MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Barium	130	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Beryllium	0.74	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Cadmium	0.14	mg/Kg	J	MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Chromium	8.4	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Cobalt	19	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Copper	62	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Lead	4.4	mg/Kg	J	MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Manganese	1200	mg/Kg	J	SD<LCL
IGSR-05-0.0-0.5-20220503	SW6020	Molybdenum	0.25	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Nickel	8.9	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Selenium	4	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Vanadium	120	mg/Kg	J	MS<LCL; MSRPD
IGSR-05-0.0-0.5-20220503	SW6020	Zinc	79	mg/Kg	J	MS<LCL; MSRPD; SD>UCL
IGSR-08-1.0-1.5-20220503	SW6020	Manganese	560	mg/Kg	J	FD>RPD
IGSR-08-1.0-1.5-20220503-FD	SW6020	Manganese	380	mg/Kg	J	FD>RPD
IGSR-09-1.0-1.5-20220506	SW6020	Vanadium	88	mg/Kg	J	FD>RPD
IGSR-09-1.0-1.5-20220506-FD	SW6020	Vanadium	110	mg/Kg	J	FD>RPD
IGSR-13-1.0-1.5-20220506	SW6010B	Boron	5.9	mg/Kg	UJ	MS<LCL; SD<LCL
IGSR-13-1.0-1.5-20220506	SW6020	Barium	190	mg/Kg	J	MS<LCL; SD<LCL
IGSR-13-1.0-1.5-20220506	SW6020	Iron	38000	mg/Kg	J	MS>UCL; SD>UCL
IGSR-13-1.0-1.5-20220506	SW6020	Manganese	1100	mg/Kg	J	MS<LCL; SD<LCL
IGSR-16-1.0-1.5-20220505	SW6020	Barium	180	mg/Kg	J	MS<LCL; SD<LCL
IGSR-16-1.0-1.5-20220505	SW6020	Iron	41000	mg/Kg	J	MS>UCL; SD>UCL
IGSR-16-1.0-1.5-20220505	SW6020	Manganese	1300	mg/Kg	J	MS<LCL; SD<LCL
IGSR-21-1.0-1.5-20220505	SW6020	Barium	180	mg/Kg	J	FD>RPD
IGSR-21-1.0-1.5-20220505	SW6020	Lead	15	mg/Kg	J	FD>RPD
IGSR-21-1.0-1.5-20220505-FD	SW6020	Barium	140	mg/Kg	J	FD>RPD
IGSR-21-1.0-1.5-20220505-FD	SW6020	Lead	10	mg/Kg	UJ	FD>RPD
IGSR-25-0.5-1.5-20220513	SW6010B	Boron	3.1	mg/Kg	UJ	SD<LCL
IGSR-25-0.5-1.5-20220513	SW6020	Barium	180	mg/Kg	J	MS>UCL; SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Chromium	17	mg/Kg	J	SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Copper	16	mg/Kg	J	SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Iron	34000	mg/Kg	J	MS>UCL; SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Manganese	1400	mg/Kg	J	SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Nickel	17	mg/Kg	J	SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Vanadium	75	mg/Kg	J	MS>UCL; SD>UCL
IGSR-25-0.5-1.5-20220513	SW6020	Zinc	60	mg/Kg	J	MS>UCL; SD>UCL
IGSR-27-0.5-1.5-20220513	SW8270SIM	Naphthalene	0.0032	mg/Kg	J	Sur>UCL
IGSR-28-1.0-1.5-20220505	SW6020	Lead	5.9	mg/Kg	J	FD>RPD
IGSR-28-1.0-1.5-20220505-FD	SW6020	Lead	15	mg/Kg	J	FD>RPD
JBRA-01-0.0-0.5-20220504	SW6020	Barium	200	mg/Kg	J	MS<LCL; SD>UCL
JBRA-01-0.0-0.5-20220504	SW6020	Iron	31000	mg/Kg	J	MS<LCL; SD>UCL
JBRA-01-0.0-0.5-20220504	SW6020	Manganese	770	mg/Kg	J	MS<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-01-0.0-0.5-20220504	SW6020	Nickel	35	mg/Kg	J	MS>UCL
JBRA-01-0.0-0.5-20220504	SW6020	Vanadium	98	mg/Kg	J	MS<LCL
JBRA-01-0.0-0.5-20220504	SW6020	Zinc	130	mg/Kg	J	LabDupRPD; MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00084	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00043	mg/Kg	UJ	MS<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00074	mg/Kg	UJ	MS<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00076	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1-Dichloroethene	0.0016	mg/Kg	UJ	MS<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,1-Dichloropropene	0.00043	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.00086	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2,3-Trichloropropene	0.0014	mg/Kg	UJ	SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.0006	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0023	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2-Dibromoethane	0.00029	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0019	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0016	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,3-Dichloropropane	0.00033	mg/Kg	UJ	SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	2-Chlorotoluene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	4-Chlorotoluene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Benzene	0.00056	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Bromobenzene	0.0014	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Bromochloromethane	0.00036	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Bromodichloromethane	0.00026	mg/Kg	UJ	MS<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Bromoform	0.0012	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Bromomethane	0.001	mg/Kg	J	LC<LCL; MS<LCL; SD<LCL; Sur>UCL
JBRA-01-0.0-0.5-20220504	SW8260B	Carbon disulfide	0.00029	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Chlorobenzene	0.00036	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.00086	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00029	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Dibromochloromethane	0.0008	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Dibromomethane	0.0006	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Dichlorodifluoromethane	0.001	mg/Kg	J	Sur>UCL
JBRA-01-0.0-0.5-20220504	SW8260B	Ethylbenzene	0.00059	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Hexachlorobutadiene	0.00086	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Isopropylbenzene	0.00066	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Methylene Chloride	0.014	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0017	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Naphthalene	0.0026	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	n-Butylbenzene	0.0009	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	N-Propylbenzene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	o-Xylene	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	p-Isopropyltoluene	0.00057	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	sec-Butylbenzene	0.00096	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Styrene	0.0011	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	tert-Butylbenzene	0.00094	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Tetrachloroethene	0.00057	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Toluene	0.0019	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.00057	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.00086	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Trichloroethene	0.00043	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Trichlorofluoromethane	0.00043	mg/Kg	UJ	MS<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Vinyl acetate	0.0021	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8260B	Xylenes, Total	0.0013	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	3,3'-Dichlorobenzidine	0.0098	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	3-Nitroaniline	0.012	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	4-Chloroaniline	0.016	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	4-Nitroaniline	0.0059	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	Azobenzene	0.00059	mg/Kg	UJ	MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LC<LCL; MS<LCL; SD<LCL
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000082	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000004	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000005	mg/Kg	UJ	LB<RL
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,4,7,8-HxCDF	0.00000017	mg/Kg	UJ	EMPC; LB<RL (U)

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,7,8,9-HxCDD	0.00000052	mg/Kg	U	LB<RL
JBRA-01-0.0-0.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000044	mg/Kg	U	LB<RL
JBRA-01-0.0-0.5-20220504	SW8290	2,3,4,7,8-PeCDF	0.00000018	mg/Kg	U	LB<RL
JBRA-01-0.0-0.5-20220504	SW8290	2,3,7,8-TCDD	0.00000013	mg/Kg	UJ	EMPC
JBRA-01-0.0-0.5-20220504	SW8290	OCDF	0.00000013	mg/Kg	U	LB<RL
JBRA-01-1.0-1.5-20220504	SW6020	Barium	200	mg/Kg	J	LabDupRPD; MS<LCL
JBRA-01-1.0-1.5-20220504	SW6020	Iron	30000	mg/Kg	J	MS>UCL; SD>UCL
JBRA-01-1.0-1.5-20220504	SW6020	Manganese	670	mg/Kg	J	LabDupRPD; MS>UCL; SD>UCL
JBRA-01-1.0-1.5-20220504	SW6020	Nickel	34	mg/Kg	J	MS>UCL; SD>UCL
JBRA-01-1.0-1.5-20220504	SW6020	Zinc	55	mg/Kg	J	SD>UCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00065	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1-Dichloroethane	0.00024	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1-Dichloroethene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,1-Dichloropropene	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00053	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.002	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2-Dibromoethane	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2-Dichloroethane	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,2-Dichloropropane	0.0005	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,3-Dichloropropane	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	2,2-Dichloropropane	0.00096	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	2-Butanone (MEK)	0.011	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	2-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	2-Hexanone	0.0049	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	4-Chlorotoluene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0075	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Acetone	0.011	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Benzene	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Bromobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Bromochloromethane	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Bromodichloromethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Bromoform	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Bromomethane	0.00026	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Carbon disulfide	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Carbon tetrachloride	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Chlorobenzene	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Chloroethane	0.00094	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Chloroform	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Chloromethane	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Dibromochloromethane	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Dibromomethane	0.00053	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Dichlorodifluoromethane	0.00061	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Ethylbenzene	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Hexachlorobutadiene	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Isopropylbenzene	0.00058	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Methyl tert-butyl ether	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Naphthalene	0.0023	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	n-Butylbenzene	0.00079	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	N-Propylbenzene	0.00095	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	p-Isopropyltoluene	0.0005	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	sec-Butylbenzene	0.00084	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-01-1.0-1.5-20220504	SW8260B	Styrene	0.00093	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	tert-Butylbenzene	0.00083	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Tetrachloroethene	0.0005	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Toluene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.0005	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Trichloroethene	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Trichlorofluoromethane	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Vinyl acetate	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Vinyl chloride	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-1.0-1.5-20220504	SW8270C	Pyridine	0.018	mg/Kg	UJ	LCS<LCL
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000024	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000017	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000034	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,6,7,8-HxCDF	0.00000011	mg/Kg	UJ	EMPC
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,7,8,9-HxCDD	0.00000021	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-1.0-1.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000026	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-1.0-1.5-20220504	SW8290	2,3,7,8-TCDD	0.00000013	mg/Kg	UJ	EMPC
JBRA-01-1.0-1.5-20220504	SW8290	2,3,7,8-TCDF	0.000000057	mg/Kg	UJ	EMPC
JBRA-01-1.0-1.5-20220504	SW8290	OCDF	0.00000064	mg/Kg	UJ	LB<RL
JBRA-01-2.0-3.0-20220504	SW8260B	Acetone	0.051	mg/Kg	J	LCS>UCL; Sur>UCL
JBRA-01-2.0-3.0-20220504	SW8260B	Bromomethane	0.00029	mg/Kg	UJ	LCS<LCL
JBRA-01-2.0-3.0-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000086	mg/Kg	U	LB<RL
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000022	mg/Kg	U	LB<RL
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000024	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,4,7,8-HxCDF	0.00000011	mg/Kg	U	LB<RL
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,6,7,8-HxCDD	0.00000017	mg/Kg	UJ	EMPC
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,7,8,9-HxCDD	0.00000013	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-2.0-3.0-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000022	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-2.0-3.0-20220504	SW8290	2,3,4,6,7,8-HxCDF	0.000000081	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-2.0-3.0-20220504	SW8290	OCDF	0.00000057	mg/Kg	U	LB<RL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00069	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00061	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1-Dichloroethene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,1-Dichloropropene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2-Dibromoethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2-Dichloroethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,2-Dichloropropane	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.00095	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,3-Dichloropropane	0.00027	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	2,2-Dichloropropane	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	2-Hexanone	0.0046	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.007	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Acetone	0.01	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Benzene	0.00046	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Bromochloromethane	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Bromodichloromethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Bromoform	0.00098	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Bromomethane	0.00025	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Carbon disulfide	0.00023	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-01-3.0-3.5-20220504	SW8260B	Carbon tetrachloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Chlorobenzene	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Chloroethane	0.00088	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Chloroform	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Chloromethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Dibromochloromethane	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Dibromomethane	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Dichlorodifluoromethane	0.00057	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Ethylbenzene	0.00048	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Hexachlorobutadiene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Isopropylbenzene	0.00054	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Methyl tert-butyl ether	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Naphthalene	0.0021	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	n-Butylbenzene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	N-Propylbenzene	0.00089	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	p-Isopropyltoluene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	sec-Butylbenzene	0.00078	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Styrene	0.00087	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	tert-Butylbenzene	0.00077	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Tetrachloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Toluene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Trichloroethene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Trichlorofluoromethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Vinyl chloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000099	mg/Kg	UJ	LB<RL
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000025	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000028	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000032	mg/Kg	UJ	LB<RL
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,6,7,8-HxCDD	0.00000017	mg/Kg	UJ	EMPC
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,7,8,9-HxCDD	0.00000019	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-3.0-3.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000045	mg/Kg	UJ	LB<RL
JBRA-01-3.0-3.5-20220504	SW8290	2,3,4,6,7,8-HxCDF	0.00000013	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-01-3.0-3.5-20220504	SW8290	2,3,7,8-TCDD	0.00000012	mg/Kg	UJ	EMPC
JBRA-01-3.0-3.5-20220504	SW8290	OCDD	0.00000036	mg/Kg	UJ	Sur<LCL
JBRA-01-3.0-3.5-20220504	SW8290	OCDF	0.00000072	mg/Kg	UJ	LB<RL
JBRA-02-0.0-0.5-20220504	SW8011	1,2,3-Trichloropropane	0.000097	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8011	1,2-Dibromo-3-Chloropropane	0.000015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8011	Ethylene Dibromide	0.000018	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00091	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00092	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1-Dichloroethane	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1-Dichloroethene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,1-Dichloropropene	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00073	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0021	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0028	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2-Dibromoethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0023	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2-Dichloroethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,2-Dichloropropane	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	1,3-Dichloropropane	0.0004	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-0.0-0.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	2,2-Dichloropropane	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	2-Butanone (MEK)	0.016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	2-Chlorotoluene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	2-Hexanone	0.0068	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	4-Chlorotoluene	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Acetone	0.015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Benzene	0.00068	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Bromobenzene	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Bromochloromethane	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Bromodichloromethane	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Bromoform	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Bromomethane	0.001	mg/Kg	J	LCS<LCL; Sur<LCL; Sur>UCL
JBRA-02-0.0-0.5-20220504	SW8260B	Carbon disulfide	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Carbon tetrachloride	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Chlorobenzene	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Chloroethane	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Chloroform	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Chloromethane	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Dibromochloromethane	0.00098	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Dibromomethane	0.00073	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Dichlorodifluoromethane	0.00085	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Ethylbenzene	0.00071	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Hexachlorobutadiene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Isopropylbenzene	0.0008	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Methyl tert-butyl ether	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Methylene Chloride	0.017	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	m-Xylene & p-Xylene	0.002	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Naphthalene	0.0031	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	n-Butylbenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	N-Propylbenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	o-Xylene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	p-Isopropyltoluene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	sec-Butylbenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Styrene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	tert-Butylbenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Tetrachloroethene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Toluene	0.0023	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Trichloroethene	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Trichlorofluoromethane	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Vinyl acetate	0.0026	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Vinyl chloride	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8260B	Xylenes, Total	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	1,2,4-Trichlorobenzene	0.00089	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	1,2-Dichlorobenzene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	1,3-Dichlorobenzene	0.00071	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	1-Methylnaphthalene	0.0085	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4,5-Trichlorophenol	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4,6-Trichlorophenol	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4-Dichlorophenol	0.0041	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4-Dimethylphenol	0.0089	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4-Dinitrophenol	0.086	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,4-Dinitrotoluene	0.0064	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2,6-Dinitrotoluene	0.0022	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Chloronaphthalene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Chlorophenol	0.00059	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Methylnaphthalene	0.01	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Methylphenol	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Nitroaniline	0.0022	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	2-Nitrophenol	0.00092	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	3 & 4 Methylphenol	0.043	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	3,3'-Dichlorobenzidine	0.012	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-0.0-0.5-20220504	SW8270C	3-Nitroaniline	0.015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4,6-Dinitro-2-methylphenol	0.015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Bromophenyl phenyl ether	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Chloro-3-methylphenol	0.0049	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Chloroaniline	0.02	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Chlorophenyl phenyl ether	0.00093	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Nitroaniline	0.0074	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	4-Nitrophenol	0.025	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Acenaphthene	0.00068	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Acenaphthylene	0.0027	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Anthracene	0.0024	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Azobenzene	0.028	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzo[a]anthracene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzo[a]pyrene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzo[b]fluoranthene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzo[g,h,i]perylene	0.0027	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzo[k]fluoranthene	0.0021	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzoic acid	0.18	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Benzyl alcohol	0.0074	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	bis (2-chloroisopropyl) ether	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Bis(2-chloroethoxy)methane	0.0027	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Bis(2-chloroethyl)ether	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Bis(2-ethylhexyl) phthalate	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Butyl benzyl phthalate	0.0075	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Carbazole	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Chrysene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Dibenz[a,h]anthracene	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Dibenzofuran	0.077	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Diethyl phthalate	0.0032	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Dimethyl phthalate	0.0022	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Di-n-butyl phthalate	0.004	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Di-n-octyl phthalate	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Fluoranthene	0.0024	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Fluorene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Hexachlorobenzene	0.0022	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Hexachlorobutadiene	0.0022	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Hexachlorocyclopentadiene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Hexachloroethane	0.00064	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Indeno[1,2,3-cd]pyrene	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Isophorone	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Naphthalene	0.29	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Nitrobenzene	0.003	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	N-Nitrosodi-n-propylamine	0.0032	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	N-Nitrosodiphenylamine	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Pentachlorophenol	0.0093	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Phenanthrene	0.022	mg/Kg	J	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Pyrene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8270C	Pyridine	0.023	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000011	mg/Kg	U	LB<RL
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000092	mg/Kg	U	LB<RL
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,4,7,8,9-HpCDF	0.0000003	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.0000057	mg/Kg	U	LB<RL
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,6,7,8-HxCDD	0.0000042	mg/Kg	UJ	EMPC
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,7,8,9-HxCDD	0.0000041	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.0000057	mg/Kg	U	LB<RL
JBRA-02-0.0-0.5-20220504	SW8290	1,2,3,7,8-PeCDF	0.0000064	mg/Kg	UJ	EMPC
JBRA-02-0.0-0.5-20220504	SW8290	2,3,4,6,7,8-HxCDF	0.0000037	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-0.0-0.5-20220504	SW8290	2,3,7,8-TCDD	0.0000033	mg/Kg	UJ	EMPC
JBRA-02-0.0-0.5-20220504	SW8290	OCDD	0.0000042	mg/Kg	UJ	Sur<LCL
JBRA-02-0.0-0.5-20220504	SW8290	OCDF	0.0000087	mg/Kg	U	LB<RL
JBRA-02-1.0-1.5-20220504	SW6020	Antimony	1.5	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW6020	Beryllium	0.41	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW6020	Lead	18	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW6020	Manganese	420	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW6020	Zinc	130	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00069	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0011	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-1.0-1.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00061	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1-Dichloroethene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,1-Dichloropropene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2-Dibromoethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2-Dichloroethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,2-Dichloropropane	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.00095	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,3-Dichloropropane	0.00027	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	2,2-Dichloropropane	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	2-Hexanone	0.0046	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Acetone	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Benzene	0.00046	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Bromochloromethane	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Bromodichloromethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Bromoform	0.00098	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Bromomethane	0.00025	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Carbon disulfide	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Carbon tetrachloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Chlorobenzene	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Chloroethane	0.00088	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Chloroform	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Chloromethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Dibromochloromethane	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Dibromomethane	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Dichlorodifluoromethane	0.00057	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Ethylbenzene	0.00048	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Hexachlorobutadiene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Isopropylbenzene	0.00054	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Methyl tert-butyl ether	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Naphthalene	0.0021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	n-Butylbenzene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	N-Propylbenzene	0.00089	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	p-Isopropyltoluene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	sec-Butylbenzene	0.00078	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Styrene	0.00087	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	tert-Butylbenzene	0.00077	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Tetrachloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Toluene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Trichloroethene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Trichlorofluoromethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Vinyl acetate	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Vinyl chloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8270C	Naphthalene	0.027	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-02-1.0-1.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000016	mg/Kg	J	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-1.0-1.5-20220504	SW8290	1,2,3,7,8-PeCDD	0.00000049	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8290	OCDD	0.0000056	mg/Kg	UJ	EMPC; Sur<LCL
JBRA-02-1.0-1.5-20220504	SW8290	OCDF	0.00000099	mg/Kg	U	LB<RL
JBRA-02-1.0-1.5-20220504-FD	SW6020	Antimony	0.56	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW6020	Beryllium	0.51	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW6020	Lead	7.4	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW6020	Manganese	520	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW6020	Zinc	64	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1,1,2-Tetrachloroethane	0.00061	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1,1-Trichloroethane	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1,2,2-Tetrachloroethane	0.00094	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00054	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1,2-Trichloroethane	0.00055	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1-Dichloroethane	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1-Dichloroethene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,1-Dichloropropene	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2,3-Trichlorobenzene	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2,3-Trichloropropane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2,4-Trichlorobenzene	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2,4-Trimethylbenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2-Dibromo-3-Chloropropane	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2-Dibromoethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2-Dichloroethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,2-Dichloropropane	0.00042	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,3,5-Trimethylbenzene	0.00084	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,3-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,3-Dichloropropane	0.00024	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	1,4-Dichlorobenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	2,2-Dichloropropane	0.0008	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	2-Butanone (MEK)	0.0093	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	2-Chlorotoluene	0.00097	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	2-Hexanone	0.0041	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	4-Chlorotoluene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Acetone	0.009	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Benzene	0.00041	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Bromobenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Bromochloromethane	0.00026	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Bromodichloromethane	0.00019	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Bromoform	0.00087	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Bromomethane	0.00057	mg/Kg	U	LB<RL; LCS<LCL; Sur<LCL; Sur>UCL (J)
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Carbon disulfide	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Carbon tetrachloride	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Chlorobenzene	0.00026	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Chloroethane	0.00078	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Chloroform	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Chloromethane	0.00097	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	cis-1,2-Dichloroethene	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	cis-1,3-Dichloropropene	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Dibromochloromethane	0.00058	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Dibromomethane	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Dichlorodifluoromethane	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Ethylbenzene	0.00043	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Hexachlorobutadiene	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Isopropylbenzene	0.00048	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Methyl tert-butyl ether	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Methylene Chloride	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	m-Xylene & p-Xylene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Naphthalene	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	n-Butylbenzene	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	N-Propylbenzene	0.00079	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	o-Xylene	0.00096	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	p-Isopropyltoluene	0.00042	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	sec-Butylbenzene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Styrene	0.00077	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	tert-Butylbenzene	0.00069	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Tetrachloroethene	0.00042	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Toluene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	trans-1,2-Dichloroethene	0.00042	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	trans-1,3-Dichloropropene	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Trichloroethene	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Trichloroethene	0.00031	mg/Kg	UJ	LCS<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Trichlorofluoromethane	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Vinyl acetate	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Vinyl chloride	0.00031	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8260B	Xylenes, Total	0.00096	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8270C	Naphthalene	0.007	mg/Kg	J	FD>RPD
JBRA-02-1.0-1.5-20220504-FD	SW8270C	Pyridine	0.02	mg/Kg	UJ	LCS<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000091	mg/Kg	U	LB<RL
JBRA-02-1.0-1.5-20220504-FD	SW8290	1,2,3,4,7,8-HxCDD	0.0000003	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-1.0-1.5-20220504-FD	SW8290	1,2,3,4,7,8-HxCDF	0.0000002	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-1.0-1.5-20220504-FD	SW8290	1,2,3,7,8,9-HxCDF	0.00000022	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-02-1.0-1.5-20220504-FD	SW8290	2,3,7,8-TCDD	0.00000011	mg/Kg	UJ	EMPC
JBRA-02-1.0-1.5-20220504-FD	SW8290	OCDD	0.0000043	mg/Kg	UJ	Sur<LCL
JBRA-02-1.0-1.5-20220504-FD	SW8290	OCDF	0.0000017	mg/Kg	U	LB<RL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00069	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00061	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1-Dichloroethene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,1-Dichloropropene	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2-Dibromoethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2-Dichloroethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,2-Dichloropropane	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.00094	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,3-Dichloropropane	0.00027	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	2,2-Dichloropropane	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	2-Butanone (MEK)	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	2-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	2-Hexanone	0.0045	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	4-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.007	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Acetone	0.01	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Benzene	0.00045	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Bromobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Bromochloromethane	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Bromodichloromethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Bromoform	0.00098	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Bromomethane	0.00024	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Carbon disulfide	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Carbon tetrachloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Chlorobenzene	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Chloroethane	0.00087	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Chloroform	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Chloromethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Dibromochloromethane	0.00065	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Dibromomethane	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Dichlorodifluoromethane	0.00057	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Ethylbenzene	0.00048	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Hexachlorobutadiene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Isopropylbenzene	0.00054	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Methyl tert-butyl ether	0.00035	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-02-3.0-3.5-20220504	SW8260B	Methylene Chloride	0.012	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Naphthalene	0.0021	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	n-Butylbenzene	0.00073	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	N-Propylbenzene	0.00088	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	o-Xylene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	p-Isopropyltoluene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	sec-Butylbenzene	0.00078	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Styrene	0.00086	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	tert-Butylbenzene	0.00077	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Tetrachloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Toluene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Trichloroethene	0.00035	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Trichlorofluoromethane	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Vinyl chloride	0.00035	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8260B	Xylenes, Total	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-02-3.0-3.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000047	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
JBRA-02-3.0-3.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000032	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
JBRA-02-3.0-3.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000038	mg/Kg	UJ	EMPC; LB<RL(U)
JBRA-02-3.0-3.5-20220504	SW8290	2,3,7,8-TCDF	0.00000029	mg/Kg	UJ	EMPC
JBRA-02-3.0-3.5-20220504	SW8290	OCDD	0.0000016	mg/Kg	UJ	EMPC; Sur<LCL
JBRA-02-3.0-3.5-20220504	SW8290	OCDF	0.00000037	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
JBRA-03-0.0-0.5-20220504	SW6020	Arsenic	1.8	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Barium	84	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Chromium	19	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Cobalt	7.2	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Copper	18	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Iron	13000	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Lead	5.4	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Manganese	280	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Nickel	13	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Vanadium	37	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW6020	Zinc	37	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1,1-Trichloroethane	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1,2-Trichloroethane	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1-Dichloroethane	0.00024	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1-Dichloroethene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,1-Dichloropropene	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2,3-Trichlorobenzene	0.00076	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2,3-Trichloropropane	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00053	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.002	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2-Dibromoethane	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2-Dichlorobenzene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2-Dichloroethane	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,2-Dichloropropane	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,3,5-Trimethylbenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,3-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,3-Dichloropropane	0.00029	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	1,4-Dichlorobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	2,2-Dichloropropane	0.00097	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	2-Butanone (MEK)	0.011	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	2-Chlorotoluene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	2-Hexanone	0.0049	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	4-Chlorotoluene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0076	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Acetone	0.011	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Benzene	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Bromobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Bromochloromethane	0.00032	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-03-0.0-0.5-20220504	SW8260B	Bromodichloromethane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Bromoform	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Bromomethane	0.00027	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Carbon disulfide	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Carbon tetrachloride	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Chlorobenzene	0.00032	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Chloroethane	0.00095	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Chloroform	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Chloromethane	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	cis-1,2-Dichloroethene	0.00076	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	cis-1,3-Dichloropropene	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Dibromochloromethane	0.00071	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Dibromomethane	0.00053	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Dichlorodifluoromethane	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Ethylbenzene	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Hexachlorobutadiene	0.00076	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Isopropylbenzene	0.00058	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Methyl tert-butyl ether	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Methylene Chloride	0.013	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	m-Xylene & p-Xylene	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Naphthalene	0.0023	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	n-Butylbenzene	0.0008	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	N-Propylbenzene	0.00096	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	o-Xylene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	p-Isopropyltoluene	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	sec-Butylbenzene	0.00085	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Styrene	0.00094	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	tert-Butylbenzene	0.00084	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Tetrachloroethene	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Toluene	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	trans-1,2-Dichloroethene	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	trans-1,3-Dichloropropene	0.00076	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Trichloroethene	0.00038	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Trichlorofluoromethane	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Vinyl acetate	0.0019	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Vinyl chloride	0.00038	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8260B	Xylenes, Total	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-03-0.0-0.5-20220504	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000013	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,4,7,8,9-HpCDF	0.00000089	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000096	mg/Kg	U	LB<RL
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,4,7,8-HxCDF	0.00000075	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000078	mg/Kg	U	LB<RL
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,7,8-PeCDD	0.00000021	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	1,2,3,7,8-PeCDF	0.00000025	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	2,3,4,6,7,8-HxCDF	0.00000065	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504	SW8290	2,3,4,7,8-PeCDF	0.00000041	mg/Kg	U	LB<RL
JBRA-03-0.0-0.5-20220504	SW8290	2,3,7,8-TCDF	0.00000073	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504-FD	SW6020	Arsenic	3.8	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Barium	160	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Chromium	36	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Cobalt	14	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Copper	30	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Iron	24000	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Lead	11	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Manganese	520	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Nickel	24	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Vanadium	70	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW6020	Zinc	70	mg/Kg	J	FD>RPD
JBRA-03-0.0-0.5-20220504-FD	SW8260B	Bromomethane	0.00026	mg/Kg	UJ	LCS<LCL
JBRA-03-0.0-0.5-20220504-FD	SW8260B	Trichloroethene	0.00038	mg/Kg	UJ	LCS<LCL
JBRA-03-0.0-0.5-20220504-FD	SW8270C	Pyridine	0.019	mg/Kg	UJ	LCS<LCL
JBRA-03-0.0-0.5-20220504-FD	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000012	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504-FD	SW8290	1,2,3,4,7,8-HxCDD	0.00000034	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-03-0.0-0.5-20220504-FD	SW8290	1,2,3,6,7,8-HxCDD	0.00000029	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504-FD	SW8290	1,2,3,7,8,9-HxCDD	0.00000038	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-03-0.0-0.5-20220504-FD	SW8290	1,2,3,7,8,9-HxCDF	0.00000023	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-03-0.0-0.5-20220504-FD	SW8290	2,3,4,6,7,8-HxCDF	0.00000003	mg/Kg	UJ	EMPC; LB<RL (U)

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-03-0.0-0.5-20220504-FD	SW8290	2,3,4,7,8-PeCDF	0.0000003	mg/Kg	U	LB<RL
JBRA-03-0.0-0.5-20220504-FD	SW8290	2,3,7,8-TCDD	0.00000018	mg/Kg	UJ	EMPC
JBRA-03-0.0-0.5-20220504-FD	SW8290	2,3,7,8-TCDF	0.00000081	mg/Kg	UJ	EMPC
JBRA-03-1.0-1.5-20220504	SW8260B	Bromomethane	0.00026	mg/Kg	UJ	LCS<LCL
JBRA-03-1.0-1.5-20220504	SW8260B	Trichloroethene	0.00037	mg/Kg	UJ	LCS<LCL
JBRA-03-1.0-1.5-20220504	SW8270C	Pyridine	0.018	mg/Kg	UJ	LCS<LCL
JBRA-03-1.0-1.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.000001	mg/Kg	U	LB<RL
JBRA-03-1.0-1.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000025	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-03-1.0-1.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000033	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-03-1.0-1.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000027	mg/Kg	U	LB<RL
JBRA-03-1.0-1.5-20220504	SW8290	2,3,7,8-TCDD	0.00000014	mg/Kg	UJ	EMPC
JBRA-03-1.0-1.5-20220504	SW8290	OCDD	0.00000032	mg/Kg	UJ	Sur<LCL
JBRA-03-1.0-1.5-20220504	SW8290	OCDF	0.00000051	mg/Kg	U	LB<RL
JBRA-03-1.5-2.5-20220504	SW8260B	Bromomethane	0.00026	mg/Kg	UJ	LCS<LCL
JBRA-03-1.5-2.5-20220504	SW8260B	Trichloroethene	0.00037	mg/Kg	UJ	LCS<LCL
JBRA-03-1.5-2.5-20220504	SW8270C	Pyridine	0.02	mg/Kg	UJ	LCS<LCL
JBRA-03-1.5-2.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.00000013	mg/Kg	U	LB<RL; Sur<LCL (J)
JBRA-03-1.5-2.5-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.00000044	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
JBRA-03-1.5-2.5-20220504	SW8290	1,2,3,4,7,8,9-HxCDF	0.00000035	mg/Kg	U	LB<RL
JBRA-03-1.5-2.5-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000035	mg/Kg	U	LB<RL
JBRA-03-1.5-2.5-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000048	mg/Kg	U	LB<RL
JBRA-03-1.5-2.5-20220504	SW8290	2,3,7,8-TCDD	0.00000014	mg/Kg	UJ	EMPC
JBRA-03-1.5-2.5-20220504	SW8290	OCDD	0.00000052	mg/Kg	UJ	EMPC; Sur<LCL
JBRA-03-1.5-2.5-20220504	SW8290	OCDF	0.00000011	mg/Kg	UJ	EMPC; Sur<LCL; LB<RL(U)
JBRA-20220504-TB-S	SW8260B	1,1,1,2-Tetrachloroethane	0.00059	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1,1-Trichloroethane	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1,2,2-Tetrachloroethane	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00052	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1,2-Trichloroethane	0.00053	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1-Dichloroethane	0.00019	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1-Dichloroethene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,1-Dichloropropene	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2,3-Trichlorobenzene	0.0006	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2,3-Trichloropropane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2,4-Trichlorobenzene	0.00042	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2,4-Trimethylbenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2-Dibromo-3-Chloropropane	0.0016	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2-Dibromoethane	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2-Dichlorobenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2-Dichloroethane	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,2-Dichloropropane	0.0004	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,3,5-Trimethylbenzene	0.00081	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,3-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,3-Dichloropropane	0.00023	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	1,4-Dichlorobenzene	0.00098	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	2,2-Dichloropropane	0.00077	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	2-Butanone (MEK)	0.0089	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	2-Chlorotoluene	0.00093	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	2-Hexanone	0.0039	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	4-Chlorotoluene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	4-Methyl-2-pentanone (MIBK)	0.006	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Acetone	0.0086	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Benzene	0.00039	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Bromobenzene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Bromochloromethane	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Bromodichloromethane	0.00018	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Bromoform	0.00084	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Bromomethane	0.00021	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-20220504-TB-S	SW8260B	Carbon disulfide	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Carbon tetrachloride	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Chlorobenzene	0.00025	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Chloroethane	0.00075	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Chloroform	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Chloromethane	0.00093	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	cis-1,2-Dichloroethene	0.0006	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	cis-1,3-Dichloropropene	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Dibromochloromethane	0.00056	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Dibromomethane	0.00042	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-20220504-TB-S	SW8260B	Dichlorodifluoromethane	0.00049	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Ethylbenzene	0.00041	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Hexachlorobutadiene	0.0006	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Isopropylbenzene	0.00046	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Methyl tert-butyl ether	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Methylene Chloride	0.0099	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	m-Xylene & p-Xylene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Naphthalene	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	n-Butylbenzene	0.00063	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	N-Propylbenzene	0.00076	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	o-Xylene	0.00092	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	p-Isopropyltoluene	0.0004	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	sec-Butylbenzene	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Styrene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	tert-Butylbenzene	0.00066	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Tetrachloroethene	0.0004	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Toluene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	trans-1,2-Dichloroethene	0.0004	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	trans-1,3-Dichloropropene	0.0006	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Trichloroethene	0.0003	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-20220504-TB-S	SW8260B	Trichlorofluoromethane	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Vinyl acetate	0.0015	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Vinyl chloride	0.0003	mg/Kg	UJ	Sur<LCL
JBRA-20220504-TB-S	SW8260B	Xylenes, Total	0.00092	mg/Kg	UJ	Sur<LCL
JBRA-GW01-20220504	SW6020	Lead	9.6	ug/L	J	FD>RPD
JBRA-GW01-20220504	SW6020	Manganese	87	ug/L	J	FD>RPD
JBRA-GW01-20220504	SW8270C	4,6-Dinitro-2-methylphenol	0.53	ug/L	UJ	LCS<LCL
JBRA-GW01-20220504	SW8270C	Hexachlorocyclopentadiene	0.13	ug/L	UJ	LCS<LCL
JBRA-GW01-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000019	ug/L	UJ	EMPC; LB<RL (U)
JBRA-GW01-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000011	ug/L	UJ	EMPC
JBRA-GW01-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.0000025	ug/L	UJ	EMPC; LB<RL (U)
JBRA-GW01-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.0000024	ug/L	U	LB<RL
JBRA-GW01-20220504	SW8290	OCDD	0.0000057	ug/L	UJ	EMPC
JBRA-GW01-20220504-FD	SW6020	Lead	12	ug/L	J	FD>RPD
JBRA-GW01-20220504-FD	SW6020	Manganese	110	ug/L	J	FD>RPD
JBRA-GW01-20220504-FD	SW8270C	4,6-Dinitro-2-methylphenol	0.53	ug/L	UJ	LCS<LCL
JBRA-GW01-20220504-FD	SW8270C	Diethyl phthalate	0.23	ug/L	U	LB<RL
JBRA-GW01-20220504-FD	SW8270C	Hexachlorocyclopentadiene	0.13	ug/L	UJ	LCS<LCL
JBRA-GW01-20220504-FD	SW8290	1,2,3,4,7,8-HxCDD	0.0000024	ug/L	U	LB<RL
JBRA-GW01-20220504-FD	SW8290	1,2,3,7,8,9-HxCDF	0.0000013	ug/L	UJ	EMPC; LB<RL (U)
JBRA-GW01-20220504-FD	SW8290	OCDD	0.0000051	ug/L	UJ	EMPC
JBRA-WC-S-20220504	SW8260B	1,1,1,2-Tetrachloroethane	0.00065	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1,1-Trichloroethane	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1,2,2-Tetrachloroethane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1,2-Trichloro-1,2,2-trifluoroethane	0.00058	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1,2-Trichloroethane	0.00059	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1-Dichloroethane	0.00021	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1-Dichloroethene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,1-Dichloropropene	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2,3-Trichlorobenzene	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2,3-Trichloropropane	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2,4-Trichlorobenzene	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2,4-Trimethylbenzene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2-Dibromo-3-Chloropropane	0.0018	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2-Dibromoethane	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2-Dichlorobenzene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2-Dichloroethane	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,2-Dichloropropane	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,3,5-Trimethylbenzene	0.0009	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,3-Dichlorobenzene	0.0012	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,3-Dichloropropane	0.00026	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	1,4-Dichlorobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	2,2-Dichloropropane	0.00085	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	2-Butanone (MEK)	0.0099	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	2-Chlorotoluene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	2-Hexanone	0.0043	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	4-Chlorotoluene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	4-Methyl-2-pentanone (MIBK)	0.0067	mg/Kg	UJ	Sur<LCL

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
JBRA-WC-S-20220504	SW8260B	Acetone	0.0096	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Benzene	0.00043	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Bromobenzene	0.0011	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Bromochloromethane	0.00028	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Bromodichloromethane	0.0002	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Bromoform	0.00093	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Bromomethane	0.00023	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-WC-S-20220504	SW8260B	Carbon disulfide	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Carbon tetrachloride	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Chlorobenzene	0.00028	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Chloroethane	0.00083	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Chloroform	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Chloromethane	0.001	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	cis-1,2-Dichloroethene	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	cis-1,3-Dichloropropene	0.00022	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Dibromochloromethane	0.00062	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Dibromomethane	0.00047	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Dichlorodifluoromethane	0.00054	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Ethylbenzene	0.00045	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Hexachlorobutadiene	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Isopropylbenzene	0.00051	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Methyl tert-butyl ether	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Methylene Chloride	0.011	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	m-Xylene & p-Xylene	0.0013	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Naphthalene	0.002	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	n-Butylbenzene	0.0007	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	N-Propylbenzene	0.00084	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	o-Xylene	0.001	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	p-Isopropyltoluene	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	sec-Butylbenzene	0.00074	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Styrene	0.00082	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	tert-Butylbenzene	0.00073	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Tetrachloroethene	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Toluene	0.0014	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	trans-1,2-Dichloroethene	0.00044	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	trans-1,3-Dichloropropene	0.00067	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Trichloroethene	0.00033	mg/Kg	UJ	LCS<LCL; Sur<LCL
JBRA-WC-S-20220504	SW8260B	Trichlorofluoromethane	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Vinyl acetate	0.0017	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Vinyl chloride	0.00033	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8260B	Xylenes, Total	0.001	mg/Kg	UJ	Sur<LCL
JBRA-WC-S-20220504	SW8270C	Pyridine	0.02	mg/Kg	UJ	LCS<LCL
JBRA-WC-S-20220504	SW8290	1,2,3,4,6,7,8-HpCDD	0.0000013	mg/Kg	U	LB<RL
JBRA-WC-S-20220504	SW8290	1,2,3,4,6,7,8-HpCDF	0.0000003	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-WC-S-20220504	SW8290	1,2,3,4,7,8-HxCDD	0.00000028	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-WC-S-20220504	SW8290	1,2,3,7,8,9-HxCDF	0.00000024	mg/Kg	UJ	EMPC; LB<RL (U)
JBRA-WC-S-20220504	SW8290	2,3,7,8-TCDD	0.00000016	mg/Kg	UJ	EMPC
JBRA-WC-S-20220504	SW8290	OCDD	0.000003	mg/Kg	UJ	EMPC; Sur<LCL
JBRA-WC-S-20220504	SW8290	OCDF	0.00000062	mg/Kg	U	LB<RL

Notes:

- CCV<LCL = continuing calibration verification recovery less than the lower control limit
- CCV>UCL = continuing calibration verification recovery greater than the upper control limit
- EB<RL = analyte detected less than five times associated equipment blank concentration
- EB>RL = analyte detected greater than five times associated equipment blank concentration
- EMPC = estimated maximum possible concentration
- FD>RPD = field duplicate relative percent difference greater than acceptance criterion
- HTa>UCL = sample analysis holding time exceeded the method specified control limit
- HTp>UCL = sample preparation holding time exceeded the method specified control limit
- ICVS<LCL = Initial calibration verification recovery less than the lower control limit
- ICVS>UCL = Initial calibration verification 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
- LCSRPD = laboratory control sample/laboratory control sample duplicate relative percent difference greater than acceptance criterion

TABLE 3 - Data Qualification Summary

NativeID	Method	Analyte	Final Result	Units	Final Validation Flag	Validation Reason
----------	--------	---------	--------------	-------	-----------------------	-------------------

mg/Kg = milligrams per kilogram

mg/L = milligrams per liter

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

SD<LCL = matrix spike duplicate recovery less than the lower control limit

SD>UCL = matrix spike duplicate recovery greater than the upper control limit

STLC = Soluble Threshold Limit Concentration

Sur<LCL = surrogate recovery less than the lower control limit

Sur>UCL = surrogate recovery greater than the upper control limit

TCLP = Toxicity Characteristic Leaching Procedure

TB<RL = analyte detected less than five times associated trip blank concentration

ug/Kg = micrograms per kilogram

ug/L = micrograms per liter

4. References

Jacobs Engineering Group Inc. (Jacobs). 2021a. *California Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Jacobs Engineering Group Inc. (Jacobs). 2021b. *Oregon Site Investigation Work Plan*. Prepared for PacifiCorp. November.

U.S. Environmental Protection Agency (EPA). 2020a. *National Functional Guidelines for Organic Superfund Methods Data Review*. November.

U.S. Environmental Protection Agency (EPA). 2020b. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. November.

5. Signature Page

This Data Quality Evaluation Report has been validated by the following Senior Chemist.



February 22, 2023

Mark Fesler
Senior Chemist
Jacobs Engineering Group Inc.

Attachment
Samples Associated with Data Quality Evaluation
Report

Samples Associated with Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C2UT-02-12-20220308	08-Mar-22	N	SOIL
C2UT-02-16-20220308	08-Mar-22	N	SOIL
C2UT-02-18-20220308	08-Mar-22	N	SOIL
C2UT-02-PCB-20220308	08-Mar-22	N	SOIL
C2UT-02W-17.5-20220308	08-Mar-22	N	SOIL
C2UT-02W-17.5-20220308-FD	08-Mar-22	FD	SOIL
C2WP-01-0.5-20220308	08-Mar-22	N	SOIL
C2WP-01-2.5-20220308	08-Mar-22	N	SOIL
C2WP-01-5.0-20220308	08-Mar-22	N	SOIL
C2WP-02-0.5-20220308	08-Mar-22	N	SOIL
C2WP-02-0.5-20220308-FD	08-Mar-22	FD	SOIL
C2WP-02-1.5-20220308	08-Mar-22	N	SOIL
C2WP-02-3.5-20220308	08-Mar-22	N	SOIL
C2WP-02-6.0-20220308	08-Mar-22	N	SOIL
C2WP-03-0.5-20220308	08-Mar-22	N	SOIL
C2WP-03-2.5-20220308	08-Mar-22	N	SOIL
C2WP-03-5.0-20220308	08-Mar-22	N	SOIL
C2WP-04-0.5-20220308	08-Mar-22	N	SOIL
C2WP-04-1.5-20220308	08-Mar-22	N	SOIL
C2WP-04-3.5-20220308	08-Mar-22	N	SOIL
C2WP-04-6.0-20220308	08-Mar-22	N	SOIL
C2WP-05-0.5-20220308	08-Mar-22	N	SOIL
C2WP-05-2.5-20220308	08-Mar-22	N	SOIL
C2WP-05-5.0-20220308	08-Mar-22	N	SOIL
C2WP-06-0.5-20220308	08-Mar-22	N	SOIL
C2WP-06-0.5-20220308-FD	08-Mar-22	FD	SOIL
C2WP-06-1.5-20220308	08-Mar-22	N	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C2WP-06-3.5-20220308	08-Mar-22	N	SOIL
C2WP-06-6.0-20220308	08-Mar-22	N	SOIL
C2WP-07-0.5-20220308	08-Mar-22	N	SOIL
C2WP-07-2.5-20220308	08-Mar-22	N	SOIL
C2WP-07-5.0-20220308	08-Mar-22	N	SOIL
C2WP-20220308-EB	08-Mar-22	EB	WATER
C2WP-20220308-TB-G	08-Mar-22	TB	WATER
C2WP-20220308-TB-S	08-Mar-22	TB	SOIL
C2WP-PCB-20220308	08-Mar-22	N	SOIL
C2WP-WC-20220308	08-Mar-22	N	SOIL
C2BP-01-0.5-20220309	09-Mar-22	N	SOIL
C2BP-01-2.5-20220309	09-Mar-22	N	SOIL
C2BP-02-0.5-20220309	09-Mar-22	N	SOIL
C2BP-02-1.5-20220309	09-Mar-22	N	SOIL
C2BP-02-1.5-20220309-FD	09-Mar-22	FD	SOIL
C2BP-02-2.5-20220309	09-Mar-22	N	SOIL
C2BP-03-0.5-20220309	09-Mar-22	N	SOIL
C2BP-03-1.5-20220309	09-Mar-22	N	SOIL
C2BP-03-2.5-20220309	09-Mar-22	N	SOIL
C2BP-06-0.5-20220309	09-Mar-22	N	SOIL
C2BP-06-1.5-20220309	09-Mar-22	N	SOIL
C2BP-06-2.5-20220309	09-Mar-22	N	SOIL
C2BP-12-0.5-20220309	09-Mar-22	N	SOIL
C2BP-12-1.5-20220309	09-Mar-22	N	SOIL
C2BP-12-2.5-20220309	09-Mar-22	N	SOIL
C2BP-12-2.5-20220309-FD	09-Mar-22	FD	SOIL
C2BP-WC2-20220309	09-Mar-22	N	SOIL
C2TF-01-1.0-20220309	09-Mar-22	N	SOIL
C2TF-01-2.0-20220309	09-Mar-22	N	SOIL

Sample ID	Sample Date	Sample Type	Matrix
C2TF-20220309-TB-S	09-Mar-22	TB	SOIL
C2UT-02W-20220309	09-Mar-22	N	WATER
C2UT-02W-20220309-FD	09-Mar-22	FD	WATER
C2UT-20220309-EB	09-Mar-22	EB	WATER
C2UT-20220309-TB-W	09-Mar-22	TB	WATER
C1DP-01-0.5-20220310	10-Mar-22	N	SOIL
C1DP-01-1.5-2022310	10-Mar-22	N	SOIL
C1DP-01-2.5-20220310	10-Mar-22	N	SOIL
C1DP-02-0.5-20220310	10-Mar-22	N	SOIL
C1DP-02-0.5-20220310-FD	10-Mar-22	FD	SOIL
C1DP-02-1.5-20220310	10-Mar-22	N	SOIL
C1DP-02-2.5-20220310	10-Mar-22	N	SOIL
C1DP-03-0.5-20220310	10-Mar-22	N	SOIL
C1DP-03-1.5-20220310	10-Mar-22	N	SOIL
C1DP-03-3.5-20220310	10-Mar-22	N	SOIL
C1DP-03-6.0-20220310	10-Mar-22	N	SOIL
C1DP-20220310-EB	10-Mar-22	EB	WATER
C1DP-WC1-20220310	10-Mar-22	N	SOIL
C2BP-04-0.5-20220310	10-Mar-22	N	SOIL
C2BP-04-1.5-20220310	10-Mar-22	N	SOIL
C2BP-04-2.5-20220310	10-Mar-22	N	SOIL
C2BP-05-0.5-20220310	10-Mar-22	N	SOIL
C2BP-05-1.5-20220310	10-Mar-22	N	SOIL
C2BP-05-2.5-20220310	10-Mar-22	N	SOIL
C2BP-07-0.5-20220310	10-Mar-22	N	SOIL
C2BP-07-1.5-20220310	10-Mar-22	N	SOIL
C2BP-07-2.5-20220310	10-Mar-22	N	SOIL
C2BP-08-0.5-20220310	10-Mar-22	N	SOIL
C2BP-08-1.5-20220310	10-Mar-22	N	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C2BP-08-1.5-20220310-FD	10-Mar-22	FD	SOIL
C2BP-08-2.5-20220310	10-Mar-22	N	SOIL
C2BP-08-3.5-20220310	10-Mar-22	N	SOIL
C2BP-09-0.5-20220310	10-Mar-22	N	SOIL
C2BP-09-1.5-20220310	10-Mar-22	N	SOIL
C2BP-09-2.5-20220310	10-Mar-22	N	SOIL
C2BP-09-3.5-20220310	10-Mar-22	N	SOIL
C2BP-10-0.5-20220310	10-Mar-22	N	SOIL
C2BP-10-0.5-20220310-FD	10-Mar-22	FD	SOIL
C2BP-10-1.5-20220310	10-Mar-22	N	SOIL
C2BP-10-3.5-20220310	10-Mar-22	N	SOIL
C2BP-10-6.0-20220310	10-Mar-22	N	SOIL
C2BP-11-0.5-20220310	10-Mar-22	N	SOIL
C2BP-11-1.5-20220310	10-Mar-22	N	SOIL
C2BP-11-2.5-20220310	10-Mar-22	N	SOIL
C2BP-11-3.5-20220310	10-Mar-22	N	SOIL
C2BP-20220310-EB	10-Mar-22	EB	WATER
C2BP-20220310-TB-S	10-Mar-22	TB	SOIL
C2BP-20220310-TB-W	10-Mar-22	TB	WATER
C2BP-PCB-202200310	10-Mar-22	N	SOIL
C2BP-WC-20220310	10-Mar-22	N	SOIL
C2BP-WC3-20220310	10-Mar-22	N	SOIL
C2TF-03-1.5-20220310	10-Mar-22	N	SOIL
C2TF-03-1.5-20220310-FD	10-Mar-22	FD	SOIL
C1DP-04-0.5-20220311	11-Mar-22	N	SOIL
C1DP-04-1.5-20220311	11-Mar-22	N	SOIL
C1DP-04-2.5-20220311	11-Mar-22	N	SOIL
C1DP-05-0.5-20220311	11-Mar-22	N	SOIL
C1DP-05-1.5-20220311	11-Mar-22	N	SOIL

Sample ID	Sample Date	Sample Type	Matrix
C1DP-05-2.5-20220311	11-Mar-22	N	SOIL
C1DP-06-0.5-20220311	11-Mar-22	N	SOIL
C1DP-06-1.5-20220311	11-Mar-22	N	SOIL
C1DP-06-1.5-20220311-FD	11-Mar-22	FD	SOIL
C1DP-06-4.5-20220311	11-Mar-22	N	SOIL
C1DP-06-6.0-20220311	11-Mar-22	N	SOIL
C1DP-07-0.5-20220311	11-Mar-22	N	SOIL
C1DP-07-1.5-20220311	11-Mar-22	N	SOIL
C1DP-07-2.5-20220311	11-Mar-22	N	SOIL
C1DP-08-0.5-20220311	11-Mar-22	N	SOIL
C1DP-08-1.5-20220311	11-Mar-22	N	SOIL
C1DP-08-2.5-20220311	11-Mar-22	N	SOIL
C1DP-09-0.5-20220311	11-Mar-22	N	SOIL
C1DP-09-1.5-20220311	11-Mar-22	N	SOIL
C1DP-09-2.5-20220311	11-Mar-22	N	SOIL
C1DP-10-0.5-20220311	11-Mar-22	N	SOIL
C1DP-10-1.5-20220311	11-Mar-22	N	SOIL
C1DP-10-2.5-20220311	11-Mar-22	N	SOIL
C1DP-11-0.5-20220311	11-Mar-22	N	SOIL
C1DP-11-1.5-20220311	11-Mar-22	N	SOIL
C1DP-11-2.5-20220311	11-Mar-22	N	SOIL
C1DP-12-0.5-20220311	11-Mar-22	N	SOIL
C1DP-12-0.5-20220311-FD	11-Mar-22	FD	SOIL
C1DP-12-1.5-20220311	11-Mar-22	N	SOIL
C1DP-12-2.5-20220311	11-Mar-22	N	SOIL
C1DP-13-0.5-20220311	11-Mar-22	N	SOIL
C1DP-13-1.5-20220311	11-Mar-22	N	SOIL
C1DP-13-1.5-20220311-FD	11-Mar-22	FD	SOIL
C1DP-13-6.0-20220311	11-Mar-22	N	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C1DP-14-0.5-20220311	11-Mar-22	N	SOIL
C1DP-14-1.5-20220311	11-Mar-22	N	SOIL
C1DP-14-6.0-20220311	11-Mar-22	N	SOIL
C1DP-15-0.5-20220311	11-Mar-22	N	SOIL
C1DP-15-1.5-20220311	11-Mar-22	N	SOIL
C1DP-15-6.0-20220311	11-Mar-22	N	SOIL
C1DP-16-0.5-20220311	11-Mar-22	N	SOIL
C1DP-16-1.5-20220311	11-Mar-22	N	SOIL
C1DP-16-2.5-20220311	11-Mar-22	N	SOIL
C1DP-17-0.5-20220311	11-Mar-22	N	SOIL
C1DP-17-1.5-20220311	11-Mar-22	N	SOIL
C1DP-17-1.5-20220311-FD	11-Mar-22	FD	SOIL
C1DP-17-2.5-20220311	11-Mar-22	N	SOIL
C1DP-20220311-EB	11-Mar-22	EB	WATER
C1DP-20220311-TB-GW	11-Mar-22	TB	WATER
C1DP-20220311-TB-S	11-Mar-22	TB	SOIL
C1DP-PCB-20220311	11-Mar-22	N	SOIL
C1DP-WC2-20220311	11-Mar-22	N	SOIL
C1DP-WC3-20220311	11-Mar-22	N	SOIL
C1DP-WC4-20220311	11-Mar-22	N	SOIL
C2BP-WC-W-20220325	25-Mar-22	N	WATER
C2CB-WC-S-20220325	25-Mar-22	N	SOIL
C2CB-WC-W-20220325	25-Mar-22	N	WATER
C2TF-WC-S-20220325	25-Mar-22	N	SOIL
C2TF-WC-W-20220325	25-Mar-22	N	WATER
C2UT-WC-S-20220325	25-Mar-22	N	SOIL
C2UT-WC-W-20220325	25-Mar-22	N	WATER
C2WP-WC-W-20220325	25-Mar-22	N	WATER
TB-S-20220325	25-Mar-22	TB	SOIL

Sample ID	Sample Date	Sample Type	Matrix
TB-W-20220325	25-Mar-22	TB	WATER
IGBP-01-0.0-0.5-20220502	02-May-22	N	SOIL
IGBP-01-0.0-0.5-20220502-FD	02-May-22	FD	SOIL
IGBP-01-0.5-1.5-20220502	02-May-22	N	SOIL
IGBP-02-0.0-0.5-20220502	02-May-22	N	SOIL
IGBP-20220502-EB	02-May-22	EB	WATER
IGBP-C1-0.0-0.5-20220502	02-May-22	N	SOIL
IGBP-C2-0.0-0.5-20220502	02-May-22	N	SOIL
Trip Blank 20220502	02-May-22	TB	SOIL
IGSR-01-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-01-0.5-1.0-20220503	03-May-22	N	SOIL
IGSR-02-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-02-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-02-3.0-3.5-20220503	03-May-22	N	SOIL
IGSR-03-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-03-0.0-0.5-20220503-FD	03-May-22	FD	SOIL
IGSR-03-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-04-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-04-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-04-1.5-2.0-20220503	03-May-22	N	SOIL
IGSR-05-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-05-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-06-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-06-1.0-1.25-20220503	03-May-22	N	SOIL
IGSR-07-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-07-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-08-0.0-0.5-20220503	03-May-22	N	SOIL
IGSR-08-1.0-1.5-20220503	03-May-22	N	SOIL
IGSR-08-1.0-1.5-20220503-FD	03-May-22	FD	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
IGSR-20220503-EB	03-May-22	EB	WATER
JBRA-01-0.0-0.5-20220504	04-May-22	N	SOIL
JBRA-01-1.0-1.5-20220504	04-May-22	N	SOIL
JBRA-01-2.0-3.0-20220504	04-May-22	N	SOIL
JBRA-01-3.0-3.5-20220504	04-May-22	N	SOIL
JBRA-02-0.0-0.5-20220504	04-May-22	N	SOIL
JBRA-02-1.0-1.5-20220504	04-May-22	N	SOIL
JBRA-02-1.0-1.5-20220504-FD	04-May-22	FD	SOIL
JBRA-02-3.0-3.5-20220504	04-May-22	N	SOIL
JBRA-03-0.0-0.5-20220504	04-May-22	N	SOIL
JBRA-03-0.0-0.5-20220504-FD	04-May-22	FD	SOIL
JBRA-03-1.0-1.5-20220504	04-May-22	N	SOIL
JBRA-03-1.5-2.5-20220504	04-May-22	N	SOIL
JBRA-20220504-TB-S	04-May-22	TB	SOIL
JBRA-20220504-TB-W	04-May-22	TB	WATER
JBRA-GW01-20220504	04-May-22	N	WATER
JBRA-GW01-20220504-FD	04-May-22	FD	WATER
JBRA-PCB-20220504	04-May-22	N	SOIL
JBRA-WC-S-20220504	04-May-22	N	SOIL
IGSR-14-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-14-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-15-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-15-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-16-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-16-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-17-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-17-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-18-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-18-1.0-1.5-20220505	05-May-22	N	SOIL

Sample ID	Sample Date	Sample Type	Matrix
IGSR-19-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-19-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-19-2.0-2.5-20220505	05-May-22	N	SOIL
IGSR-20220505-EB	05-May-22	EB	WATER
IGSR-21-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-21-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-21-1.0-1.5-20220505-FD	05-May-22	FD	SOIL
IGSR-22-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-22-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-23-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-23-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-24-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-24-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-26-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-26-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-28-0.0-0.5-20220505	05-May-22	N	SOIL
IGSR-28-1.0-1.5-20220505	05-May-22	N	SOIL
IGSR-28-1.0-1.5-20220505-FD	05-May-22	FD	SOIL
JBRA-20220505-EB	05-May-22	EB	WATER
IGSR-09-0.0-0.5-20220506	06-May-22	N	SOIL
IGSR-09-1.0-1.5-20220506	06-May-22	N	SOIL
IGSR-09-1.0-1.5-20220506-FD	06-May-22	FD	SOIL
IGSR-11-0.0-0.5-20220506	06-May-22	N	SOIL
IGSR-11-1.0-1.5-20220506	06-May-22	N	SOIL
IGSR-12-0.0-0.5-20220506	06-May-22	N	SOIL
IGSR-12-1.0-1.5-20220506	06-May-22	N	SOIL
IGSR-13-0.0-0.5-20220506	06-May-22	N	SOIL
IGSR-13-1.0-1.5-20220506	06-May-22	N	SOIL
IGSR-20220506-EB	06-May-22	EB	WATER

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C2UT-10-0.0-5.0-20220509	09-May-22	N	SOIL
C2UT-10-10.0-15.0-20220509	09-May-22	N	SOIL
C2UT-10-15.0-17.0-20220509	09-May-22	N	SOIL
C2UT-10-5.0-10.0-20220509	09-May-22	N	SOIL
C2UT-11-0.0-5.0-20220509	09-May-22	N	SOIL
C2UT-11-5.0-10.0-20220509	09-May-22	N	SOIL
C2UT-12-0.0-5.0-20220509	09-May-22	N	SOIL
C2UT-12-10.0-15.0-20220509	09-May-22	N	SOIL
C2UT-12-15.0-20.0-20220509	09-May-22	N	SOIL
C2UT-12-15.0-20.0-20220509-FD	09-May-22	FD	SOIL
C2UT-12-20.0-21.0-20220509	09-May-22	N	SOIL
C2UT-12-5.0-10.0-20220509	09-May-22	N	SOIL
C2UT-14-0.0-5.0-20220509	09-May-22	N	SOIL
C2UT-14-10.0-15.0-20220509	09-May-22	N	SOIL
C2UT-14-15.0-20.0-20220509	09-May-22	N	SOIL
C2UT-14-20.0-23.0-20220509	09-May-22	N	SOIL
C2UT-14-5.0-10.0-20220509	09-May-22	N	SOIL
C2UT-14-GW-20220509	09-May-22	N	WATER
C2UT-20220509-TB-S	09-May-22	TB	SOIL
C2UT-20220509-TB-W	09-May-22	TB	WATER
C2CB-09-0.0-5.0-20220510	10-May-22	N	SOIL
C2CB-09-5.0-10.0-20220510	10-May-22	N	SOIL
C2CB-10-0.0-5.0-20220510	10-May-22	N	SOIL
C2CB-10-10.0-15.0-20220510	10-May-22	N	SOIL
C2CB-10-15.0-20.0-20220510	10-May-22	N	SOIL
C2CB-10-20.0-25.0-20220510	10-May-22	N	SOIL
C2CB-10-5.0-10.0-20220510	10-May-22	N	SOIL
C2CB-11-0.0-5.0-20220510	10-May-22	N	SOIL
C2CB-11-10.0-15.0-20220510	10-May-22	N	SOIL

Sample ID	Sample Date	Sample Type	Matrix
C2CB-11-10.0-15.0-20220510-FD	10-May-22	FD	SOIL
C2CB-11-15.0-20.0-20220510	10-May-22	N	SOIL
C2CB-11-20.0-23.0-20220510	10-May-22	N	SOIL
C2CB-11-5.0-10.0-20220510	10-May-22	N	SOIL
C2CB-14-0.0-5.0-20220510	10-May-22	N	SOIL
C2CB-14-5.0-10.0-20220510	10-May-22	N	SOIL
C2CB-20220510-EB	10-May-22	EB	WATER
C2CB-20220510-TB-S	10-May-22	TB	SOIL
C2CB-20220510-TB-W	10-May-22	TB	WATER
C2CB-PCB-20220510	10-May-22	N	SOIL
C2UT-10-GW-20220510	10-May-22	N	WATER
C2UT-12-GW-20220510	10-May-22	N	WATER
C2UT-12-GW-20220510-FD	10-May-22	FD	WATER
C2UT-13-0.0-5.0-20220510	10-May-22	N	SOIL
C2UT-13-10.0-15.0-20220510	10-May-22	N	SOIL
C2UT-13-15.0-20.0-20220510	10-May-22	N	SOIL
C2UT-13-20.0-25.0-20220510	10-May-22	N	SOIL
C2UT-13-5.0-10.0-20220510	10-May-22	N	SOIL
C2UT-20220510-EB	10-May-22	EB	WATER
C2UT-PCB-20220510	10-May-22	N	SOIL
C2CB-08-0.0-5.0-20220511	11-May-22	N	SOIL
C2CB-08-10.0-15.0-20220511	11-May-22	N	SOIL
C2CB-08-5.0-10.0-20220511	11-May-22	N	SOIL
C2CB-08-GW-20220511	11-May-22	N	WATER
C2CB-10-GW-20220511	11-May-22	N	WATER
C2CB-10-GW-20220511-FD	11-May-22	FD	WATER
C2CB-12-0.0-5.0-20220511	11-May-22	N	SOIL
C2CB-12-5.0-10.0-20220511	11-May-22	N	SOIL
C2CB-12-5.0-10.0-20220511-FD	11-May-22	FD	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
C2CB-13-0.5-5.0-20220511	11-May-22	N	SOIL
C2CB-13-10.0-15.0-20220511	11-May-22	N	SOIL
C2CB-13-15.0-20.0-20220511	11-May-22	N	SOIL
C2CB-13-15.0-20.0-20220511-FD	11-May-22	FD	SOIL
C2CB-13-20.0-23.0-20220511	11-May-22	N	SOIL
C2CB-13-5.0-10.0-20220511	11-May-22	N	SOIL
C2CB-20220511-EB	11-May-22	EB	WATER
C2UT-13-GW-20220510	11-May-22	N	WATER
C2WS-11-0.0-0.5-20220511	11-May-22	N	SOIL
C2WS-11-0.5-1.5-20220511	11-May-22	N	SOIL
C2WS-12-0.0-0.5-20220511	11-May-22	N	SOIL
C2WS-12-0.5-1.5-20220511	11-May-22	N	SOIL
C2WS-12-2.5-3.5-20220511	11-May-22	N	SOIL
C2WS-12-5.0-6.0-20220511	11-May-22	N	SOIL
C2UT-20220512-TB-S	12-May-22	TB	SOIL
C2UT-20220512-TB-W	12-May-22	TB	WATER
C2WS-02-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-02-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-04-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-04-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-05-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-05-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-06-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-06-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-06-0.5-1.5-20220512-FD	12-May-22	FD	SOIL
C2WS-06-GW-20220512	12-May-22	N	WATER
C2WS-06-GW-20220512-FD	12-May-22	FD	WATER
C2WS-07-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-08-0.0-0.5-20220512	12-May-22	N	SOIL

Sample ID	Sample Date	Sample Type	Matrix
C2WS-08-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-08-1.5-2.5-20220512	12-May-22	N	SOIL
C2WS-09-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-10-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-10-0.0-0.5-20220512-FD	12-May-22	FD	SOIL
C2WS-13-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-13-0.5-2.0-20220512	12-May-22	N	SOIL
C2WS-13-2.0-3.0-20220512	12-May-22	N	SOIL
C2WS-14-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-15-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-15-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-15-0.5-1.5-20220512-FD	12-May-22	FD	SOIL
C2WS-15-1.5-2.5-20220512	12-May-22	N	SOIL
C2WS-16-0.0-0.5-20220512	12-May-22	N	SOIL
C2WS-16-0.5-1.5-20220512	12-May-22	N	SOIL
C2WS-20220512-EB	12-May-22	EB	WATER
C2WS-PCB-20220512	12-May-22	N	SOIL
C2WS-04-GW-20220513	13-May-22	N	WATER
C2WS-WC-S-20220513	13-May-22	N	SOIL
C2WS-WC-W-20220513	13-May-22	N	WATER
IGBP-01-2.5-3.5-20220513	13-May-22	N	SOIL
IGBP-01-5.0-6.0-20220513	13-May-22	N	SOIL
IGBP-20220513-EB	13-May-22	EB	WATER
IGBP-20220513-TB-S	13-May-22	TB	SOIL
IGBP-20220513-TB-W	13-May-22	TB	WATER
IGBP-PCB-20220513	13-May-22	N	SOIL
IGBP-WC-S-20220513	13-May-22	N	SOIL
IGSR-02-5.0-6.0-20220513	13-May-22	N	SOIL
IGSR-02-5.0-6.0-20220513-FD	13-May-22	FD	SOIL

Data Quality Evaluation Report

Sample ID	Sample Date	Sample Type	Matrix
IGSR-03-2.5-3.5-20220513	13-May-22	N	SOIL
IGSR-03-5.0-6.0-20220513	13-May-22	N	SOIL
IGSR-03-5.0-6.0-20220513-FD	13-May-22	FD	SOIL
IGSR-10-0.0-0.5-20220513	13-May-22	N	SOIL
IGSR-10-0.5-1.5-20220513	13-May-22	N	SOIL
IGSR-10-2.5-3.5-20220513	13-May-22	N	SOIL
IGSR-10-5.0-6.0-20220513	13-May-22	N	SOIL
IGSR-20-0.0-0.5-20220513	13-May-22	N	SOIL
IGSR-20-0.5-1.5-20220513	13-May-22	N	SOIL
IGSR-20-2.5-3.5-20220513	13-May-22	N	SOIL
IGSR-20220513-EB	13-May-22	EB	WATER
IGSR-20-5.0-6.0-20220513	13-May-22	N	SOIL
IGSR-25-0.0-0.5-20220513	13-May-22	N	SOIL
IGSR-25-0.5-1.5-20220513	13-May-22	N	SOIL
IGSR-25-2.5-3.5-20220513	13-May-22	N	SOIL
IGSR-25-5.0-6.0-20220513	13-May-22	N	SOIL
IGSR-27-0.0-0.5-20220513	13-May-22	N	SOIL
IGSR-27-0.5-1.5-20220513	13-May-22	N	SOIL
IGSR-27-2.5-3.5-20220513	13-May-22	N	SOIL
IGSR-WC-S-20220513	13-May-22	N	SOIL
C2WS-WC-W-20220514	14-May-22	N	WATER

Notes:

EB = equipment blank

FD = field duplicate

N = regular sample

TB = trip blank

Appendix F
Human Health and Leaching to Groundwater
Risk Evaluation Tables

Appendix F-1
COPC Evaluation – Soil

Copco No. 1 Debris Piles Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
CALC	2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	1.5E-05	0.000048	Yes	NA	Yes	NA	NA	2,3,7,8-TCDD
SW6010B	Boron	7440-42-8	1.8E+01	1600	No	NA	No	NA	NA	
SW6020	Antimony	7440-36-0	4.5E-01	3.1	No	0.67	No	NA	NA	
SW6020	Arsenic	7440-38-2	2.0E+01	0.041	Yes	19	Yes	NA	NA	
SW6020	Barium	7440-39-3	2.4E+02	1500	No	630	No	NA	NA	
SW6020	Beryllium	7440-41-7	4.9E-01	1.6	No	2.1	No	NA	NA	
SW6020	Cadmium	7440-43-9	2.8E-01	0.71	No	0.54	No	NA	NA	
SW6020	Chromium	7440-47-3	6.6E+01	12000	No	200	No	NA	NA	Chromium III
SW6020	Cobalt	7440-48-4	2.7E+01	2.3	Yes	NA	Yes	NA	NA	
SW6020	Copper	7440-50-8	1.8E+02	310	No	73	No	NA	NA	
SW6020	Iron	7439-89-6	4.8E+04	5500	Yes	NA	Yes	NA	NA	
SW6020	Lead	7439-92-1	1.3E+02	80	Yes	34	Yes	NA	NA	
SW6020	Manganese	7439-96-5	9.8E+02	180	Yes	2100	No	NA	NA	
SW6020	Molybdenum	7439-98-7	2.5E+00	39	No	NA	No	NA	NA	
SW6020	Nickel	7440-02-0	6.4E+01	82	No	110	No	NA	NA	
SW6020	Selenium	7782-49-2	2.5E+00	39	No	0.52	No	NA	NA	
SW6020	Silver	7440-22-4	4.5E-02	39	No	0.17	No	NA	NA	
SW6020	Thallium	7440-28-0	7.4E-01	0.078	Yes	2.8	No	NA	NA	
SW6020	Vanadium	7440-62-2	1.4E+02	39	Yes	280	No	NA	NA	
SW6020	Zinc	7440-66-6	1.2E+02	2300	No	170	No	NA	NA	
SW7471A	Mercury	7439-97-6	1.6E-02	0.1	No	0.24	No	NA	NA	
SW8011	1,2-Dibromo-3-chloropropane	96-12-8	1.0E-05	0.0043	No	NA	No	5.9E-04	No	
SW8260B	2-Butanone	78-93-3	2.9E-02	2700	No	NA	No	6.1E+00	No	
SW8260B	Acetone	67-64-1	4.1E-01	7000	No	NA	No	9.2E-01	No	
SW8270C	1-Methylnaphthalene	90-12-0	7.1E-03	9.9	No	NA	No	NA	NA	
SW8270C	2-Methylnaphthalene	91-57-6	1.1E-02	19	No	NA	No	8.8E-01	No	
SW8270C	4-Chloro-3-methylphenol	59-50-7	4.4E-03	630	No	NA	No	NA	NA	
SW8270C	Acenaphthylene	208-96-8	6.4E-03	180	No	NA	No	6.4E+00	No	Pyrene
SW8270C	Anthracene	120-12-7	1.3E-02	1700	No	NA	No	1.9E+00	No	
SW8270C	Benzo(a)anthracene	56-55-3	3.8E-02	1.1	No	NA	No	1.0E+01	No	
SW8270C	Benzo(a)pyrene	50-32-8	1.1E-02	0.11	No	NA	No	5.7E+00	No	
SW8270C	Benzo(b)fluoranthene	205-99-2	3.9E-02	1.1	No	NA	No	5.4E+00	No	
SW8270C	Benzo(k)fluoranthene	207-08-9	1.2E-02	11	No	NA	No	4.8E+00	No	
SW8270C	Bis (2-chloroethyl) ether	111-44-4	6.5E-03	0.1	No	NA	No	3.4E-05	Yes	
SW8270C	Butyl benzyl phthalate	85-68-7	1.3E-02	290	No	NA	No	NA	NA	
SW8270C	Carbazole	86-74-8	1.1E-02	630	No	NA	No	NA	NA	Cresols
SW8270C	Chrysene	218-01-9	4.3E-02	110	No	NA	No	2.2E+00	No	
SW8270C	Dibenzofuran	132-64-9	5.3E-02	6.6	No	NA	No	NA	NA	
SW8270C	Fluoranthene	206-44-0	1.2E-01	240	No	NA	No	8.6E+01	No	
SW8270C	Naphthalene	91-20-3	7.7E-02	2	No	NA	No	4.2E-02	Yes	
SW8270C	Pentachlorophenol	87-86-5	3.8E-02	1	No	NA	No	9.8E-02	No	
SW8270C	Phenanthrene	85-01-8	5.8E-02	180	No	NA	No	1.1E+01	No	Pyrene
SW8270C	Phenol	108-95-2	4.5E-03	1900	No	NA	No	1.6E-01	No	
SW8270C	Pyrene	129-00-0	7.7E-02	180	No	NA	No	4.5E+01	No	
SW8290	1,2,3,4,6,7,8-HpCDD	35822-46-9	3.5E-04	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,4,6,7,8-HpCDF	67562-39-4	4.3E-05	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,4,7,8,9-HpCDF	55673-89-7	3.9E-06	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,4,7,8-HxCDD	39227-28-6	5.0E-06	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,4,7,8-HxCDF	70648-26-9	2.3E-06	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,6,7,8-HxCDD	57653-85-7	1.1E-05	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,6,7,8-HxCDF	57117-44-9	1.4E-06	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,7,8,9-HxCDD	19408-74-3	1.3E-05	NA ^f	No	NA	No	NA	NA	

Copco No. 1 Debris Piles Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
SW8290	1,2,3,7,8-PeCDD	40321-76-4	6.3E-06	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,7,8-PeCDF	57117-41-6	5.7E-07	NA ^f	No	NA	No	NA	NA	
SW8290	2,3,4,6,7,8-HxCDF	60851-34-5	8.5E-07	NA ^f	No	NA	No	NA	NA	
SW8290	2,3,4,7,8-PeCDF	57117-31-4	7.2E-07	NA ^f	No	NA	No	NA	NA	
SW8290	2,3,7,8-TCDD	1746-01-6	3.6E-06	0.0000048	No	NA	No	3.0E-01	No	
SW8290	OCDD	3268-87-9	2.2E-03	NA ^f	No	NA	No	NA	NA	
SW8290	OCDF	39001-02-0	2.2E-04	NA ^f	No	NA	No	NA	NA	

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for residential soil; if no screening level is available in Note 3, the EPA (2022) Residential Soil RSL was used. Background values are used if available and if higher. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b Background concentrations for metals in soil in Cascade Range (ODEQ 2013)

^c Human health COPCs are analytes that exceed the human health SL and the background value, if available.

^d The screening levels for protection of groundwater from soil leaching are the SFRWQCB values protective of groundwater as a drinking water resource (SFRWQCB 2019, Table S-3).

^e For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

^f Evaluated using Total 2,3,7,8-TCDD, calculated using toxicity equivalent values.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

mg/kg = milligrams per kilogram

NA = not available or not applicable

SL = screening level

Sources:

Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment Note 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities. May

San Francisco Regional Water Quality Control Board (SFRWQCB). 2019. *Environmental Screening Levels*. Interim Final. January.

United States Environmental Protection Agency (EPA). 2022. Regional Screening Levels for Chemical Contaminants at Superfund Sites. November.

Copco No. 2 Wood Stave Penstock Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
SW6010B	Boron	7440-42-8	9.6E+00	1600	No	NA	No	NA	NA	
SW6020	Antimony	7440-36-0	4.8E-01	3.1	No	0.67	No	NA	NA	
SW6020	Arsenic	7440-38-2	1.1E+01	0.041	Yes	19	No	NA	NA	
SW6020	Barium	7440-39-3	3.1E+02	1500	No	630	No	NA	NA	
SW6020	Beryllium	7440-41-7	7.8E-01	1.6	No	2.1	No	NA	NA	
SW6020	Cadmium	7440-43-9	1.3E-01	0.71	No	0.54	No	NA	NA	
SW6020	Chromium	7440-47-3	3.1E+01	12000	No	NA	No	NA	NA	Chromium III
SW6020	Cobalt	7440-48-4	2.1E+01	2.3	Yes	NA	Yes	NA	NA	
SW6020	Copper	7440-50-8	6.4E+01	310	No	73	No	NA	NA	
SW6020	Iron	7439-89-6	5.3E+04	5500	Yes	NA	Yes	NA	NA	
SW6020	Lead	7439-92-1	3.7E+01	80	No	34	No	NA	NA	
SW6020	Manganese	7439-96-5	1.7E+03	180	Yes	2100	No	NA	NA	
SW6020	Molybdenum	7439-98-7	7.3E-01	39	No	NA	No	NA	NA	
SW6020	Nickel	7440-02-0	2.3E+01	82	No	110	No	NA	NA	
SW6020	Selenium	7782-49-2	3.5E+00	39	No	0.52	No	NA	NA	
SW6020	Silver	7440-22-4	7.9E-02	39	No	0.17	No	NA	NA	
SW6020	Thallium	7440-28-0	1.5E-01	0.078	Yes	2.8	No	NA	NA	
SW6020	Vanadium	7440-62-2	1.4E+02	39	Yes	280	No	NA	NA	
SW6020	Zinc	7440-66-6	8.5E+01	2300	No	170	No	NA	NA	
SW7471A	Mercury	7439-97-6	3.2E-01	0.1	Yes	0.24	Yes	NA	NA	
SW8270C	1-Methylnaphthalene	90-12-0	2.1E-01	9.9	No	NA	No	NA	NA	
SW8270C	2-Methylnaphthalene	91-57-6	1.8E-01	19	No	NA	No	8.8E-01	No	
SW8270C	2-Methylphenol	95-48-7	3.5E-03	320	No	NA	No	NA	NA	
SW8270C	3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	8.6E-03	6.3	No	NA	No	NA	NA	3,4-Dimethylphenol
SW8270C	Acenaphthene	83-32-9	2.9E-01	330	No	NA	No	1.2E+01	No	
SW8270C	Acenaphthylene	208-96-8	8.6E-01	180	No	NA	No	6.4E+00	No	Pyrene
SW8270C	Anthracene	120-12-7	1.8E+00	1700	No	NA	No	1.9E+00	No	
SW8270C	Benzo(a)anthracene	56-55-3	2.4E+00	1.1	Yes	NA	Yes	1.0E+01	No	
SW8270C	Benzo(a)pyrene	50-32-8	1.1E+00	0.11	Yes	NA	Yes	5.7E+00	No	
SW8270C	Benzo(b)fluoranthene	205-99-2	6.5E+00	1.1	Yes	NA	Yes	5.4E+00	Yes	
SW8270C	Benzo(g,h,i)perylene	191-24-2	4.6E-01	180	No	NA	No	2.7E+01	No	Pyrene
SW8270C	Benzo(k)fluoranthene	207-08-9	2.0E+00	11	No	NA	No	4.8E+00	No	
SW8270C	Bis (2-chloroethyl) ether	111-44-4	1.1E-03	0.1	No	NA	No	3.4E-05	Yes	
SW8270C	Bis (2-ethylhexyl) phthalate	117-81-7	2.0E-02	39	No	NA	No	1.9E+02	No	
SW8270C	Butyl benzyl phthalate	85-68-7	1.5E-02	290	No	NA	No	NA	NA	
SW8270C	Carbazole	86-74-8	4.6E+00	630	No	NA	No	NA	NA	Cresols
SW8270C	Chrysene	218-01-9	9.9E+00	110	No	NA	No	2.2E+00	Yes	
SW8270C	Dibenzo(a,h)anthracene	53-70-3	2.0E-01	0.028	Yes	NA	Yes	2.9E+01	No	
SW8270C	Dibenzofuran	132-64-9	7.0E-01	6.6	No	NA	No	NA	NA	
SW8270C	Di-N-Butylphthalate	84-74-2	1.2E-02	630	No	NA	No	NA	NA	
SW8270C	Di-n-octyl phthalate	117-84-0	7.5E-02	63	No	NA	No	NA	NA	
SW8270C	Fluoranthene	206-44-0	4.6E+01	240	No	NA	No	8.6E+01	No	
SW8270C	Fluorene	86-73-7	4.3E-01	230	No	NA	No	6.0E+00	No	
SW8270C	Indeno(1,2,3-cd)pyrene	193-39-5	7.9E-01	1.1	No	NA	No	1.6E+01	No	
SW8270C	Isophorone	78-59-1	3.9E-03	570	No	NA	No	NA	NA	
SW8270C	Naphthalene	91-20-3	3.4E-01	2	No	NA	No	4.2E-02	Yes	
SW8270C	N-Nitrosodiphenylamine	86-30-6	7.5E-02	110	No	NA	No	NA	No	
SW8270C	Pentachlorophenol	87-86-5	1.2E+01	1	Yes	NA	Yes	9.8E-02	Yes	
SW8270C	Phenanthrene	85-01-8	2.1E+01	180	No	NA	No	1.1E+01	Yes	Pyrene
SW8270C	Pyrene	129-00-0	2.2E+01	180	No	NA	No	4.5E+01	No	

Notes:

Copco No. 2 Wood Stave Penstock Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
-----------------	---------------	-----	--	---	-----------------------------	---------------------------------------	----------------------------------	--	--	---

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for residential soil; if no screening level is available in Note 3, the EPA (2022) Residential Soil RSL was used. Background values are used if available and if higher. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b Background concentrations for metals in soil in Cascade Range (ODEQ 2013)

^c Human health COPCs are analytes that exceed the human health SL and the background value, if available.

^d The screening levels for protection of groundwater from soil leaching are the SFRWQCB values protective of groundwater as a drinking water resource (SFRWQCB 2019, Table S-3).

^e For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

mg/kg = milligrams per kiligram

NA = not available or not applicable

SL = screening level

Sources:

Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment Note 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities. May

Oregon Department of Environmental Quality (ODEQ). 2013. *Development of Oregon Background Metals Concentrations in Soil*. Technical Report. March. Accessed June 2021.

San Francisco Regional Water Quality Control Board (SFRWQCB). 2019. *Environmental Screening Levels*. Interim Final. January.

United States Environmental Protection Agency (EPA). 2022. Regional Screening Levels for Chemical Contaminants at Superfund Sites. November.

Copco No. 2 Wood Pile Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
SW6010B	Boron	7440-42-8	4.1E+00	1600	No	NA	No	NA	NA	
SW6020	Antimony	7440-36-0	1.9E-01	3.1	No	0.67	No	NA	NA	
SW6020	Arsenic	7440-38-2	9.4E+00	0.041	Yes	19	No	NA	NA	
SW6020	Barium	7440-39-3	2.2E+02	1500	No	630	No	NA	NA	
SW6020	Beryllium	7440-41-7	8.9E-01	1.6	No	2.1	No	NA	NA	
SW6020	Cadmium	7440-43-9	2.0E-01	0.71	No	0.54	No	NA	NA	
SW6020	Chromium	7440-47-3	8.7E+01	12000	No	200	No	NA	NA	Chromium III
SW6020	Cobalt	7440-48-4	3.6E+01	2.3	Yes	NA	Yes	NA	NA	
SW6020	Copper	7440-50-8	6.5E+01	310	No	73	No	NA	NA	
SW6020	Iron	7439-89-6	5.9E+04	5500	Yes	NA	Yes	NA	NA	
SW6020	Lead	7439-92-1	2.5E+01	80	No	34	No	NA	NA	
SW6020	Manganese	7439-96-5	1.5E+03	180	Yes	2100	No	NA	NA	
SW6020	Molybdenum	7439-98-7	1.0E+00	39	No	NA	No	NA	NA	
SW6020	Nickel	7440-02-0	7.3E+01	82	No	110	No	NA	NA	
SW6020	Selenium	7782-49-2	4.7E+00	39	No	0.52	No	NA	NA	
SW6020	Silver	7440-22-4	4.9E-02	39	No	0.17	No	NA	NA	
SW6020	Thallium	7440-28-0	2.0E-01	0.078	Yes	2.8	No	NA	NA	
SW6020	Vanadium	7440-62-2	1.7E+02	39	Yes	280	No	NA	NA	
SW6020	Zinc	7440-66-6	1.1E+02	2300	No	170	No	NA	NA	
SW7471A	Mercury	7439-97-6	5.5E-02	0.1	No	0.24	No	NA	NA	
SW8260B	Acetone	67-64-1	1.7E-02	7000	No	NA	No	NA	NA	
SW8270C	1,3-Dichlorobenzene	541-73-1	6.7E-04	180	No	NA	No	7.4E+00	No	1,2-Dichlorobenzene
SW8270C	1-Methylnaphthalene	90-12-0	1.1E-02	9.9	No	NA	No	NA	NA	
SW8270C	2,4,6-Trichlorophenol	88-06-2	7.8E-03	6.3	No	NA	No	4.0E-02	No	
SW8270C	2-Chlorophenol	95-57-8	6.1E-04	34	No	NA	No	1.2E-02	No	
SW8270C	2-Methylnaphthalene	91-57-6	2.7E-02	19	No	NA	No	8.8E-01	No	
SW8270C	2-Methylphenol	95-48-7	3.0E-03	320	No	NA	No	NA	NA	
SW8270C	3 & 4-Methylphenol (m,p-Cresols)	65794-96-9	7.9E-03	6.3	No	NA	No	NA	NA	3,4-Dimethylphenol
SW8270C	4-Nitroaniline	100-01-6	8.3E-03	25	No	NA	No	NA	NA	
SW8270C	Acenaphthylene	208-96-8	1.3E-03	180	No	NA	No	6.4E+00	No	Pyrene
SW8270C	Anthracene	120-12-7	5.5E-03	1700	No	NA	No	1.9E+00	No	
SW8270C	Azobenzene	103-33-3	1.2E-03	5.6	No	NA	No	NA	NA	
SW8270C	Benzo(a)anthracene	56-55-3	4.3E-02	1.1	No	NA	No	1.0E+01	No	
SW8270C	Benzo(a)pyrene	50-32-8	1.8E-02	0.11	No	NA	No	5.7E+00	No	
SW8270C	Benzo(b)fluoranthene	205-99-2	1.7E-01	1.1	No	NA	No	5.4E+00	No	
SW8270C	Benzo(g,h,i)perylene	191-24-2	2.6E-02	180	No	NA	No	2.7E+01	No	Pyrene
SW8270C	Benzo(k)fluoranthene	207-08-9	4.2E-02	11	No	NA	No	4.8E+00	No	
SW8270C	Benzoic Acid	65-85-0	2.3E-01	25000	No	NA	No	NA	NA	
SW8270C	Bis (2-chloroethyl) ether	111-44-4	1.6E-03	0.1	No	NA	No	3.4E-05	Yes	
SW8270C	Bis (2-ethylhexyl) phthalate	117-81-7	1.3E-01	39	No	NA	No	1.9E+02	No	
SW8270C	Butyl benzyl phthalate	85-68-7	5.1E-01	290	No	NA	No	NA	NA	
SW8270C	Carbazole	86-74-8	1.4E-02	630	No	NA	No	NA	NA	Cresols
SW8270C	Chrysene	218-01-9	1.8E-01	110	No	NA	No	2.2E+00	No	
SW8270C	Dibenzo(a,h)anthracene	53-70-3	5.2E-03	0.028	No	NA	No	2.9E+01	No	
SW8270C	Dibenzofuran	132-64-9	2.5E-03	6.6	No	NA	No	NA	NA	
SW8270C	Diethylphthalate	84-66-2	8.1E-03	5100	No	NA	No	2.5E-02	No	
SW8270C	Di-n-octyl phthalate	117-84-0	6.1E-02	63	No	NA	No	NA	NA	
SW8270C	Fluoranthene	206-44-0	1.6E-01	240	No	NA	No	8.6E+01	No	
SW8270C	Fluorene	86-73-7	2.1E-02	230	No	NA	No	6.0E+00	No	
SW8270C	Indeno(1,2,3-cd)pyrene	193-39-5	3.8E-02	1.1	No	NA	No	1.6E+01	No	
SW8270C	Naphthalene	91-20-3	1.2E-02	2	No	NA	No	4.2E-02	No	
SW8270C	Pentachlorophenol	87-86-5	3.2E+01	1	Yes	NA	Yes	9.8E-02	Yes	
SW8270C	Phenanthrene	85-01-8	1.7E-01	180	No	NA	No	1.1E+01	No	Pyrene

Copco No. 2 Wood Pile Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
SW8270C	Phenol	108-95-2	2.5E-02	1900	No	NA	No	1.6E-01	No	
SW8270C	Pyrene	129-00-0	1.5E-01	180	No	NA	No	4.5E+01	No	

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for residential soil; if no screening level is available in Note 3, the EPA (2022) Residential Soil RSL was used. Background values are used if available and if higher. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b Background concentrations for metals in soil in Cascade Range (ODEQ 2013)

^c Human health COPCs are analytes that exceed the human health SL and the background value, if available.

^d The screening levels for protection of groundwater from soil leaching are the SFRWQCB values protective of groundwater as a drinking water resource (SFRWQCB 2019, Table S-3).

^e For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

mg/kg = milligrams per kiligram

NA = not available or not applicable

SL = screening level

Sources:

Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment Note 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities. May

Oregon Department of Environmental Quality (ODEQ). 2013. *Development of Oregon Background Metals Concentrations in Soil*. Technical Report. March. Accessed June 2021.

San Francisco Regional Water Quality Control Board (SFRWQCB). 2019. *Environmental Screening Levels*. Interim Final. January.

United States Environmental Protection Agency (EPA). 2022. Regional Screening Levels for Chemical Contaminants at Superfund Sites. November.

Copco No. 2 Transformer Fire Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
SW8015-E	Diesel Range Organics	DRO	4.4E+03	260	Yes	NA	Yes	1100	Yes	
SW8015-E	Extended Range Organics	ERO	1.7E+02	12000	No	NA	No	NA	NA	
SW8082	Aroclor 1260	11096-82-5	6.4E-03	0.24	No	NA	No	NA	NA	
SW8082	Aroclor 1262	37324-23-5	1.0E+00	0.24	Yes	NA	Yes	NA	NA	Aroclor 1260
SW8270SIM	1-Methylnaphthalene	90-12-0	5.8E-03	9.9	No	NA	No	NA	NA	
SW8270SIM	2-Methylnaphthalene	91-57-6	1.1E-02	19	No	NA	No	8.8E-01	No	
SW8270SIM	Acenaphthene	83-32-9	1.5E-02	330	No	NA	No	1.2E+01	No	
SW8270SIM	Acenaphthylene	208-96-8	1.0E-02	180	No	NA	No	6.4E+00	No	Pyrene
SW8270SIM	Anthracene	120-12-7	4.0E-02	1700	No	NA	No	1.9E+00	No	
SW8270SIM	Benzo(a)anthracene	56-55-3	1.3E-01	1.1	No	NA	No	1.0E+01	No	
SW8270SIM	Benzo(a)pyrene	50-32-8	3.1E-01	0.11	Yes	NA	Yes	5.7E+00	No	
SW8270SIM	Benzo(b)fluoranthene	205-99-2	5.5E-01	1.1	No	NA	No	5.4E+00	No	
SW8270SIM	Benzo(g,h,i)perylene	191-24-2	3.9E-01	180	No	NA	No	2.7E+01	No	Pyrene
SW8270SIM	Benzo(k)fluoranthene	207-08-9	1.9E-01	11	No	NA	No	4.8E+00	No	
SW8270SIM	Chrysene	218-01-9	2.4E-01	110	No	NA	No	2.2E+00	No	
SW8270SIM	Dibenzo(a,h)anthracene	53-70-3	6.0E-02	0.028	Yes	NA	Yes	2.9E+01	No	
SW8270SIM	Fluoranthene	206-44-0	2.3E-01	240	No	NA	No	8.6E+01	No	
SW8270SIM	Fluorene	86-73-7	8.7E-03	230	No	NA	No	6.0E+00	No	
SW8270SIM	Indeno(1,2,3-cd)pyrene	193-39-5	3.8E-01	1.1	No	NA	No	1.6E+01	No	
SW8270SIM	Naphthalene	91-20-3	2.7E-02	2	No	NA	No	4.2E-02	No	
SW8270SIM	Phenanthrene	85-01-8	1.1E-01	180	No	NA	No	1.1E+01	No	Pyrene
SW8270SIM	Pyrene	129-00-0	2.7E-01	180	No	NA	No	4.5E+01	No	

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for residential soil; if no screening level is available in Note 3, the EPA (2022) Residential Soil RSL was used. Background values are used if available and if higher. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b Background concentrations for metals in soil in Cascade Range (ODEQ 2013)

^c Human health COPCs are analytes that exceed the human health SL and the background value, if available.

^d The screening levels for protection of groundwater from soil leaching are the SFRWQCB values protective of groundwater as a drinking water resource (SFRWQCB 2019, Table S-3).

^e For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

mg/kg = milligrams per kilogram

NA = not available or not applicable

SL = screening level

Sources:

Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment Note 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities. May

Oregon Department of Environmental Quality (ODEQ). 2013. *Development of Oregon Background Metals Concentrations in Soil*. Technical Report. March. Accessed June 2021.

San Francisco Regional Water Quality Control Board (SFRWQCB). 2019. *Environmental Screening Levels*. Interim Final. January.

United States Environmental Protection Agency (EPA). 2022. Regional Screening Levels for Chemical Contaminants at Superfund Sites. November.

Copco No. 2 Former Mobile Oil Containment Building Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
SW8015-E	Diesel Range Organics	DRO	8.6E+01	260	No	NA	No	1100	No	
SW8015-E	Extended Range Organics	ERO	3.8E+02	12000	No	NA	No	NA	NA	
SW8260B	Acetone	67-64-1	6.2E-02	7000	No	NA	No	9.2E-01	No	
SW8270SIM	Acenaphthylene	208-96-8	9.1E-04	180	No	NA	No	6.4E+00	No	Pyrene
SW8270SIM	Benzo(a)pyrene	50-32-8	2.1E-03	0.11	No	NA	No	5.7E+00	No	
SW8270SIM	Benzo(b)fluoranthene	205-99-2	6.3E-03	1.1	No	NA	No	5.4E+00	No	
SW8270SIM	Benzo(g,h,i)perylene	191-24-2	3.3E-03	180	No	NA	No	2.7E+01	No	Pyrene
SW8270SIM	Chrysene	218-01-9	6.5E-03	110	No	NA	No	2.2E+00	No	
SW8270SIM	Fluoranthene	206-44-0	3.1E-03	240	No	NA	No	8.6E+01	No	
SW8270SIM	Indeno(1,2,3-cd)pyrene	193-39-5	4.1E-03	1.1	No	NA	No	1.6E+01	No	
SW8270SIM	Naphthalene	91-20-3	1.2E-02	2	No	NA	No	4.2E-02	No	
SW8270SIM	Phenanthrene	85-01-8	2.9E-03	180	No	NA	No	1.1E+01	No	Pyrene
SW8270SIM	Pyrene	129-00-0	3.1E-03	180	No	NA	No	4.5E+01	No	

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for residential soil; if no screening level is available in Note 3, the EPA (2022) Residential Soil RSL was used. Background values are used if available and if higher. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b Background concentrations for metals in soil in Cascade Range (ODEQ 2013)

^c Human health COPCs are analytes that exceed the human health SL and the background value, if available.

^d The screening levels for protection of groundwater from soil leaching are the SFRWQCB values protective of groundwater as a drinking water resource (SFRWQCB 2019, Table S-3).

^e For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

mg/kg = milligrams per kilogram

NA = not available or not applicable

SL = screening level

Sources:

Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment Note 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities. May

Oregon Department of Environmental Quality (ODEQ). 2013. *Development of Oregon Background Metals Concentrations in Soil*. Technical Report. March. Accessed June 2021.

San Francisco Regional Water Quality Control Board (SFRWQCB). 2019. *Environmental Screening Levels*. Interim Final. January.

United States Environmental Protection Agency (EPA). 2022. Regional Screening Levels for Chemical Contaminants at Superfund Sites. November.

Copco No. 2 Underground Storage Tanks Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
CALC	Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	1.2E-02	0.11	No	NA	No	NA	NA	benzo(a)pyrene
SW8011	1,2,3-Trichloropropane	96-18-4	6.5E-04	0.0015	No	NA	No	1.1E-04	Yes	
SW8015-E	Diesel Range Organics	DRO	2.8E+01	260	No	NA	No	1100	No	
SW8015-E	Extended Range Organics	ERO	9.3E+01	12000	No	NA	No	NA	NA	
SW8082	Aroclor 1262	37324-23-5	5.7E-03	0.24	No	NA	No	NA	NA	Aroclor 1260
SW8260B	2-Butanone	78-93-3	2.9E-02	2700	No	NA	No	6.1E+00	No	
SW8260B	Acetone	67-64-1	1.6E-01	7000	No	NA	No	9.2E-01	No	
SW8260B	Bromomethane	74-83-9	6.0E-04	0.68	No	NA	No	3.6E-01	No	
SW8270SIM	1-Methylnaphthalene	90-12-0	2.6E-03	9.9	No	NA	No	NA	NA	
SW8270SIM	2-Methylnaphthalene	91-57-6	6.6E-03	19	No	NA	No	8.8E-01	No	
SW8270SIM	Acenaphthene	83-32-9	6.5E-04	330	No	NA	No	1.2E+01	No	
SW8270SIM	Acenaphthylene	208-96-8	3.1E-03	180	No	NA	No	6.4E+00	No	Pyrene
SW8270SIM	Anthracene	120-12-7	1.8E-03	1700	No	NA	No	1.9E+00	No	
SW8270SIM	Benzo(a)anthracene	56-55-3	5.1E-03	1.1	No	NA	No	1.0E+01	No	
SW8270SIM	Benzo(a)pyrene	50-32-8	5.4E-03	0.11	No	NA	No	5.7E+00	No	
SW8270SIM	Benzo(b)fluoranthene	205-99-2	1.2E-02	1.1	No	NA	No	5.4E+00	No	
SW8270SIM	Benzo(g,h,i)perylene	191-24-2	9.3E-03	180	No	NA	No	2.7E+01	No	Pyrene
SW8270SIM	Benzo(k)fluoranthene	207-08-9	4.3E-03	11	No	NA	No	4.8E+00	No	
SW8270SIM	Chrysene	218-01-9	9.3E-03	110	No	NA	No	2.2E+00	No	
SW8270SIM	Dibenzo(a,h)anthracene	53-70-3	4.4E-03	0.028	No	NA	No	2.9E+01	No	
SW8270SIM	Fluoranthene	206-44-0	1.0E-02	240	No	NA	No	8.6E+01	No	
SW8270SIM	Fluorene	86-73-7	3.3E-03	230	No	NA	No	6.0E+00	No	
SW8270SIM	Indeno(1,2,3-cd)pyrene	193-39-5	7.3E-03	1.1	No	NA	No	1.6E+01	No	
SW8270SIM	Naphthalene	91-20-3	2.0E-02	2	No	NA	No	4.2E-02	No	
SW8270SIM	Phenanthrene	85-01-8	7.3E-03	180	No	NA	No	1.1E+01	No	Pyrene
SW8270SIM	Pyrene	129-00-0	9.0E-03	180	No	NA	No	4.5E+01	No	

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for residential soil; if no screening level is available in Note 3, the EPA (2022) Residential Soil RSL was used. Background values are used if available and if higher. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b Background concentrations for metals in soil in Cascade Range (ODEQ 2013)

^c Human health COPCs are analytes that exceed the human health SL and the background value, if available.

^d The screening levels for protection of groundwater from soil leaching are the SFRWQCB values protective of groundwater as a drinking water resource (SFRWQCB 2019, Table S-3).

^e For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

mg/kg = milligrams per kilogram

NA = not available or not applicable

SL = screening level

Sources:

Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment Note 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities. May

Oregon Department of Environmental Quality (ODEQ). 2013. *Development of Oregon Background Metals Concentrations in Soil*. Technical Report. March. Accessed June 2021.

San Francisco Regional Water Quality Control Board (SFRWQCB). 2019. *Environmental Screening Levels*. Interim Final. January.

United States Environmental Protection Agency (EPA). 2022. Regional Screening Levels for Chemical Contaminants at Superfund Sites. November.

Copco No. 2 Burn Pit Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
CALC	2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-MO	1.1E-04	0.0000048	Yes	NA	Yes	NA	NA	2,3,7,8-TCDD
SW6020	Arsenic	7440-38-2	1.1E+02	0.041	Yes	19	Yes	NA	NA	
SW6020	Cadmium	7440-43-9	2.1E+00	0.71	Yes	0.54	Yes	NA	NA	
SW6020	Cobalt	7440-48-4	2.6E+01	2.3	Yes	NA	Yes	NA	NA	
SW6020	Iron	7439-89-6	6.3E+04	5500	Yes	NA	Yes	NA	NA	
SW6020	Lead	7439-92-1	9.9E+01	80	Yes	34	Yes	NA	NA	
SW8015-E	Diesel Range Organics	DRO	6.7E+03	260	Yes	NA	Yes	1100	Yes	
SW8270C/SW8270SIN	Benzo(a)anthracene	56-55-3	2.0E+01	1.1	Yes	NA	Yes	1.0E+01	Yes	
SW8270C/SW8270SIN	Benzo(a)pyrene	50-32-8	3.5E+01	0.11	Yes	NA	Yes	5.7E+00	Yes	
SW8270C/SW8270SIN	Benzo(b)fluoranthene	205-99-2	3.2E+01	1.1	Yes	NA	Yes	5.4E+00	Yes	
SW8270C	Dibenzo(a,h)anthracene	53-70-3	2.1E+00	0.028	Yes	NA	Yes	2.9E+01	No	
SW8270C/SW8270SIN	Indeno(1,2,3-cd)pyrene	193-39-5	2.5E+01	1.1	Yes	NA	Yes	1.6E+01	Yes	
SW8290	2,3,7,8-TCDD	1746-01-6	1.2E-05	0.0000048	Yes	NA	Yes	3.0E-01	No	

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for residential soil; if no screening level is available in Note 3, the EPA (2022) Residential Soil RSL was used. Background values are used if available and if higher. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b Background concentrations for metals in soil in Cascade Range (ODEQ 2013)

^c Human health COPCs are analytes that exceed the human health SL and the background value, if available.

^d The screening levels for protection of groundwater from soil leaching are the SFRWQCB values protective of groundwater as a drinking water resource (SFRWQCB 2019, Table S-3).

^e For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

^f Evaluated using Total 2,3,7,8-TCDD, calculated using toxicity equivalent values.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

mg/kg = milligrams per kilogram

NA = not available or not applicable

SL = screening level

Sources:

Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment Note 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities. May

San Francisco Regional Water Quality Control Board (SFRWQCB). 2019. *Environmental Screening Levels*. Interim Final. January.

United States Environmental Protection Agency (EPA). 2022. Regional Screening Levels for Chemical Contaminants at Superfund Sites. November.

Iron Gate Shooting Range Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
SW6010B	Boron	7440-42-8	1.1E+01	1600	No	NA	No	NA	NA	
SW6020	Antimony	7440-36-0	1.1E+02	3.1	Yes	0.67	Yes	NA	NA	
SW6020	Arsenic	7440-38-2	6.0E+00	0.041	Yes	19	No	NA	NA	
SW6020	Barium	7440-39-3	3.4E+02	1500	No	630	No	NA	NA	
SW6020	Beryllium	7440-41-7	9.1E-01	1.6	No	2.1	No	NA	NA	
SW6020	Cadmium	7440-43-9	3.4E-01	0.71	No	0.54	No	NA	NA	
SW6020	Chromium	7440-47-3	2.3E+01	12000	No	200	No	NA	NA	Chromium III
SW6020	Cobalt	7440-48-4	2.5E+01	2.3	Yes	NA	Yes	NA	NA	
SW6020	Copper	7440-50-8	1.8E+02	310	No	73	No	NA	NA	
SW6020	Iron	7439-89-6	6.2E+04	5500	Yes	NA	Yes	NA	NA	
SW6020	Lead	7439-92-1	8.9E+03	80	Yes	34	Yes	NA	NA	
SW6020	Manganese	7439-96-5	2.7E+03	180	Yes	2100	Yes	NA	NA	
SW6020	Molybdenum	7439-98-7	7.1E-01	39	No	NA	No	NA	NA	
SW6020	Nickel	7440-02-0	2.4E+01	82	No	110	No	NA	NA	
SW6020	Selenium	7782-49-2	4.7E+00	39	No	0.52	No	NA	NA	
SW6020	Silver	7440-22-4	3.7E-01	39	No	0.17	No	NA	NA	
SW6020	Thallium	7440-28-0	1.6E-01	0.078	Yes	2.8	No	NA	NA	
SW6020	Vanadium	7440-62-2	2.7E+02	39	Yes	280	No	NA	NA	
SW6020	Zinc	7440-66-6	5.6E+02	2300	No	170	No	NA	NA	
SW7471A	Mercury	7439-97-6	3.3E-02	0.1	No	0.24	No	NA	NA	
SW8270SIM	1-Methylnaphthalene	90-12-0	1.8E-03	9.9	No	NA	No	NA	NA	
SW8270SIM	Acenaphthene	83-32-9	4.9E-03	330	No	NA	No	1.2E+01	No	
SW8270SIM	Anthracene	120-12-7	4.4E-03	1700	No	NA	No	1.9E+00	No	
SW8270SIM	Benzo(a)anthracene	56-55-3	7.9E-02	1.1	No	NA	No	1.0E+01	No	
SW8270SIM	Benzo(a)pyrene	50-32-8	1.2E-01	0.11	Yes	NA	Yes	5.7E+00	No	
SW8270SIM	Benzo(b)fluoranthene	205-99-2	1.6E-01	1.1	No	NA	No	5.4E+00	No	
SW8270SIM	Benzo(g,h,i)perylene	191-24-2	1.1E-01	180	No	NA	No	2.7E+01	No	Pyrene
SW8270SIM	Benzo(k)fluoranthene	207-08-9	5.6E-02	11	No	NA	No	4.8E+00	No	
SW8270SIM	Chrysene	218-01-9	1.1E-01	110	No	NA	No	2.2E+00	No	
SW8270SIM	Dibenzo(a,h)anthracene	53-70-3	2.4E-02	0.028	No	NA	No	2.9E+01	No	
SW8270SIM	Fluoranthene	206-44-0	1.2E-01	240	No	NA	No	8.6E+01	No	
SW8270SIM	Fluorene	86-73-7	2.1E-03	230	No	NA	No	6.0E+00	No	
SW8270SIM	Indeno(1,2,3-cd)pyrene	193-39-5	1.3E-01	1.1	No	NA	No	1.6E+01	No	
SW8270SIM	Naphthalene	91-20-3	7.7E-03	2	No	NA	No	4.2E-02	No	
SW8270SIM	Phenanthrene	85-01-8	2.5E-02	180	No	NA	No	1.1E+01	No	Pyrene
SW8270SIM	Pyrene	129-00-0	1.2E-01	180	No	NA	No	4.5E+01	No	

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for residential soil; if no screening level is available in Note 3, the EPA (2022) Residential Soil RSL was used. Background values are used if available and if higher. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b Background concentrations for metals in soil in Cascade Range (ODEQ 2013)

^c Human health COPCs are analytes that exceed the human health SL and the background value, if available.

^d The screening levels for protection of groundwater from soil leaching are the SFRWQCB values protective of groundwater as a drinking water resource (SFRWQCB 2019, Table S-3).

^e For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

mg/kg = milligrams per kilogram

NA = not available or not applicable

SL = screening level

Sources:

Iron Gate Shooting Range Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
-----------------	---------------	-----	--	---	-----------------------------	---------------------------------------	----------------------------------	--	--	---

Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment Note 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities. May

Oregon Department of Environmental Quality (ODEQ). 2013. *Development of Oregon Background Metals Concentrations in Soil*. Technical Report. March. Accessed June 2021.

San Francisco Regional Water Quality Control Board (SFRWQCB). 2019. *Environmental Screening Levels*. Interim Final. January.

United States Environmental Protection Agency (EPA). 2022. Regional Screening Levels for Chemical Contaminants at Superfund Sites. November.

Iron Gate Hatchery Burn Pit Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
CALC	Benzo[a]pyrene Equivalent, Zero for ND	BaPEqZero	5.1E-04	0.11	No	NA	No	NA	NA	benzo(a)pyrene
SW6010B	Boron	7440-42-8	4.0E+01	1600	No	NA	No	NA	NA	
SW6020	Antimony	7440-36-0	7.8E+00	3.1	Yes	0.67	Yes	NA	NA	
SW6020	Arsenic	7440-38-2	8.6E+01	0.041	Yes	19	Yes	NA	NA	
SW6020	Barium	7440-39-3	2.3E+02	1500	No	630	No	NA	NA	
SW6020	Beryllium	7440-41-7	8.0E-01	1.6	No	2.1	No	NA	NA	
SW6020	Cadmium	7440-43-9	2.5E-01	0.71	No	0.54	No	NA	NA	
SW6020	Chromium	7440-47-3	1.3E+02	12000	No	200	No	NA	NA	Chromium III
SW6020	Cobalt	7440-48-4	2.1E+01	2.3	Yes	NA	Yes	NA	NA	
SW6020	Copper	7440-50-8	2.0E+02	310	No	73	No	NA	NA	
SW6020	Iron	7439-89-6	5.3E+04	5500	Yes	NA	Yes	NA	NA	
SW6020	Lead	7439-92-1	6.8E+01	80	No	34	No	NA	NA	
SW6020	Manganese	7439-96-5	1.4E+03	180	Yes	2100	No	NA	NA	
SW6020	Molybdenum	7439-98-7	1.3E+00	39	No	NA	No	NA	NA	
SW6020	Nickel	7440-02-0	1.4E+01	82	No	110	No	NA	NA	
SW6020	Selenium	7782-49-2	4.5E+00	39	No	0.52	No	NA	NA	
SW6020	Silver	7440-22-4	5.3E-02	39	No	0.17	No	NA	NA	
SW6020	Thallium	7440-28-0	1.1E-01	0.078	Yes	2.8	No	NA	NA	
SW6020	Vanadium	7440-62-2	1.4E+02	39	Yes	280	No	NA	NA	
SW6020	Zinc	7440-66-6	2.4E+02	2300	No	170	No	NA	NA	
SW7471A	Mercury	7439-97-6	9.2E-02	0.1	No	0.24	No	NA	NA	
SW8015-E	Diesel Range Organics	DRO	3.4E+02	260	Yes	NA	Yes	1100	No	
SW8015-E	Extended Range Organics	ERO	1.7E+02	12000	No	NA	No	NA	NA	
SW8260B	1,2,3-Trichlorobenzene	87-61-6	6.0E-02	12000	No	NA	No	NA	NA	
SW8260B	1,2-Dichlorobenzene	95-50-1	1.7E-02	180	No	NA	No	1.0E+00	No	
SW8260B	2-Butanone	78-93-3	3.2E-01	2700	No	NA	No	6.1E+00	No	
SW8260B	2-Chlorotoluene	95-49-8	1.2E-02	47	No	NA	No	NA	NA	
SW8260B	2-Hexanone	591-78-6	7.5E-02	20	No	NA	No	NA	NA	
SW8260B	4-Chlorotoluene	106-43-4	1.5E-02	44	No	NA	No	NA	NA	
SW8260B	4-Methyl-2-Pentanone	108-10-1	8.1E-02	3300	No	NA	No	3.6E-01	No	
SW8260B	Benzene	71-43-2	3.7E-01	0.33	Yes	NA	Yes	2.5E-02	Yes	
SW8260B	Bromobenzene	108-86-1	1.0E-02	29	No	NA	No	NA	NA	
SW8260B	Carbon tetrachloride	56-23-5	1.3E-02	0.65	No	NA	No	7.6E-02	No	
SW8260B	Chlorobenzene	108-90-7	1.1E-02	28	No	NA	No	1.4E+00	No	
SW8260B	Ethylbenzene	100-41-4	4.2E-02	5.8	No	NA	No	4.3E-01	No	
SW8260B	Hexachlorobutadiene	87-68-3	4.3E-02	1.2	No	NA	No	2.8E-02	Yes	
SW8260B	Naphthalene	91-20-3	6.0E-02	2	No	NA	No	4.2E-02	Yes	
SW8260B	n-Butylbenzene	104-51-8	3.1E-02	240	No	NA	No	NA	NA	
SW8260B	Tetrachloroethene	127-18-4	7.8E-03	0.59	No	NA	No	8.0E-02	No	
SW8260B	Toluene	108-88-3	1.6E-01	110	No	NA	No	3.2E+00	No	
SW8270C	1-Methylnaphthalene	90-12-0	1.6E-02	9.9	No	NA	No	NA	NA	
SW8270C	2-Methylnaphthalene	91-57-6	3.0E-02	19	No	NA	No	8.8E-01	No	
SW8270C	Bis (2-ethylhexyl) phthalate	117-81-7	2.4E-01	39	No	NA	No	1.9E+02	No	
SW8270C	Dibenzofuran	132-64-9	3.5E-02	6.6	No	NA	No	NA	NA	
SW8270C	Diethylphthalate	84-66-2	6.3E-02	5100	No	NA	No	2.5E-02	Yes	
SW8270C	Fluorene	86-73-7	1.2E-02	230	No	NA	No	6.0E+00	No	
SW8270C/SW8270SIM	Naphthalene	91-20-3	7.8E-02	2	No	NA	No	4.2E-02	Yes	
SW8270C	Pentachlorophenol	87-86-5	2.5E-02	1	No	NA	No	9.8E-02	No	
SW8270C	Phenanthrene	85-01-8	2.8E-02	180	No	NA	No	1.1E+01	No	Pyrene
SW8270C	Phenol	108-95-2	4.0E-02	1900	No	NA	No	1.6E-01	No	
SW8270C	Pyrene	129-00-0	2.0E-02	180	No	NA	No	4.5E+01	No	
SW8270SIM	1-Methylnaphthalene	90-12-0	1.3E-02	9.9	No	NA	No	NA	NA	
SW8270SIM	2-Methylnaphthalene	91-57-6	2.4E-02	19	No	NA	No	8.8E-01	No	

Iron Gate Hatchery Burn Pit Evaluation of COPCs for Human Health and Leaching to Groundwater

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Soil (mg/kg)	CA Human Health SL ^a (mg/kg)	Exceeds CA Human Health SL?	Background Value ^b (mg/kg)	Human Health COPC ^c ?	CA Leaching to Groundwater SL ^d (mg/kg)	Exceeds CA Leach to Groundwater SL (COPC)?	Surrogate Chemicals for Human Health ^e
SW8270SIM	Acenaphthylene	208-96-8	2.9E-03	180	No	NA	No	6.4E+00	No	Pyrene
SW8270SIM	Anthracene	120-12-7	2.5E-03	1700	No	NA	No	1.9E+00	No	
SW8270SIM	Benzo(b)fluoranthene	205-99-2	3.1E-03	1.1	No	NA	No	5.4E+00	No	
SW8270SIM	Chrysene	218-01-9	9.5E-03	110	No	NA	No	2.2E+00	No	
SW8270SIM	Fluoranthene	206-44-0	7.3E-03	240	No	NA	No	8.6E+01	No	
SW8270SIM	Fluorene	86-73-7	6.3E-03	230	No	NA	No	6.0E+00	No	
SW8270SIM	Indeno(1,2,3-cd)pyrene	193-39-5	1.9E-03	1.1	No	NA	No	1.6E+01	No	
SW8270SIM	Phenanthrene	85-01-8	2.6E-02	180	No	NA	No	1.1E+01	No	Pyrene
SW8270SIM	Pyrene	129-00-0	2.0E-02	180	No	NA	No	4.5E+01	No	
SW8290	1,2,3,4,6,7,8-HpCDD	35822-46-9	3.3E-04	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,4,6,7,8-HpCDF	67562-39-4	1.4E-05	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,4,7,8-HxCDD	39227-28-6	5.0E-06	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,4,7,8-HxCDF	70648-26-9	1.8E-06	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,6,7,8-HxCDD	57653-85-7	1.7E-05	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,6,7,8-HxCDF	57117-44-9	8.7E-07	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,7,8,9-HxCDD	19408-74-3	6.7E-06	NA ^f	No	NA	No	NA	NA	
SW8290	1,2,3,7,8-PeCDD	40321-76-4	1.9E-06	NA ^f	No	NA	No	NA	NA	
SW8290	2,3,4,6,7,8-HxCDF	60851-34-5	8.0E-07	NA ^f	No	NA	No	NA	NA	
SW8290	2,3,4,7,8-PeCDF	57117-31-4	5.8E-07	NA ^f	No	NA	No	NA	NA	
SW8290	2,3,7,8-TCDF	51207-31-9	6.8E-07	NA ^f	No	NA	No	NA	NA	
SW8290	OCDD	3268-87-9	2.0E-03	NA ^f	No	NA	No	NA	NA	
SW8290	OCDF	39001-02-0	1.3E-05	NA ^f	No	NA	No	NA	NA	

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for residential soil; if no screening level is available in Note 3, the EPA (2022) Residential Soil RSL was used. Background values are used if available and if higher. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b Background concentrations for metals in soil in Cascade Range (ODEQ 2013)

^c Human health COPCs are analytes that exceed the human health SL and the background value, if available.

^d The screening levels for protection of groundwater from soil leaching are the SFRWQCB values protective of groundwater as a drinking water resource (SFRWQCB 2019, Table S-3).

^e For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

^f Evaluated using Total 2,3,7,8-TCDD, calculated using toxicity equivalent values.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

mg/kg = milligrams per kilogram

NA = not available or not applicable

SL = screening level

Sources:

Department of Toxic Substances Control (DTSC). 2022. Human Health Risk Assessment Note 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities. May

San Francisco Regional Water Quality Control Board (SFRWQCB). 2019. *Environmental Screening Levels*. Interim Final. January.

United States Environmental Protection Agency (EPA). 2022. Regional Screening Levels for Chemical Contaminants at Superfund Sites. November.

Appendix F-2
COPC Evaluation – Water

Copco No. 2 Wood Stave Penstock Evaluation of COPCs in Groundwater for Human Health

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Groundwater (ug/L)	CA Human Health SL ^a (ug/L)	Exceeds CA Human Health SL (COPC)?	Surrogate Chemicals ^b
SW6020	Antimony	7440-36-0	4.5E-01	7.8E-01	No	
SW6020	Arsenic	7440-38-2	4.1E+01	7.0E-03	Yes	
SW6020	Barium	7440-39-3	1.1E+03	3.8E+02	Yes	
SW6020	Beryllium	7440-41-7	5.0E+00	4.0E-01	Yes	
SW6020	Cadmium	7440-43-9	1.0E+00	1.8E-01	Yes	
SW6020	Chromium	7440-47-3	1.3E+02	2.2E+03	No	Chromium III
SW6020	Cobalt	7440-48-4	1.1E+02	6.0E-01	Yes	
SW6020	Copper	7440-50-8	3.7E+02	8.0E+01	Yes	
SW6020	Iron	7439-89-6	2.1E+05	1.4E+03	Yes	
SW6020	Lead	7439-92-1	2.4E+02	1.5E+01	Yes	
SW6020	Manganese	7439-96-5	7.2E+03	4.3E+01	Yes	
SW6020	Molybdenum	7439-98-7	5.1E+00	1.0E+01	No	
SW6020	Nickel	7440-02-0	1.3E+02	2.2E+01	Yes	
SW6020	Selenium	7782-49-2	2.0E+01	1.0E+01	Yes	
SW6020	Silver	7440-22-4	7.1E-01	9.4E+00	No	
SW6020	Thallium	7440-28-0	8.0E-01	2.0E-02	Yes	
SW6020	Vanadium	7440-62-2	4.5E+02	8.6E+00	Yes	
SW6020	Zinc	7440-66-6	5.1E+02	6.0E+02	No	
SW7470A	Mercury	7439-97-6	6.7E-01	6.3E-03	Yes	
SW8270C	Anthracene	120-12-7	5.7E-02	1.0E+02	No	
SW8270C	Benzo(a)anthracene	56-55-3	1.4E-01	3.0E-02	Yes	
SW8270C	Benzo(a)pyrene	50-32-8	5.5E-02	2.5E-02	Yes	
SW8270C	Benzo(b)fluoranthene	205-99-2	2.8E-01	2.5E-01	Yes	
SW8270C	Benzo(k)fluoranthene	207-08-9	1.0E-01	2.5E+00	No	
SW8270C	Chrysene	218-01-9	3.5E-01	2.5E+01	No	
SW8270C	Fluoranthene	206-44-0	8.8E-01	8.0E+01	No	
SW8270C	Phenanthrene	85-01-8	1.7E-01	8.1E+00	No	Pyrene
SW8270C	Pyrene	129-00-0	5.8E-01	8.1E+00	No	

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for tapwater; if no screening level is available in Note 3, the EPA (2022) tapwater RSL was used. SFRWQCB (2019) ELSs are used for DRO. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

ug/L = micrograms per liter

NA = not available or not applicable

SL = screening level

Copco No. 2 Underground Storage Tanks Evaluation of COPCs in Groundwater for Human Health

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Groundwater (ug/L)	CA Human Health SL ^a (ug/L)	Exceeds CA Human Health SL (COPC)?	Surrogate Chemicals ^b
SW8015-E	Diesel Range Organics	DRO	4.5E+02	2.0E+02	Yes	
SW8260B	Benzene	71-43-2	6.8E-02	1.5E-01	No	
SW8260B	Chloroform	67-66-3	2.6E-01	2.2E-01	Yes	
SW8260B	Hexachlorobutadiene	87-68-3	1.3E-01	1.4E-01	No	
SW8260B	Toluene	108-88-3	6.5E-01	4.1E+01	No	
SW8260B	Vinyl Acetate	108-05-4	7.1E-01	4.1E+01	No	
SW8270SIM	Acenaphthylene	208-96-8	2.3E-02	8.1E+00	No	Pyrene
SW8270SIM	Anthracene	120-12-7	3.0E-01	1.0E+02	No	
SW8270SIM	Benzo(a)anthracene	56-55-3	1.5E+00	3.0E-02	Yes	
SW8270SIM	Benzo(a)pyrene	50-32-8	1.1E+00	2.5E-02	Yes	
SW8270SIM	Benzo(b)fluoranthene	205-99-2	6.9E-01	2.5E-01	Yes	
SW8270SIM	Benzo(g,h,i)perylene	191-24-2	5.2E-01	8.1E+00	No	Pyrene
SW8270SIM	Benzo(k)fluoranthene	207-08-9	1.2E-01	2.5E+00	No	
SW8270SIM	Chrysene	218-01-9	2.2E+00	2.5E+01	No	
SW8270SIM	Dibenzo(a,h)anthracene	53-70-3	2.0E-01	2.5E-02	Yes	
SW8270SIM	Fluoranthene	206-44-0	9.0E-01	8.0E+01	No	
SW8270SIM	Fluorene	86-73-7	8.0E-02	1.6E+01	No	
SW8270SIM	Indeno(1,2,3-cd)pyrene	193-39-5	2.2E-01	2.5E-01	No	
SW8270SIM	Phenanthrene	85-01-8	8.3E-01	8.1E+00	No	Pyrene
SW8270SIM	Pyrene	129-00-0	4.3E+00	8.1E+00	No	

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for tapwater; if no screening level is available in Note 3, the EPA (2022) tapwater RSL was used. SFRWQCB (2019) ELSs are used for DRO. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

^b For chemicals without published DTSC (2022) or EPA (2022) Screening Levels, surrogate values were selected as indicated.

CAS = Chemical Abstracts Service

COPC = chemical of potential concern

ug/L = micrograms per liter

NA = not available or not applicable

SL = screening level

Copco No. 2 Former Mobile Oil Containment Building Evaluation of COPCs in Groundwater for Human Health

ANALYTIC METHOD	CHEMICAL NAME	CAS	Maximum Detected Concentration in Groundwater (ug/L)	CA Human Health SL ^a (ug/L)	Exceeds CA Human Health SL (COPC)?
SW8015-E	Diesel Range Organics	DRO	2.9E+02	2.0E+02	Yes
SW8015-E	Extended Range Organics	ERO	2.0E+02	6.0E+04	No
SW8260B	Hexachlorobutadiene	87-68-3	9.5E-02	1.4E-01	No
SW8260B	Toluene	108-88-3	9.8E-02	4.1E+01	No

Notes:

^a The screening levels used for human health are the the DTSC (2022) Note 3 Soil Screening Levels for tapwater; if no screening level is available in Note 3, the EPA (2022) tapwater RSL was used. SFRWQCB (2019) ELSs are used for DRO. Screening levels are based on a target cancer risk of 1E-06 and a target hazard index of 0.1 to account for potential cumulative risk.

CAS = Chemical Abstracts Service
 COPC = chemical of potential concern
 ug/L = micrograms per liter
 NA = not available or not applicable
 SL = screening level

Appendix F-3 ProUCL Statistics

The following Excel tables are available upon request:

C1DP_ProUCL_Input.xlsx
C1DP_ProUCL_Output_0to10.xlsx
C1DP_ProUCL_Output_0to2.xlsx
C2BP_ProUCL_Input_Metals.xlsx
C2BP_ProUCL_Input_NonMetals.xlsx
C2BP_ProUCL_Output_0to10_Metals.xlsx
C2BP_ProUCL_Output_0to10_NonMetals_M2GW.xlsx
C2BP_ProUCL_Output_0to10_NonMetals-v2.xlsx
C2BP_ProUCL_Output_0to2_Metals.xlsx
C2BP_ProUCL_Output_0to2_NonMetals-v2.xlsx
C2UT_ProUCL_Input.xlsx
C2WP_ProUCL_Input.xlsx
C2WP_ProUCL_Input0to02.xlsx
C2WP_ProUCL_Input0to10.xlsx
C2WP_ProUCL_output_0t010_v2.xlsx
C2WP_ProUCL_output_0t02_v2.xlsx
C2WS_ProUCL_Input.xlsx
C2WS_ProUCL_Output_0to10.xlsx
C2WS_ProUCL_Output_0to2.xlsx
IGBP_ProUCL_Input.xlsx
IGBP_ProUCL_Output_0to10.xlsx
IGSR_ProUCL_Input.xlsx
IGSR_ProUCL_Output_0to10.xlsx
IGSR_ProUCL_Output_0to2.xlsxxxxxx

Appendix F-4
Risk-Based Concentrations

Risk-Based Concentrations for Soil, Residential Exposure Scenario

Type	COPC	CAS	CAS Lookup	DTSC Note 3 Cancer (mg/kg) ^a	DTSC Note 3 Non-cancer (mg/kg) ^a	EPA RSL Cancer (mg/kg) ^b	EPA RSL Non-cancer (mg/kg) ^b	RBC Cancer (mg/kg) ^c	RBC Non-cancer (mg/kg) ^c	Surrogate
Dioxins	2,3,7,8-TCDD Toxic Equivalent (TEQ) Mammal, (ND=0)	TEQ-M0	1746-01-6	0.0000048	0.000051	0.0000048	0.000051	0.0000048	0.000051	2,3,7,8-TCDD
Metals	Antimony	7440-36-0	7440-36-0	--	--	--	31	--	31	
Metals	Arsenic	7440-38-2	7440-38-2	0.11	0.41	0.68	35	0.11	0.41	
Metals	Cadmium	7440-43-9	7440-43-9	910	7.1	2100	7.1	910	7.1	
Metals	Cobalt	7440-48-4	7440-48-4	--	--	420	23	420	23	
Metals	Iron	7439-89-6	7439-89-6	--	--	--	55000	--	55000	
Metals	Lead	7439-92-1	7439-92-1	--	80	--	400	--	80	
Metals	Manganese	7439-96-5	7439-96-5	--	--	--	1800	--	1800	
Metals	Mercury	7439-97-6	7439-97-6	--	1	--	11	--	1	
PAHs	Benzo(a)anthracene	56-55-3	56-55-3	1.1	--	1.1		1.1		
PAHs	Benzo(a)pyrene	50-32-8	50-32-8	0.11	18	0.11	18	0.11	18	
PAHs	Benzo(b)fluoranthene	205-99-2	205-99-2	1.1	--	1.1	--	1.1	--	
PAHs	Dibenzo(a,h)anthracene	53-70-3	53-70-3	0.028	--	0.11	--	0.028	--	
PAHs	Indeno(1,2,3-cd)pyrene	193-39-5	193-39-5	1.1	--	1.1	--	1.1	--	
SVOC	Pentachlorophenol	87-86-5	87-86-5	1	250	1	250	1	250	
VOC	Benzene	71-43-2	71-43-2	0.33	11	1.2	82	0.33	11	
TPH	Diesel Range Organics	DRO	DRO	--	--	--	--	--	--	
PCB	Aroclor 1262	37324-23-5	11096-82-5	0.24	--	0.24	--	0.24	--	Aroclor 1260

Notes:

^a Source: DTSC 2022a

^b Source: USEPA 2022a

^c Priority of: 1) DTSC Note 3 value for residential soil (DTSC 2022a); 2) EPA RSL for residential soil (EPA 2022a)

CAS = chemical abstract service

COPC = constituent of potential concern

DTSC = California Environmental Protection Agency, Department of Toxic Substances Control

EPA = U.S. Environmental Protection Agency

EPC = Exposure Point Concentration

mg/kg = milligram(s) per kilogram

RBC = risk-based concentration

RSL = Regional Screening Level

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
A (PEF Dispersion Constant)	16.2302	16.2302
A (VF Dispersion Constant)	11.911	11.911
A (VF Dispersion Constant - mass limit)	11.911	11.911
B (PEF Dispersion Constant)	18.7762	18.7762
B (VF Dispersion Constant)	18.4385	18.4385
B (VF Dispersion Constant - mass limit)	18.4385	18.4385
City (PEF Climate Zone) Selection	Default	Default
City (VF Climate Zone) Selection	Default	Default
C (PEF Dispersion Constant)	216.108	216.108
C (VF Dispersion Constant)	209.7845	209.7845
C (VF Dispersion Constant - mass limit)	209.7845	209.7845
foc (fraction organic carbon in soil) g/g	0.006	0.006
F(x) (function dependent on U_{crit}/U) unitless	0.194	0.194
n (total soil porosity) L_{pore}/L_{crit}	0.43396	0.43396
ρ_n (dry soil bulk density) g/cm ³	1.5	1.5
ρ_n (dry soil bulk density - mass limit) g/cm ³	1.5	1.5
PEF (particulate emission factor) m ³ /kg	1359344438	1359344438
ρ_c (soil particle density) g/cm ³	2.65	2.65
Q/C_{wind} (g/m ² -s per kg/m ³)	93.77	93.77
Q/C_{vint} (g/m ² -s per kg/m ³)	68.18	68.18
Q/C_{vint} (g/m ² -s per kg/m ³ - mass limit)	68.18	68.18
A_e (PEF acres)	0.5	0.5
A_e (VF acres)	0.5	0.5
A_e (VF mass-limit acres)	0.5	0.5
$AF_{n,s}$ (mutagenic skin adherence factor) mg/cm ²	0.2	0.2
$AF_{r,s}$ (mutagenic skin adherence factor) mg/cm ²	0.2	0.2
AF_{r-1R} (mutagenic skin adherence factor) mg/cm ²	0.07	0.07
AF_{1R-7R} (mutagenic skin adherence factor) mg/cm ²	0.07	0.07
$AF_{res,a}$ (skin adherence factor - adult) mg/cm ²	0.07	0.07
$AF_{res,c}$ (skin adherence factor - child) mg/cm ²	0.2	0.2
AT_{res} (averaging time - resident carcinogenic)	365	365

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
BW _{n,2} (mutagenic body weight) kg	15	15
BW _{2,6} (mutagenic body weight) kg	15	15
BW _{6,16} (mutagenic body weight) kg	80	80
BW _{16,26} (mutagenic body weight) kg	80	80
BW _{res-a} (body weight - adult) kg	80	80
BW _{res-c} (body weight - child) kg	15	15
DFS _{res-adj} (age-adjusted soil dermal factor) mg/kg	103390	103390
DFS _{M, res-adj} (mutagenic age-adjusted soil dermal factor) mg/kg	428260	428260
ED _{res} (exposure duration) years	26	26
ED _{n,2} (mutagenic exposure duration) years	2	2
ED _{2,6} (mutagenic exposure duration) years	4	4
ED _{6,16} (mutagenic exposure duration) years	10	10
ED _{16,26} (mutagenic exposure duration) years	10	10
ED _{res-a} (exposure duration - adult) years	20	20
ED _{res-c} (exposure duration - child) years	6	6
EF _{res} (exposure frequency) days/year	350	350
EF _{n,2} (mutagenic exposure frequency) days/year	350	350
EF _{2,6} (mutagenic exposure frequency) days/year	350	350
EF _{6,16} (mutagenic exposure frequency) days/year	350	350
EF _{16,26} (mutagenic exposure frequency) days/year	350	350
EF _{res-a} (exposure frequency - adult) days/year	350	350
EF _{res-c} (exposure frequency - child) days/year	350	350
ET _{res} (exposure time) hours/day	24	24
ET _{n,2} (mutagenic exposure time) hours/day	24	24
ET _{2,6} (mutagenic exposure time) hours/day	24	24
ET _{6,16} (mutagenic exposure time) hours/day	24	24
ET _{16,26} (mutagenic exposure time) hours/day	24	24
ET _{res-a} (adult exposure time) hours/day	24	24
ET _{res-c} (child exposure time) hours/day	24	24
THQ (target hazard quotient) unitless	0.1	1
IFS _{res-adj} (age-adjusted soil ingestion factor) mg/kg	36750	36750

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
IFSM _{res-adi} (mutagenic age-adjusted soil ingestion factor) mg/kg	166833.3	166833.3
IRS _{n-3} (mutagenic soil intake rate) mg/day	200	200
IRS _{2-R} (mutagenic soil intake rate) mg/day	200	200
IRS _{R-1R} (mutagenic soil intake rate) mg/day	100	100
IRS _{1R-2R} (mutagenic soil intake rate) mg/day	100	100
IRS _{res-a} (soil intake rate - adult) mg/day	100	100
IRS _{res-r} (soil intake rate - child) mg/day	200	200
LT (lifetime) years	70	70
SA _{n-3} (mutagenic skin surface area) cm ² /day	2373	2373
SA _{2-R} (mutagenic skin surface area) cm ² /day	2373	2373
SA _{R-1R} (mutagenic skin surface area) cm ² /day	6032	6032
SA _{1R-2R} (mutagenic skin surface area) cm ² /day	6032	6032
SA _{res-a} (skin surface area - adult) cm ² /day	6032	6032
SA _{res-r} (skin surface area - child) cm ² /day	2373	2373
TR (target risk) unitless	1.0E-06	1.0E-06
T _w (groundwater temperature) Celsius	25	25
Theta _a (air-filled soil porosity) L _{air} /L _{cnil}	0.28396	0.28396
Theta _w (water-filled soil porosity) L _{water} /L _{cnil}	0.15	0.15
T (exposure interval) s	819936000	819936000
T (exposure interval) yr	26	26
U _m (mean annual wind speed) m/s	4.69	4.69
U _t (equivalent threshold value)	11.32	11.32
V (fraction of vegetative cover) unitless	0.5	0.5

Site-specific

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref (ug/m ³) ⁻¹	IUR Ref	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref	GIABS
Total Petroleum Hydrocarbons (Aliphatic Medium)	NA	No	Yes	Organics	-	-			1.00E-01	U	1.00E+00	U	1

ABS	RBA	Soil Saturation Concentration (mg/kg)	S (mg/L)	K _{oc} (cm ³ /g)	K _d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H ¹ and HLC Ref	Normal Boiling Point (K)	BP Ref	Critical Temperature (K)	T _c Ref	Chemical Type
-	1	6.86E+00	2.20E-01	7.96E+02	4.78E+00	3.40E+00	1.39E+02	U	424.15	U	594	U	BTEX

D _{ia} (cm ² /s)	D _{iw} (cm ² /s)	D _A (cm ² /s)	Particulate Emission Factor (m ³ /kg)	Volatilization Factor Unlimited Reservoir (m ³ /kg)	Volatilization Factor Mass Limit (m ³ /kg)	Volatilization Factor Selected (m ³ /kg)	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)
5.14E-02	6.77E-06	1.22E-02	1.36E+09	1.04E+03	-	1.04E+03	-	-	-	-

Ingestion SL Child THQ=1 (mg/kg)	Dermal SL Child THQ=1 (mg/kg)	Inhalation SL Child THQ=1 (mg/kg)	Noncarcinogenic SL Child THI=1 (mg/kg)	Ingestion SL Adult THQ=1 (mg/kg)	Dermal SL Adult THQ=1 (mg/kg)	Inhalation SL Adult THQ=1 (mg/kg)	Noncarcinogenic SL Adult THI=1 (mg/kg)	Screening Level (mg/kg)
7.82E+03	-	1.09E+03	9.55E+02	8.34E+04	-	1.09E+03	1.07E+03	9.55E+02 nc sat

Site-specific Resident Tap Water Inputs

Variable	Resident Tap Water Default Value	Site-Specific Value
BW _{n,1} (mutagenic body weight) kg	15	15
BW _{2,6} (mutagenic body weight) kg	15	15
BW _{6,16} (mutagenic body weight) kg	80	80
BW _{16,76} (mutagenic body weight) kg	80	80
BW _{res-a} (body weight - adult) kg	80	80
BW _{res-r} (body weight - child) kg	15	15
DFW _{res-adj} (age-adjusted dermal factor) cm ² -event/kg	2610650	2610650
DFWM _{res-adj} (mutagenic age-adjusted dermal factor) cm ² -event/kg	8191633	8191633
ED _{res} (exposure duration - resident) years	26	26
ED _{n,1} (mutagenic exposure duration first phase) years	2	2
ED _{2,6} (mutagenic exposure duration second phase) years	4	4
ED _{6,16} (mutagenic exposure duration third phase) years	10	10
ED _{16,76} (mutagenic exposure duration fourth phase) years	10	10
ED _{res-a} (exposure duration - adult) years	20	20
ED _{res-r} (exposure duration - child) years	6	6
EF _{res} (exposure frequency) days/year	350	350
EF _{n,1} (mutagenic exposure frequency first phase) days/year	350	350
EF _{2,6} (mutagenic exposure frequency second phase) days/year	350	350
EF _{6,16} (mutagenic exposure frequency third phase) days/year	350	350
EF _{16,76} (mutagenic exposure frequency fourth phase) days/year	350	350
EF _{res-a} (exposure frequency - adult) days/year	350	350
EF _{res-r} (exposure frequency - child) days/year	350	350
ET _{res} (exposure time) hours/day	24	24
ET _{event,res-adj} (age-adjusted exposure time) hours/event	0.67077	0.67077
ET _{event,res-adj} (mutagenic age-adjusted exposure time) hours/event	0.67077	0.67077
ET _{n,1} (mutagenic dermal exposure time first phase) hours/event	0.54	0.54
ET _{2,6} (mutagenic dermal exposure time second phase) hours/event	0.54	0.54
ET _{6,16} (mutagenic dermal exposure time third phase) hours/event	0.71	0.71
ET _{16,76} (mutagenic dermal exposure time fourth phase) hours/event	0.71	0.71
ET _{res-a} (dermal exposure time - adult) hours/event	0.71	0.71

Site-specific Resident Tap Water Inputs

Variable	Resident Tap Water Default Value	Site-Specific Value
ET _{res-c} (dermal exposure time - child) hours/event	0.54	0.54
ET _{n-c} (mutagenic inhalation exposure time first phase) hours/day	24	24
ET _{2-c} (mutagenic inhalation exposure time second phase) hours/day	24	24
ET ₆₋₁₆ (mutagenic inhalation exposure time third phase) hours/day	24	24
ET ₁₆₋₂₆ (mutagenic inhalation exposure time fourth phase) hours/day	24	24
ET _{res-a} (inhalation exposure time - adult) hours/day	24	24
ET _{res-c} (inhalation exposure time - child) hours/day	24	24
EV _{n-c} (mutagenic events) per day	1	1
EV _{2-c} (mutagenic events) per day	1	1
EV ₆₋₁₆ (mutagenic events) per day	1	1
EV ₁₆₋₂₆ (mutagenic events) per day	1	1
EV _{res-a} (events - adult) per day	1	1
EV _{res-c} (events - child) per day	1	1
THQ (target hazard quotient) unitless	0.1	1
IFW _{res-a} (adjusted intake factor) L/kg	327.95	327.95
IFWM _{res-a} (mutagenic adjusted intake factor) L/kg	1019.9	1019.9
IRW _{n-c} (mutagenic water intake rate) L/day	0.78	0.78
IRW _{2-c} (mutagenic water intake rate) L/day	0.78	0.78
IRW ₆₋₁₆ (mutagenic water intake rate) L/day	2.5	2.5
IRW ₁₆₋₂₆ (mutagenic water intake rate) L/day	2.5	2.5
IRW _{res-a} (water intake rate - adult) L/day	2.5	2.5
IRW _{res-c} (water intake rate - child) L/day	0.78	0.78
K (volatilization factor of Andelman) L/m ³	0.5	0.5
LT (lifetime) years	70	70
SA _{n-c} (mutagenic skin surface area) cm ²	6365	6365
SA _{2-c} (mutagenic skin surface area) cm ²	6365	6365
SA ₆₋₁₆ (mutagenic skin surface area) cm ²	19652	19652
SA ₁₆₋₂₆ (mutagenic skin surface area) cm ²	19652	19652
SA _{res-a} (skin surface area - adult) cm ²	19652	19652
SA _{res-c} (skin surface area - child) cm ²	6365	6365

Site-specific Resident Tap Water Inputs

Variable	Resident Tap Water Default Value	Site-Specific Value
l_{sc} (apparent thickness of stratum corneum) cm	0.001	0.001
TR (target risk) unitless	1.0E-06	1.0E-06

Site-specific

Resident Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref	GIABS
Total Petroleum Hydrocarbons (Aliphatic Medium)	NA	No	Yes	Organics	-		-		1.00E-01	U	1.00E+00	U	1

K _p (cm/hr)	MW	B (unitless)	t* (hr)	τ _{event} (hr/event)	FA (unitless)	In EPD?	DA _{event} (ca)	DA _{event} (nc child)	DA _{event} (nc adult)	MCL (ug/L)	Ingestion SL	Dermal SL	Inhalation SL
											TR=1E-06 (ug/L)	TR=1E-06 (ug/L)	TR=1E-06 (ug/L)
1.70E+00	128.26	7.40E+00	2.46E+00	5.50E-01	1	No	-	-	-	-	-	-	-

Carcinogenic SL TR=1E-06 (ug/L)	Ingestion SL Child THQ=1 (ug/L)	Dermal SL Child THQ=1 (ug/L)	Inhalation SL Child THQ=1 (ug/L)	Noncarcinogenic SL Child THI=1 (ug/L)	Ingestion SL Adult THQ=1 (ug/L)	Dermal SL Adult THQ=1 (ug/L)	Inhalation SL Adult THQ=1 (ug/L)	Noncarcinogenic SL Adult THI=1 (ug/L)	Screening Level (ug/L)
-	2.01E+03	-	2.09E+03	1.02E+03	3.34E+03	-	2.09E+03	1.28E+03	1.02E+03 nc

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
A (PEF Dispersion Constant)	16.2302	16.2302
A (VF Dispersion Constant)	11.911	11.911
A (VF Dispersion Constant - mass limit)	11.911	11.911
B (PEF Dispersion Constant)	18.7762	18.7762
B (VF Dispersion Constant)	18.4385	18.4385
B (VF Dispersion Constant - mass limit)	18.4385	18.4385
City (PEF Climate Zone) Selection	Default	Default
City (VF Climate Zone) Selection	Default	Default
C (PEF Dispersion Constant)	216.108	216.108
C (VF Dispersion Constant)	209.7845	209.7845
C (VF Dispersion Constant - mass limit)	209.7845	209.7845
foc (fraction organic carbon in soil) g/g	0.006	0.006
F(x) (function dependent on U_{crit}/U) unitless	0.194	0.194
n (total soil porosity) L_{pore}/L_{crit}	0.43396	0.43396
ρ_n (dry soil bulk density) g/cm ³	1.5	1.5
ρ_n (dry soil bulk density - mass limit) g/cm ³	1.5	1.5
PEF (particulate emission factor) m ³ /kg	1359344438	1359344438
ρ_c (soil particle density) g/cm ³	2.65	2.65
Q/C_{wind} (g/m ² -s per kg/m ³)	93.77	93.77
Q/C_{vint} (g/m ² -s per kg/m ³)	68.18	68.18
Q/C_{vint} (g/m ² -s per kg/m ³ - mass limit)	68.18	68.18
A_e (PEF acres)	0.5	0.5
A_e (VF acres)	0.5	0.5
A_e (VF mass-limit acres)	0.5	0.5
$AF_{n,s}$ (mutagenic skin adherence factor) mg/cm ²	0.2	0.2
$AF_{r,s}$ (mutagenic skin adherence factor) mg/cm ²	0.2	0.2
AF_{r-1R} (mutagenic skin adherence factor) mg/cm ²	0.07	0.07
AF_{1R-7R} (mutagenic skin adherence factor) mg/cm ²	0.07	0.07
$AF_{res,a}$ (skin adherence factor - adult) mg/cm ²	0.07	0.07
$AF_{res,c}$ (skin adherence factor - child) mg/cm ²	0.2	0.2
AT_{res} (averaging time - resident carcinogenic)	365	365

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
BW _{n,2} (mutagenic body weight) kg	15	15
BW _{2,6} (mutagenic body weight) kg	15	15
BW _{6,16} (mutagenic body weight) kg	80	80
BW _{16,26} (mutagenic body weight) kg	80	80
BW _{res-a} (body weight - adult) kg	80	80
BW _{res-c} (body weight - child) kg	15	15
DFS _{res-adj} (age-adjusted soil dermal factor) mg/kg	103390	5095.02
DFS _{res-adj,i} (mutagenic age-adjusted soil dermal factor) mg/kg	428260	23478.84
ED _{res} (exposure duration) years	26	16
ED _{n,2} (mutagenic exposure duration) years	2	2
ED _{2,6} (mutagenic exposure duration) years	4	4
ED _{6,16} (mutagenic exposure duration) years	10	5
ED _{16,26} (mutagenic exposure duration) years	10	5
ED _{res-a} (exposure duration - adult) years	20	10
ED _{res-c} (exposure duration - child) years	6	6
EF _{res} (exposure frequency) days/year	350	21
EF _{n,2} (mutagenic exposure frequency) days/year	350	21
EF _{2,6} (mutagenic exposure frequency) days/year	350	21
EF _{6,16} (mutagenic exposure frequency) days/year	350	21
EF _{16,26} (mutagenic exposure frequency) days/year	350	21
EF _{res-a} (exposure frequency - adult) days/year	350	21
EF _{res-c} (exposure frequency - child) days/year	350	21
ET _{res} (exposure time) hours/day	24	24
ET _{n,2} (mutagenic exposure time) hours/day	24	24
ET _{2,6} (mutagenic exposure time) hours/day	24	24
ET _{6,16} (mutagenic exposure time) hours/day	24	24
ET _{16,26} (mutagenic exposure time) hours/day	24	24
ET _{res-a} (adult exposure time) hours/day	24	24
ET _{res-c} (child exposure time) hours/day	24	24
THQ (target hazard quotient) unitless	0.1	1
IFS _{res-adj} (age-adjusted soil ingestion factor) mg/kg	36750	1942.5

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
IFSM _{res-adi} (mutagenic age-adjusted soil ingestion factor) mg/kg	166833.3	9485
IRS _{n-3} (mutagenic soil intake rate) mg/day	200	200
IRS ₂₋₆ (mutagenic soil intake rate) mg/day	200	200
IRS ₆₋₁₆ (mutagenic soil intake rate) mg/day	100	100
IRS ₁₆₋₂₆ (mutagenic soil intake rate) mg/day	100	100
IRS _{res-a} (soil intake rate - adult) mg/day	100	100
IRS _{res-r} (soil intake rate - child) mg/day	200	200
LT (lifetime) years	70	70
SA _{n-3} (mutagenic skin surface area) cm ² /day	2373	2373
SA ₂₋₆ (mutagenic skin surface area) cm ² /day	2373	2373
SA ₆₋₁₆ (mutagenic skin surface area) cm ² /day	6032	6032
SA ₁₆₋₂₆ (mutagenic skin surface area) cm ² /day	6032	6032
SA _{res-a} (skin surface area - adult) cm ² /day	6032	6032
SA _{res-r} (skin surface area - child) cm ² /day	2373	2373
TR (target risk) unitless	1.0E-06	1.0E-06
T _w (groundwater temperature) Celsius	25	25
Theta _a (air-filled soil porosity) L _{air} /L _{cnil}	0.28396	0.28396
Theta _w (water-filled soil porosity) L _{water} /L _{cnil}	0.15	0.15
T (exposure interval) s	819936000	819936000
T (exposure interval) yr	26	26
U _m (mean annual wind speed) m/s	4.69	4.69
U _t (equivalent threshold value)	11.32	11.32
V (fraction of vegetative cover) unitless	0.5	0.5

Site-specific

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref
Antimony (metallic)	7440-36-0	No	No	Inorganics	-		-		4.00E-04	U	3.00E-04	U
Aroclor 1260	11096-82-5	No	Yes	Organics	2.00E+00	U	5.71E-04	U	-		-	
Arsenic, Inorganic	7440-38-2	No	No	Inorganics	9.50E+00	U	4.30E-03	U	3.50E-06	U	1.50E-05	U
Benz[a]anthracene	56-55-3	Yes	Yes	Organics	1.00E-01	U	6.00E-05	U	-		-	
Benzene	71-43-2	No	Yes	Organics	1.00E-01	U	2.90E-05	U	4.00E-03	U	3.00E-03	U
Benzo[a]pyrene	50-32-8	Yes	No	Organics	1.00E+00	U	6.00E-04	U	3.00E-04	U	2.00E-06	U
Benzo[b]fluoranthene	205-99-2	Yes	No	Organics	1.00E-01	U	6.00E-05	U	-		-	
Cadmium (Diet)	7440-43-9	No	No	Inorganics	-		4.20E-03	U	1.00E-04	U	1.00E-05	U
Cobalt	7440-48-4	No	No	Inorganics	-		9.00E-03	U	3.00E-04	U	6.00E-06	U
Dibenz[a,h]anthracene	53-70-3	Yes	No	Organics	4.10E+00	U	1.20E-03	U	-		-	
Indeno[1,2,3-cd]pyrene	193-39-5	Yes	No	Organics	1.00E-01	U	6.00E-05	U	-		-	
Iron	7439-89-6	No	No	Inorganics	-		-		7.00E-01	U	-	
Manganese (Non-diet)	7439-96-5	No	No	Inorganics	-		-		2.40E-02	U	5.00E-05	U
Mercury (elemental)	7439-97-6	No	Yes	Inorganics	-		-		1.60E-04	U	3.00E-05	U
Pentachlorophenol	87-86-5	No	No	Organics	4.00E-01	U	5.10E-06	U	5.00E-03	U	-	
Polychlorinated Biphenyls (high risk)	1336-36-3	No	Yes	Organics	2.00E+00	U	5.71E-04	U	-		-	
TCDD, 2,3,7,8-	1746-01-6	No	Yes	Organics	1.30E+05	U	3.80E+01	U	7.00E-10	U	4.00E-08	U

Site-specific

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

GIABS	ABS	RBA	Soil Saturation Concentration (mg/kg)	S (mg/L)	K _{oc} (cm ³ /g)	K _d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H and HLC Ref	Normal Boiling Point BP (K)	BP Ref	Critical Temperature T _c (K)	T _c Ref
0.15	-	1	-	-	-	4.50E+01	-	-		1913.15	U	5070	U
1	0.14	1	-	1.44E-02	3.50E+05	2.10E+03	3.36E-04	1.37E-02	U	689.15	U	987	U
1	0.03	0.6	-	-	-	2.90E+01	-	-		888.15	U	1670	U
1	0.13	1	-	9.40E-03	1.77E+05	1.06E+03	1.20E-05	4.91E-04	U	711.15	U	979	U
1	-	1	1.82E+03	1.79E+03	1.46E+02	8.76E-01	5.55E-03	2.27E-01	U	353.15	U	562	U
1	0.13	1	-	1.62E-03	5.87E+05	-	4.57E-07	1.87E-05	U	768.15	U	969	U
1	0.13	1	-	1.50E-03	5.99E+05	-	6.57E-07	2.69E-05	U	716.15	U	969	U
0.025	0.001	1	-	-	-	7.50E+01	-	-		1038.15	U	2290	U
1	-	1	-	-	-	4.50E+01	-	-		3203.15	U	7400	U
1	0.13	1	-	2.49E-03	1.91E+06	-	1.41E-07	5.76E-06	U	797.15	U	990	U
1	0.13	1	-	1.90E-04	1.95E+06	-	3.48E-07	1.42E-05	U	809.15	U	1080	U
1	-	1	-	-	-	2.50E+01	-	-		3273.15	U	9340	U
0.04	-	1	-	-	-	6.50E+01	-	-		2373.15	U	4320	U
1	-	1	3.13E+00	6.00E-02	-	5.20E+01	8.62E-03	3.52E-01	U	630.15	U	1760	U
1	0.25	1	-	1.40E+01	5.92E+02	-	2.45E-08	1.00E-06	U	583.15	U	-	
1	0.14	1	-	7.00E-01	7.81E+04	4.69E+02	4.15E-04	1.70E-02	U	633.15	U	-	
1	0.03	1	-	2.00E-04	2.49E+05	1.49E+03	5.00E-05	2.04E-03	U	652.15	U	978	U

Site-specific

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical Type	D_{ia} \ (cm ² /s)	D_{iw} \ (cm ² /s)	D_A \ (cm ² /s)	Particulate Emission Factor (m ³ /kg)	Volatilization Factor Unlimited Reservoir (m ³ /kg)	Volatilization Factor Mass Limit (m ³ /kg)	Volatilization Factor Selected (m ³ /kg)	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)
INORGANIC	-	-	-	1.36E+09	-	-	-	-	-	-
PCB	2.20E-02	5.61E-06	7.68E-09	1.36E+09	1.32E+06	-	1.32E+06	6.58E+00	1.79E+01	1.75E+02
INORGANIC	-	-	-	1.36E+09	-	-	-	2.31E+00	1.76E+01	2.40E+04
PAH	2.61E-02	6.75E-06	6.83E-10	1.36E+09	4.41E+06	-	4.41E+06	2.69E+01	8.37E+01	1.72E+03
VOC	8.95E-02	1.03E-05	1.06E-03	1.36E+09	3.54E+03	-	3.54E+03	1.32E+02	-	9.28E+00
PAH	2.55E-02	6.58E-06	-	1.36E+09	-	-	-	2.69E+00	8.37E+00	5.30E+04
PAH	2.50E-02	6.43E-06	-	1.36E+09	-	-	-	2.69E+01	8.37E+01	5.30E+05
INORGANIC	-	-	-	1.36E+09	-	-	-	-	-	2.46E+04
INORGANIC	-	-	-	1.36E+09	-	-	-	-	-	1.15E+04
PAH	2.36E-02	6.02E-06	-	1.36E+09	-	-	-	6.57E-01	2.04E+00	2.65E+04
PAH	2.47E-02	6.37E-06	-	1.36E+09	-	-	-	2.69E+01	8.37E+01	5.30E+05
INORGANIC	-	-	-	1.36E+09	-	-	-	-	-	-
INORGANIC	-	-	-	1.36E+09	-	-	-	-	-	-
INORGANIC	3.07E-02	6.30E-06	1.11E-05	1.36E+09	3.47E+04	-	3.47E+04	-	-	-
HERB	2.95E-02	8.01E-06	-	1.36E+09	-	-	-	3.29E+01	5.01E+01	2.03E+07
PCB	2.43E-02	6.27E-06	4.69E-08	1.36E+09	5.32E+05	-	5.32E+05	6.58E+00	1.79E+01	7.08E+01
DIOXIN	4.70E-02	6.76E-06	3.45E-09	1.36E+09	1.96E+06	-	1.96E+06	1.01E-04	1.29E-03	3.92E-03

Site-specific

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=1 (mg/kg)	Dermal SL Child THQ=1 (mg/kg)	Inhalation SL Child THQ=1 (mg/kg)	Noncarcinogenic SL Child THI=1 (mg/kg)	Ingestion SL Adult THQ=1 (mg/kg)	Dermal SL Adult THQ=1 (mg/kg)	Inhalation SL Adult THQ=1 (mg/kg)	Noncarcinogenic SL Adult THI=1 (mg/kg)	Screening Level (mg/kg)
-	5.21E+02	-	7.09E+06	5.21E+02	5.56E+03	-	7.09E+06	5.56E+03	5.21E+02 nc
4.68E+00	-	-	-	-	-	-	-	-	4.68E+00 ca
2.04E+00	7.60E+00	6.41E+01	3.54E+05	6.80E+00	8.11E+01	3.84E+02	3.54E+05	6.70E+01	2.04E+00 ca
2.01E+01	-	-	-	-	-	-	-	-	2.01E+01 ca
8.67E+00	5.21E+03	-	1.85E+02	1.78E+02	5.56E+04	-	1.85E+02	1.84E+02	8.67E+00 ca
2.04E+00	3.91E+02	1.27E+03	4.73E+04	2.97E+02	4.17E+03	7.60E+03	4.73E+04	2.55E+03	2.04E+00 ca
2.04E+01	-	-	-	-	-	-	-	-	2.04E+01 ca
2.46E+04	1.30E+02	1.37E+03	2.36E+05	1.19E+02	1.39E+03	8.23E+03	2.36E+05	1.18E+03	1.19E+02 nc
1.15E+04	3.91E+02	-	1.42E+05	3.90E+02	4.17E+03	-	1.42E+05	4.05E+03	3.90E+02 nc
4.97E-01	-	-	-	-	-	-	-	-	4.97E-01 ca
2.04E+01	-	-	-	-	-	-	-	-	2.04E+01 ca
-	9.13E+05	-	-	9.13E+05	9.73E+06	-	-	9.73E+06	9.13E+05 nc max
-	3.13E+04	-	1.18E+06	3.05E+04	3.34E+05	-	1.18E+06	2.60E+05	3.05E+04 nc
-	2.09E+02	-	1.81E+01	1.66E+01	2.22E+03	-	1.81E+01	1.79E+01	1.66E+01 nc sat
1.99E+01	6.52E+03	1.10E+04	-	4.09E+03	6.95E+04	6.59E+04	-	3.38E+04	1.99E+01 ca
4.50E+00	-	-	-	-	-	-	-	-	4.50E+00 ca
9.16E-05	9.13E-04	1.28E-02	1.36E+00	8.51E-04	9.73E-03	7.68E-02	1.36E+00	8.58E-03	9.16E-05 ca

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
A (PEF Dispersion Constant)	16.2302	16.2302
A (VF Dispersion Constant)	11.911	11.911
A (VF Dispersion Constant - mass limit)	11.911	11.911
B (PEF Dispersion Constant)	18.7762	18.7762
B (VF Dispersion Constant)	18.4385	18.4385
B (VF Dispersion Constant - mass limit)	18.4385	18.4385
City (PEF Climate Zone) Selection	Default	Default
City (VF Climate Zone) Selection	Default	Default
C (PEF Dispersion Constant)	216.108	216.108
C (VF Dispersion Constant)	209.7845	209.7845
C (VF Dispersion Constant - mass limit)	209.7845	209.7845
foc (fraction organic carbon in soil) g/g	0.006	0.006
F(x) (function dependent on U_{crit}/U) unitless	0.194	0.194
n (total soil porosity) L_{pore}/L_{crit}	0.43396	0.43396
ρ_n (dry soil bulk density) g/cm ³	1.5	1.5
ρ_n (dry soil bulk density - mass limit) g/cm ³	1.5	1.5
PEF (particulate emission factor) m ³ /kg	1359344438	1359344438
ρ_c (soil particle density) g/cm ³	2.65	2.65
Q/C_{wind} (g/m ² -s per kg/m ³)	93.77	93.77
Q/C_{vint} (g/m ² -s per kg/m ³)	68.18	68.18
Q/C_{vint} (g/m ² -s per kg/m ³ - mass limit)	68.18	68.18
A_e (PEF acres)	0.5	0.5
A_e (VF acres)	0.5	0.5
A_e (VF mass-limit acres)	0.5	0.5
$AF_{n,s}$ (mutagenic skin adherence factor) mg/cm ²	0.2	0.2
$AF_{r,s}$ (mutagenic skin adherence factor) mg/cm ²	0.2	0.2
AF_{r-1R} (mutagenic skin adherence factor) mg/cm ²	0.07	0.07
AF_{1R-7R} (mutagenic skin adherence factor) mg/cm ²	0.07	0.07
$AF_{res,a}$ (skin adherence factor - adult) mg/cm ²	0.07	0.07
$AF_{res,c}$ (skin adherence factor - child) mg/cm ²	0.2	0.2
AT_{res} (averaging time - resident carcinogenic)	365	365

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
BW _{n,2} (mutagenic body weight) kg	15	15
BW _{2,6} (mutagenic body weight) kg	15	15
BW _{6,16} (mutagenic body weight) kg	80	80
BW _{16,26} (mutagenic body weight) kg	80	80
BW _{res-a} (body weight - adult) kg	80	80
BW _{res-c} (body weight - child) kg	15	15
DFS _{res-adj} (age-adjusted soil dermal factor) mg/kg	103390	5095.02
DFS _{res-adj,i} (mutagenic age-adjusted soil dermal factor) mg/kg	428260	23478.84
ED _{res} (exposure duration) years	26	16
ED _{n,2} (mutagenic exposure duration) years	2	2
ED _{2,6} (mutagenic exposure duration) years	4	4
ED _{6,16} (mutagenic exposure duration) years	10	5
ED _{16,26} (mutagenic exposure duration) years	10	5
ED _{res-a} (exposure duration - adult) years	20	10
ED _{res-c} (exposure duration - child) years	6	6
EF _{res} (exposure frequency) days/year	350	21
EF _{n,2} (mutagenic exposure frequency) days/year	350	21
EF _{2,6} (mutagenic exposure frequency) days/year	350	21
EF _{6,16} (mutagenic exposure frequency) days/year	350	21
EF _{16,26} (mutagenic exposure frequency) days/year	350	21
EF _{res-a} (exposure frequency - adult) days/year	350	21
EF _{res-c} (exposure frequency - child) days/year	350	21
ET _{res} (exposure time) hours/day	24	24
ET _{n,2} (mutagenic exposure time) hours/day	24	24
ET _{2,6} (mutagenic exposure time) hours/day	24	24
ET _{6,16} (mutagenic exposure time) hours/day	24	24
ET _{16,26} (mutagenic exposure time) hours/day	24	24
ET _{res-a} (adult exposure time) hours/day	24	24
ET _{res-c} (child exposure time) hours/day	24	24
THQ (target hazard quotient) unitless	0.1	1
IFS _{res-adj} (age-adjusted soil ingestion factor) mg/kg	36750	1942.5

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
IFSM _{res-adi} (mutagenic age-adjusted soil ingestion factor) mg/kg	166833.3	9485
IRS _{n-3} (mutagenic soil intake rate) mg/day	200	200
IRS ₂₋₆ (mutagenic soil intake rate) mg/day	200	200
IRS ₆₋₁₆ (mutagenic soil intake rate) mg/day	100	100
IRS ₁₆₋₂₆ (mutagenic soil intake rate) mg/day	100	100
IRS _{res-a} (soil intake rate - adult) mg/day	100	100
IRS _{res-r} (soil intake rate - child) mg/day	200	200
LT (lifetime) years	70	70
SA _{n-3} (mutagenic skin surface area) cm ² /day	2373	2373
SA ₂₋₆ (mutagenic skin surface area) cm ² /day	2373	2373
SA ₆₋₁₆ (mutagenic skin surface area) cm ² /day	6032	6032
SA ₁₆₋₂₆ (mutagenic skin surface area) cm ² /day	6032	6032
SA _{res-a} (skin surface area - adult) cm ² /day	6032	6032
SA _{res-r} (skin surface area - child) cm ² /day	2373	2373
TR (target risk) unitless	1.0E-06	1.0E-06
T _w (groundwater temperature) Celsius	25	25
Theta _a (air-filled soil porosity) L _{air} /L _{cnil}	0.28396	0.28396
Theta _w (water-filled soil porosity) L _{water} /L _{cnil}	0.15	0.15
T (exposure interval) s	819936000	819936000
T (exposure interval) yr	26	26
U _m (mean annual wind speed) m/s	4.69	4.69
U _t (equivalent threshold value)	11.32	11.32
V (fraction of vegetative cover) unitless	0.5	0.5

Site-specific

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref (ug/m ³) ⁻¹	IUR Ref	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref	GIABS
Total Petroleum Hydrocarbons (Aliphatic Medium)	NA	No	Yes	Organics	-	-			1.00E-01	U	1.00E+00	U	1

ABS	RBA	Soil Saturation Concentration (mg/kg)	S (mg/L)	K _{oc} (cm ³ /g)	K _d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H and HLC Ref	Normal Boiling Point (K)	BP Ref	Critical Temperature (K)	T _c Ref	Chemical Type
-	1	6.86E+00	2.20E-01	7.96E+02	4.78E+00	3.40E+00	1.39E+02	U	424.15	U	594	U	BTEX

D _{ia} (cm ² /s)	D _{iw} (cm ² /s)	D _A (cm ² /s)	Particulate Emission Factor (m ³ /kg)	Volatilization Factor Unlimited Reservoir (m ³ /kg)	Volatilization Factor Mass Limit (m ³ /kg)	Volatilization Factor Selected (m ³ /kg)	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)
5.14E-02	6.77E-06	1.22E-02	1.36E+09	1.04E+03	-	1.04E+03	-	-	-	-

Ingestion SL Child THQ=1 (mg/kg)	Dermal SL Child THQ=1 (mg/kg)	Inhalation SL Child THQ=1 (mg/kg)	Noncarcinogenic SL Child THI=1 (mg/kg)	Ingestion SL Adult THQ=1 (mg/kg)	Dermal SL Adult THQ=1 (mg/kg)	Inhalation SL Adult THQ=1 (mg/kg)	Noncarcinogenic SL Adult THI=1 (mg/kg)	Screening Level (mg/kg)
1.30E+05	-	1.81E+04	1.59E+04	1.39E+06	-	1.81E+04	1.79E+04	1.59E+04 nc sat

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
A (PEF Dispersion Constant)	16.2302	16.2302
A (VF Dispersion Constant)	11.911	11.911
A (VF Dispersion Constant - mass limit)	11.911	11.911
B (PEF Dispersion Constant)	18.7762	18.7762
B (VF Dispersion Constant)	18.4385	18.4385
B (VF Dispersion Constant - mass limit)	18.4385	18.4385
City (PEF Climate Zone) Selection	Default	Default
City (VF Climate Zone) Selection	Default	Default
C (PEF Dispersion Constant)	216.108	216.108
C (VF Dispersion Constant)	209.7845	209.7845
C (VF Dispersion Constant - mass limit)	209.7845	209.7845
foc (fraction organic carbon in soil) g/g	0.006	0.006
F(x) (function dependent on U_{crit}/U) unitless	0.194	0.194
n (total soil porosity) L_{pore}/L_{crit}	0.43396	0.43396
ρ_n (dry soil bulk density) g/cm ³	1.5	1.5
ρ_n (dry soil bulk density - mass limit) g/cm ³	1.5	1.5
PEF (particulate emission factor) m ³ /kg	1359344438	1359344438
ρ_c (soil particle density) g/cm ³	2.65	2.65
Q/C_{wind} (g/m ² -s per kg/m ³)	93.77	93.77
Q/C_{vint} (g/m ² -s per kg/m ³)	68.18	68.18
Q/C_{vint} (g/m ² -s per kg/m ³ - mass limit)	68.18	68.18
A_e (PEF acres)	0.5	0.5
A_e (VF acres)	0.5	0.5
A_e (VF mass-limit acres)	0.5	0.5
$AF_{n,s}$ (mutagenic skin adherence factor) mg/cm ²	0.2	0.2
$AF_{r,s}$ (mutagenic skin adherence factor) mg/cm ²	0.2	0.2
AF_{r-1R} (mutagenic skin adherence factor) mg/cm ²	0.07	0.07
AF_{1R-7R} (mutagenic skin adherence factor) mg/cm ²	0.07	0.07
$AF_{res,a}$ (skin adherence factor - adult) mg/cm ²	0.07	0.07
$AF_{res,c}$ (skin adherence factor - child) mg/cm ²	0.2	0.2
AT_{res} (averaging time - resident carcinogenic)	365	365

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
BW _{n,2} (mutagenic body weight) kg	15	15
BW _{2,6} (mutagenic body weight) kg	15	15
BW _{6,16} (mutagenic body weight) kg	80	80
BW _{16,26} (mutagenic body weight) kg	80	80
BW _{res-a} (body weight - adult) kg	80	80
BW _{res-c} (body weight - child) kg	15	15
DFS _{res-adj} (age-adjusted soil dermal factor) mg/kg	103390	14557.2
DFS _{M, res-adj} (mutagenic age-adjusted soil dermal factor) mg/kg	428260	67082.4
ED _{res} (exposure duration) years	26	16
ED _{n,2} (mutagenic exposure duration) years	2	2
ED _{2,6} (mutagenic exposure duration) years	4	4
ED _{6,16} (mutagenic exposure duration) years	10	5
ED _{16,26} (mutagenic exposure duration) years	10	5
ED _{res-a} (exposure duration - adult) years	20	10
ED _{res-c} (exposure duration - child) years	6	6
EF _{res} (exposure frequency) days/year	350	60
EF _{n,2} (mutagenic exposure frequency) days/year	350	60
EF _{2,6} (mutagenic exposure frequency) days/year	350	60
EF _{6,16} (mutagenic exposure frequency) days/year	350	60
EF _{16,26} (mutagenic exposure frequency) days/year	350	60
EF _{res-a} (exposure frequency - adult) days/year	350	60
EF _{res-c} (exposure frequency - child) days/year	350	60
ET _{res} (exposure time) hours/day	24	2
ET _{n,2} (mutagenic exposure time) hours/day	24	2
ET _{2,6} (mutagenic exposure time) hours/day	24	2
ET _{6,16} (mutagenic exposure time) hours/day	24	2
ET _{16,26} (mutagenic exposure time) hours/day	24	2
ET _{res-a} (adult exposure time) hours/day	24	2
ET _{res-c} (child exposure time) hours/day	24	2
THQ (target hazard quotient) unitless	0.1	1
IFS _{res-adj} (age-adjusted soil ingestion factor) mg/kg	36750	5550

Site-specific Resident Soil Inputs

Variable	Resident Soil Default Value	Site-Specific Value
IFSM _{res-adi} (mutagenic age-adjusted soil ingestion factor) mg/kg	166833.3	27100
IRS _{n-3} (mutagenic soil intake rate) mg/day	200	200
IRS ₂₋₆ (mutagenic soil intake rate) mg/day	200	200
IRS ₆₋₁₆ (mutagenic soil intake rate) mg/day	100	100
IRS ₁₆₋₂₆ (mutagenic soil intake rate) mg/day	100	100
IRS _{res-a} (soil intake rate - adult) mg/day	100	100
IRS _{res-c} (soil intake rate - child) mg/day	200	200
LT (lifetime) years	70	70
SA _{n-3} (mutagenic skin surface area) cm ² /day	2373	2373
SA ₂₋₆ (mutagenic skin surface area) cm ² /day	2373	2373
SA ₆₋₁₆ (mutagenic skin surface area) cm ² /day	6032	6032
SA ₁₆₋₂₆ (mutagenic skin surface area) cm ² /day	6032	6032
SA _{res-a} (skin surface area - adult) cm ² /day	6032	6032
SA _{res-c} (skin surface area - child) cm ² /day	2373	2373
TR (target risk) unitless	1.0E-06	1.0E-06
T _w (groundwater temperature) Celsius	25	25
Theta _a (air-filled soil porosity) L _{air} /L _{cnil}	0.28396	0.28396
Theta _w (water-filled soil porosity) L _{water} /L _{cnil}	0.15	0.15
T (exposure interval) s	819936000	819936000
T (exposure interval) yr	26	26
U _m (mean annual wind speed) m/s	4.69	4.69
U _t (equivalent threshold value)	11.32	11.32
V (fraction of vegetative cover) unitless	0.5	0.5

Site-specific

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref
Aroclor 1260	11096-82-5	No	Yes	Organics	2.00E+00	U	5.71E-04	U	-		-	
Benzo[a]pyrene	50-32-8	Yes	No	Organics	1.00E+00	U	6.00E-04	U	3.00E-04	U	2.00E-06	U
Dibenz[a,h]anthracene	53-70-3	Yes	No	Organics	1.00E+00	U	6.00E-04	U	-		-	
Total Petroleum Hydrocarbons (Aliphatic Medium)	NA	No	Yes	Organics	-		-		1.00E-01	U	1.00E+00	U

Site-specific

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

GIABS	ABS	RBA	Soil Saturation Concentration (mg/kg)	S (mg/L)	K_{oc} (cm ³ /g)	K_d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H' and HLC Ref	Normal Boiling Point BP (K)	BP Ref	Critical Temperature T _c (K)	T _c Ref
1	0.14	1	-	1.44E-02	3.50E+05	2.10E+03	3.36E-04	1.37E-02	U	689.15	U	987	U
1	0.13	1	-	1.62E-03	5.87E+05	-	4.57E-07	1.87E-05	U	768.15	U	969	U
1	0.13	1	-	2.49E-03	1.91E+06	-	1.41E-07	5.76E-06	U	797.15	U	990	U
1	-	1	6.86E+00	2.20E-01	7.96E+02	4.78E+00	3.40E+00	1.39E+02	U	424.15	U	594	U

Site-specific

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical Type	D _{ia} \ (cm ² /s)	D _{iw} \ (cm ² /s)	D _A \ (cm ² /s)	Particulate Emission Factor (m ³ /kg)	Volatilization		Volatilization Factor Mass Limit (m ³ /kg)	Volatilization Factor Selected (m ³ /kg)	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)
					Factor Unlimited Reservoir (m ³ /kg)	Factor					
PCB	2.20E-02	5.61E-06	7.68E-09	1.36E+09	1.32E+06	-	1.32E+06	2.30E+00	6.27E+00	7.35E+02	
PAH	2.55E-02	6.58E-06	-	1.36E+09	-	-	-	9.43E-01	2.93E+00	2.23E+05	
PAH	2.36E-02	6.02E-06	-	1.36E+09	-	-	-	9.43E-01	2.93E+00	2.23E+05	
BTEX	5.14E-02	6.77E-06	1.22E-02	1.36E+09	1.04E+03	-	1.04E+03	-	-	-	

Site-specific

Resident Regional Screening Levels (RSL) for Soil

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL Child THQ=1 (mg/kg)	Dermal SL Child THQ=1 (mg/kg)	Inhalation SL Child THQ=1 (mg/kg)	Noncarcinogenic SL Child THI=1 (mg/kg)	Ingestion SL Adult THQ=1 (mg/kg)	Dermal SL Adult THQ=1 (mg/kg)	Inhalation SL Adult THQ=1 (mg/kg)	Noncarcinogenic SL Adult THI=1 (mg/kg)	Screening Level (mg/kg)
1.68E+00	-	-	-	-	-	-	-	-	1.68E+00 ca
7.13E-01	1.37E+02	4.44E+02	1.98E+05	1.05E+02	1.46E+03	2.66E+03	1.98E+05	9.38E+02	7.13E-01 ca
7.13E-01	-	-	-	-	-	-	-	-	7.13E-01 ca
-	4.56E+04	-	7.62E+04	2.85E+04	4.87E+05	-	7.62E+04	6.59E+04	2.85E+04 nc sat

Copco No. 1 Debris Pile/Scrap Yard

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
A_{doz} (areal extent of dozing) acres	.	1
A_{excav} (area of excavation site) m ²	.	4050
A_{grade} (areal extent of grading) acres	.	1
A (PEF Dispersion Constant)	2.4538	2.4538
A_{surf} (areal extent of site) m ²	2023.43	8498.406
A_{till} (areal extent of tilling) acres	.	0
B_{doz} (dozing blade length) m	.	3.7
B_{grade} (grading blade length) m	.	3.7
B (PEF Dispersion Constant)	17.5660	17.5660
C (PEF Dispersion Constant)	189.0426	189.0426
d_{excav} (average depth of excavation site) m	.	3
F_n Unitless Dispersion Correction Factor	0.185837208	0.185837208
F(x) (function dependant on U_{in}/U_t , derived using Cowherd et al. (1985))	0.194	0.194
M_{moist} (Gravimetric soil moisture content) %	7.9	7.9
$M_{moistexcav}$ (Gravimetric soil moisture content) %	12	12
M_{wind} (dust emitted by wind erosion) g	51288.84717	36976.436892571
N_{doz} (number of times site was dozed)	.	1
N_{dump} (number of times soil is dumped)	2	2
N_{grade} (number of times site was graded)	.	1
N_{till} (number of times soil is tilled)	2	2
Q/C_{es} (g/m ² -s per kg/m ³)	14.31407	10.967261022578
p_{enil} (density) g/cm ³ - chemical-specific	1.68	1.68
s_{doz} (soil silt content) %	6.9	6.9
AF_{con} (skin adherence factor - construction worker) mg/cm ²	0.3	0.3
AT_{con} (averaging time - construction worker) days	365	365
AT_{con} (averaging time - construction worker) days	350	350
BW_{con} (body weight - construction worker) kg	80	80
ED_{con} (exposure duration - construction worker) yr	1	1
EF_{con} (exposure frequency - construction worker) day/yr	250	250
ET_{con} (exposure time - construction worker) hr/day	8	8

Copco No. 1 Debris Pile/Scrap Yard

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
THQ (target hazard quotient) unitless	0.1	1
IRS _{con} (soil ingestion rate - construction worker) mg/day	330	330
LT (lifetime) yr	70	70
SA _{con} (surface area - construction worker) cm ² /day	3527	3527
TR (target cancer risk) unitless	1.0E-06	1.0E-06
S _{doz} (dozing speed) kph	11.4	11.4
S _{grade} (grading speed) kph	11.4	11.4
s _{soil} (soil silt content) %	18	18
t _c (overall duration of construction) hours	8400	8400
T _c (overall duration of construction) s	30240000	30240000
T (time over which traffic occurs) s	7200000	7200000
T _t (overall duration of traffic) s	7200000	7200000
U _m (mean annual wind speed) m/s	4.69	4.69
U _e (equivalent threshold value) m/s	11.32	11.32
V (fraction of vegetative cover)	0	0

Copco No. 1 Debris Pile/Scrap Yard Site-specific

Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref	GIABS	ABS	RBA	Soil Saturation Concentration (mg/kg)
Arsenic, Inorganic	7440-38-2	No	No	Inorganics	1.50E+00	U	4.30E-03	U	-	-	-	-	1	0.03	0.6	-
Cobalt	7440-48-4	No	No	Inorganics	-	-	9.00E-03	U	3.00E-03	U	2.00E-05	U	1	-	1	-
Iron	7439-89-6	No	No	Inorganics	-	-	-	-	7.00E-01	U	-	-	1	-	1	-
TCDD, 2,3,7,8-	1746-01-6	No	Yes	Organics	1.30E+05	U	3.80E+01	U	2.00E-08	U	-	-	1	0.03	1	-

S (mg/L)	K _{oc} (cm ³ /g)	K _d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H' and HLC Ref	Normal Boiling Point (K)	BP Ref	Critical Temperature (K)	T _c Ref	Chemical Type	D _{ia} (cm ² /s)	D _{iw} (cm ² /s)	D _A (cm ² /s)	Particulate Emission Factor (m ³ /kg)
-	-	2.90E+01	-	-	-	888.15	U	1670	U	INORGANIC	-	-	-	8.50E+07
-	-	4.50E+01	-	-	-	3203.15	U	7400	U	INORGANIC	-	-	-	8.50E+07
-	-	2.50E+01	-	-	-	3273.15	U	9340	U	INORGANIC	-	-	-	8.50E+07
2.00E-04	2.49E+05	1.49E+03	5.00E-05	2.04E-03	U	652.15	U	978	U	DIOXIN	4.70E-02	6.76E-06	3.45E-09	8.50E+07

Volatilization Factor Unlimited Reservoir (m ³ /kg)	Volatilization Factor Mass Limit (m ³ /kg)	Volatilization Factor Selected (m ³ /kg)	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL THQ=1 (mg/kg)	Dermal SL THQ=1 (mg/kg)	Inhalation SL THQ=1 (mg/kg)	Noncarcinogenic SL THI=1 (mg/kg)	Screening Level (mg/kg)
-	-	-	2.75E+01	1.72E+02	6.06E+03	2.36E+01	-	-	-	-	2.36E+01 ca
-	-	-	-	-	2.90E+03	2.90E+03	1.02E+03	-	7.14E+03	8.91E+02	8.91E+02 nc
-	-	-	-	-	-	-	2.38E+05	-	-	2.38E+05	2.38E+05 nc max
-	-	4.26E+05	1.91E-04	1.98E-03	3.42E-03	1.65E-04	6.79E-03	7.06E-02	-	6.19E-03	1.65E-04 ca*

Copco No. 2 Wood-Stave Penstock

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
A_{doz} (areal extent of dozing) acres	.	3.8
A_{excav} (area of excavation site) m ²	.	15000
A_{grade} (areal extent of grading) acres	.	3.8
A (PEF Dispersion Constant)	2.4538	2.4538
A_{surf} (areal extent of site) m ²	2023.43	15378.068
B_{doz} (dozing blade length) m	.	3.7
B_{grade} (grading blade length) m	.	3.7
B (PEF Dispersion Constant)	17.5660	17.5660
C (PEF Dispersion Constant)	189.0426	189.0426
d_{excav} (average depth of excavation site) m	.	3
F_D Unitless Dispersion Correction Factor	0.185837208	0.185837208
F(x) (function dependant on U_{exc}/U_i derived using Cowherd et al. (1985))	0.194	0.194
$M_{m,doz}$ (Gravimetric soil moisture content) %	7.9	7.9
$M_{m,excav}$ (Gravimetric soil moisture content) %	12	12
M_{wind} (dust emitted by wind erosion) g	51288.84717	66909.742948463
$N_{A,doz}$ (number of times site was dozed)	.	1
$N_{A,dump}$ (number of times soil is dumped)	2	2
$N_{A,grade}$ (number of times site was graded)	.	1
$N_{A,till}$ (number of times soil is tilled)	2	2
Q/C_{es} (g/m ² -s per kg/m ³)	14.31407	9.8869366093326
p_{enil} (density) g/cm ³ - chemical-specific	1.68	1.68
s_{doz} (soil silt content) %	6.9	6.9
AF_{con} (skin adherence factor - construction worker) mg/cm ²	0.3	0.3
AT_{con} (averaging time - construction worker) days	365	365
AT_{con-a} (averaging time - construction worker) days	350	350
BW_{con} (body weight - construction worker) kg	80	80
ED_{con} (exposure duration - construction worker) yr	1	1
EF_{con} (exposure frequency - construction worker) day/yr	250	250
ET_{con} (exposure time - construction worker) hr/day	8	8
THQ (target hazard quotient) unitless	0.1	1

Copco No. 2 Wood-Stave Penstock

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
IRS _{con} (soil ingestion rate - construction worker) mg/day	330	330
LT (lifetime) yr	70	70
SA _{con} (surface area - construction worker) cm ² /day	3527	3527
TR (target cancer risk) unitless	1.0E-06	1.0E-06
S _{doz} (dozing speed) kph	11.4	11.4
S _{grade} (grading speed) kph	11.4	11.4
s _{hill} (soil silt content) %	18	18
t _c (overall duration of construction) hours	8400	8400
T _c (overall duration of construction) s	30240000	30240000
T (time over which traffic occurs) s	7200000	7200000
T _t (overall duration of traffic) s	7200000	7200000
U _m (mean annual wind speed) m/s	4.69	4.69
U _t (equivalent threshold value) m/s	11.32	11.32
V (fraction of vegetative cover)	0	0

Copco No. 2 Wood-Stave Penstock Site-specific Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref
Benz[a]anthracene	56-55-3	Yes	Yes	Organics	1.00E-01	E	6.00E-05	E	-	
Benzo[a]pyrene	50-32-8	Yes	No	Organics	1.00E+00	I	6.00E-04	I	3.00E-04	I /Chronic
Benzo[b]fluoranthene	205-99-2	Yes	No	Organics	1.00E-01	E	6.00E-05	E	-	
Cobalt	7440-48-4	No	No	Inorganics	-		9.00E-03	P	3.00E-03	P /Subchronic
Dibenz[a,h]anthracene	53-70-3	Yes	No	Organics	1.00E+00	E	6.00E-04	E	-	
Iron	7439-89-6	No	No	Inorganics	-		-		7.00E-01	P /Subchronic
Mercury (elemental)	7439-97-6	No	Yes	Inorganics	-		-		-	
Pentachlorophenol	87-86-5	No	No	Organics	4.00E-01	I	5.10E-06	C	3.00E-02	H /Subchronic

Copco No. 2 Wood-Stave Penstock Site-specific

Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

RfC (mg/m ³)	RfC Ref	GIABS	ABS	RBA	Soil Saturation Concentration (mg/kg)	S (mg/L)	K _{oc} (cm ³ /g)	K _d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H ⁺ and HLC Ref
-		1	0.13	1	-	9.40E-03	1.77E+05	1.06E+03	1.20E-05	4.91E-04	PHYSPROP
2.00E-06	I/Chronic	1	0.13	1	-	1.62E-03	5.87E+05	-	4.57E-07	1.87E-05	PHYSPROP
-		1	0.13	1	-	1.50E-03	5.99E+05	-	6.57E-07	2.69E-05	PHYSPROP
2.00E-05	P/Subchronic	1	-	1	-	-	-	4.50E+01	-	-	
-		1	0.13	1	-	2.49E-03	1.91E+06	-	1.41E-07	5.76E-06	EPI
-		1	-	1	-	-	-	2.50E+01	-	-	
3.00E-04	H/Subchronic	1	-	1	3.13E+00	6.00E-02	-	5.20E+01	8.62E-03	3.52E-01	PHYSPROP VP/S
-		1	0.25	1	-	1.40E+01	5.92E+02	-	2.45E-08	1.00E-06	PHYSPROP

Copco No. 2 Wood-Stave Penstock Site-specific

Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Normal Boiling Point BP (K)	BP Ref	Critical Temperature T _c (K)	T _c Ref	Chemical Type	D _{ia} (cm ² /s)	D _{iw} (cm ² /s)	D _A (cm ² /s)	Particulate Emission Factor (m ³ /kg)	Volatilization Factor Unlimited Reservoir (m ³ /kg)	Volatilization Factor Mass Limit (m ³ /kg)
710.75	PHYSPROP	979	YAWS	PAH	2.61E-02	6.75E-06	6.83E-10	6.75E+07	-	-
768.15	PHYSPROP	969.27	EPA 2001 Fact Sheet	PAH	2.55E-02	6.58E-06	-	6.75E+07	-	-
715.9	EPI	969.27	EPA 2001 Fact Sheet	PAH	2.50E-02	6.43E-06	-	6.75E+07	-	-
3200.15	CRC	7398.48	YAWS	INORGANIC	-	-	-	6.75E+07	-	-
797.15	PHYSPROP	990.41	EPA 2001 Fact Sheet	PAH	2.36E-02	6.02E-06	-	6.75E+07	-	-
3273.15	PERRY	9340	CRC	INORGANIC	-	-	-	6.75E+07	-	-
629.75	PHYSPROP	1764	CRC	INORGANIC	3.07E-02	6.30E-06	1.10E-05	6.75E+07	-	-
582.65	EPI	-		HERB	2.95E-02	8.01E-06	-	6.75E+07	-	-

Copco No. 2 Wood-Stave Penstock Site-specific Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Volatilization Factor Selected (m³/kg)	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL THQ=1 (mg/kg)	Dermal SL THQ=1 (mg/kg)	Inhalation SL THQ=1 (mg/kg)	Noncarcinogenic SL THI=1 (mg/kg)	Screening Level (mg/kg)
9.57E+05	2.48E+02	5.94E+02	4.82E+03	1.69E+02	-	-	-	-	1.69E+02 ca
-	2.48E+01	5.94E+01	3.45E+04	1.75E+01	1.02E+02	2.44E+02	5.67E+02	6.38E+01	1.75E+01 ca**
-	2.48E+02	5.94E+02	3.45E+05	1.75E+02	-	-	-	-	1.75E+02 ca
-	-	-	2.30E+03	2.30E+03	1.02E+03	-	5.67E+03	8.63E+02	8.63E+02 nc
-	2.48E+01	5.94E+01	3.45E+04	1.75E+01	-	-	-	-	1.75E+01 ca
-	-	-	-	-	2.38E+05	-	-	2.38E+05	2.38E+05 nc max
7.53E+03	-	-	-	-	-	-	9.49E+00	9.49E+00	9.49E+00 nc sat
-	6.19E+01	7.73E+01	4.06E+06	3.44E+01	1.02E+04	1.27E+04	-	5.65E+03	3.44E+01 ca

Copco No. 2 Wood-Stave Penstock

Site-specific Resident Tap Water Inputs

Variable	Resident Tap Water Default Value	Site-Specific Value
BW _{n,1} (mutagenic body weight) kg	15	15
BW _{2,6} (mutagenic body weight) kg	15	15
BW _{6,16} (mutagenic body weight) kg	80	80
BW _{16,76} (mutagenic body weight) kg	80	80
BW _{res-a} (body weight - adult) kg	80	80
BW _{res-r} (body weight - child) kg	15	0
DFW _{res-adj} (age-adjusted dermal factor) cm ² -event/kg	2610650	10843.75
DFWM _{res-adj} (mutagenic age-adjusted dermal factor) cm ² -event/kg	8191633	10843.75
ED _{res} (exposure duration - resident) years	26	1
ED _{n,1} (mutagenic exposure duration first phase) years	2	0
ED _{2,6} (mutagenic exposure duration second phase) years	4	0
ED _{6,16} (mutagenic exposure duration third phase) years	10	0
ED _{16,76} (mutagenic exposure duration fourth phase) years	10	1
ED _{res-a} (exposure duration - adult) years	20	1
ED _{res-r} (exposure duration - child) years	6	0
EF _{res} (exposure frequency) days/year	350	250
EF _{n,1} (mutagenic exposure frequency first phase) days/year	350	0
EF _{2,6} (mutagenic exposure frequency second phase) days/year	350	0
EF _{6,16} (mutagenic exposure frequency third phase) days/year	350	0
EF _{16,76} (mutagenic exposure frequency fourth phase) days/year	350	250
EF _{res-a} (exposure frequency - adult) days/year	350	250
EF _{res-r} (exposure frequency - child) days/year	350	0
ET _{res} (exposure time) hours/day	24	8
ET _{event,res-adj} (age-adjusted exposure time) hours/event	0.67077	4
ET _{event,res-adj} (mutagenic age-adjusted exposure time) hours/event	0.67077	4
ET _{n,1} (mutagenic dermal exposure time first phase) hours/event	0.54	0
ET _{2,6} (mutagenic dermal exposure time second phase) hours/event	0.54	0
ET _{6,16} (mutagenic dermal exposure time third phase) hours/event	0.71	0
ET _{16,76} (mutagenic dermal exposure time fourth phase) hours/event	0.71	4
ET _{res-a} (dermal exposure time - adult) hours/event	0.71	4

Copco No. 2 Wood-Stave Penstock

Site-specific Resident Tap Water Inputs

Variable	Resident Tap Water Default Value	Site-Specific Value
ET _{res-c} (dermal exposure time - child) hours/event	0.54	0
ET _{n-c} (mutagenic inhalation exposure time first phase) hours/day	24	0
ET _{2-f} (mutagenic inhalation exposure time second phase) hours/day	24	0
ET ₆₋₁₆ (mutagenic inhalation exposure time third phase) hours/day	24	0
ET ₁₆₋₂₆ (mutagenic inhalation exposure time fourth phase) hours/day	24	8
ET _{res-a} (inhalation exposure time - adult) hours/day	24	8
ET _{res-c} (inhalation exposure time - child) hours/day	24	0
EV _{n-c} (mutagenic events) per day	1	1
EV _{2-f} (mutagenic events) per day	1	1
EV ₆₋₁₆ (mutagenic events) per day	1	1
EV ₁₆₋₂₆ (mutagenic events) per day	1	1
EV _{res-a} (events - adult) per day	1	1
EV _{res-c} (events - child) per day	1	0
THQ (target hazard quotient) unitless	0.1	1
IFW _{res-a} (adjusted intake factor) L/kg	327.95	7.813
IFWM _{res-a} (mutagenic adjusted intake factor) L/kg	1019.9	7.813
IRW _{n-c} (mutagenic water intake rate) L/day	0.78	0.78
IRW _{2-f} (mutagenic water intake rate) L/day	0.78	0.78
IRW ₆₋₁₆ (mutagenic water intake rate) L/day	2.5	2.5
IRW ₁₆₋₂₆ (mutagenic water intake rate) L/day	2.5	2.5
IRW _{res-a} (water intake rate - adult) L/day	2.5	2.5
IRW _{res-c} (water intake rate - child) L/day	0.78	0
K (volatilization factor of Andelman) L/m ³	0.5	0.5
LT (lifetime) years	70	70
SA _{n-c} (mutagenic skin surface area) cm ²	6365	0
SA _{2-f} (mutagenic skin surface area) cm ²	6365	0
SA ₆₋₁₆ (mutagenic skin surface area) cm ²	19652	0
SA ₁₆₋₂₆ (mutagenic skin surface area) cm ²	19652	3470
SA _{res-a} (skin surface area - adult) cm ²	19652	3470
SA _{res-c} (skin surface area - child) cm ²	6365	0

Copco No. 2 Wood-Stave Penstock

Site-specific Resident Tap Water Inputs

Variable	Resident Tap Water Default Value	Site-Specific Value
l_c (apparent thickness of stratum corneum) cm	0.001	0.001
TR (target risk) unitless	1.0E-06	1.0E-06

Copco No. 2 Wood-Stave Penstock Site-specific Resident Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref
Arsenic, Inorganic	7440-38-2	No	No	Inorganics	1.50E+00	I	4.30E-03	I	3.00E-04	I	1.50E-05	C
Barium	7440-39-3	No	No	Inorganics	-		-		2.00E-01	I	5.00E-04	H
Benz[a]anthracene	56-55-3	Yes	Yes	Organics	1.00E-01	E	6.00E-05	E	-		-	
Benzo[a]pyrene	50-32-8	Yes	No	Organics	1.00E+00	I	6.00E-04	I	3.00E-04	I	2.00E-06	I
Benzo[b]fluoranthene	205-99-2	Yes	No	Organics	1.00E-01	E	6.00E-05	E	-		-	
Beryllium and compounds	7440-41-7	No	No	Inorganics	-		2.40E-03	I	2.00E-03	I	2.00E-05	I
Cadmium (Water)	7440-43-9	No	No	Inorganics	-		1.80E-03	I	1.00E-04	A	1.00E-05	A
Cobalt	7440-48-4	No	No	Inorganics	-		9.00E-03	P	3.00E-04	P	6.00E-06	P
Copper	7440-50-8	No	No	Inorganics	-		-		4.00E-02	H	-	
Iron	7439-89-6	No	No	Inorganics	-		-		7.00E-01	P	-	
Manganese (Non-diet)	7439-96-5	No	No	Inorganics	-		-		2.40E-02	G	5.00E-05	I
Mercury (elemental)	7439-97-6	No	Yes	Inorganics	-		-		-		3.00E-04	I
Nickel Soluble Salts	7440-02-0	No	No	Inorganics	-		2.60E-04	C	2.00E-02	I	9.00E-05	A
Selenium	7782-49-2	No	No	Inorganics	-		-		5.00E-03	I	2.00E-02	C
Thallium (Soluble Salts)	7440-28-0	No	No	Inorganics	-		-		1.00E-05	X	-	
Vanadium and Compounds	7440-62-2	No	No	Inorganics	-		-		5.04E-03	G	1.00E-04	A

Copco No. 2 Wood-Stave Penstock Site-specific Resident Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

GIABS	K _p \ (cm/hr)	MW	B (unitless)	t' (hr)	τ _{event} (hr/event)	FA (unitless)	In EPD?	DA _{event (ca)}	DA _(nc ceiling)	DA _(nc adv)	MCL (ug/L)	Ingestion SL TR=1E-06 (ug/L)	Dermal SL TR=1E-06 (ug/L)
1	1.00E-03	74.922	3.33E-03	6.63E-01	2.76E-01	1	Yes	1.57E-03	-	1.01E-02	1.00E+01	2.18E+00	3.93E+02
0.07	1.00E-03	137.33	4.51E-03	1.48E+00	6.18E-01	1	Yes	-	-	4.71E-01	2.00E+03	-	-
1	5.52E-01	228.3	3.21E+00	8.48E+00	2.00E+00	1	No	-	-	-	-	3.27E+01	-
1	7.13E-01	252.32	4.36E+00	1.18E+01	2.72E+00	1	No	-	-	-	2.00E-01	3.27E+00	-
1	4.17E-01	252.32	2.55E+00	1.13E+01	2.72E+00	1	No	-	-	-	-	3.27E+01	-
0.007	1.00E-03	9.01	1.15E-03	2.83E-01	1.18E-01	1	Yes	-	-	4.71E-04	4.00E+00	-	-
0.05	1.00E-03	112.4	4.08E-03	1.08E+00	4.48E-01	1	Yes	-	-	1.68E-04	5.00E+00	-	-
1	4.00E-04	58.93	1.18E-03	5.40E-01	2.25E-01	1	Yes	-	-	1.01E-02	-	-	-
1	1.00E-03	63.546	3.07E-03	5.73E-01	2.39E-01	1	Yes	-	-	1.35E+00	1.30E+03	-	-
1	1.00E-03	55.847	2.87E-03	5.19E-01	2.16E-01	1	Yes	-	-	2.36E+01	-	-	-
0.04	1.00E-03	54.938	2.85E-03	5.13E-01	2.14E-01	1	Yes	-	-	3.23E-02	-	-	-
1	1.00E-03	200.59	5.45E-03	3.35E+00	1.40E+00	1	Yes	-	-	-	2.00E+00	-	-
0.04	2.00E-04	58.71	5.89E-04	5.38E-01	2.24E-01	1	Yes	-	-	2.69E-02	-	-	-
1	1.00E-03	78.96	3.42E-03	6.99E-01	2.91E-01	1	Yes	-	-	1.68E-01	5.00E+01	-	-
1	1.00E-03	204.38	5.50E-03	3.52E+00	1.47E+00	1	Yes	-	-	3.37E-04	2.00E+00	-	-
0.026	1.00E-03	50.94	2.75E-03	4.87E-01	2.03E-01	1	Yes	-	-	4.41E-03	-	-	-

Copco No. 2 Wood-Stave Penstock Site-specific Resident Regional Screening Levels (RSL) for Tap Water

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Inhalation SL TR=1E-06 (ug/L)	Carcinogenic SL TR=1E-06 (ug/L)	Ingestion SL Child THQ=1 (ug/L)	Dermal SL Child THQ=1 (ug/L)	Inhalation SL Child THQ=1 (ug/L)	Noncarcinogenic SL Child THI=1 (ug/L)	Ingestion SL Adult THQ=1 (ug/L)	Dermal SL Adult THQ=1 (ug/L)	Inhalation SL Adult THQ=1 (ug/L)	Noncarcinogenic SL Adult THI=1 (ug/L)	Screening Level (ug/L)
-	2.17E+00	-	-	-	-	1.40E+01	2.52E+03	-	1.39E+01	2.17E+00 ca
-	-	-	-	-	-	9.34E+03	1.18E+05	-	8.66E+03	8.66E+03 nc
1.02E+01	7.79E+00	-	-	-	-	-	-	-	-	7.79E+00 ca
-	3.27E+00	-	-	-	-	1.40E+01	-	-	1.40E+01	3.27E+00 ca
-	3.27E+01	-	-	-	-	-	-	-	-	3.27E+01 ca
-	-	-	-	-	-	9.34E+01	1.18E+02	-	5.21E+01	5.21E+01 nc
-	-	-	-	-	-	4.67E+00	4.21E+01	-	4.21E+00	4.21E+00 nc
-	-	-	-	-	-	1.40E+01	6.31E+03	-	1.40E+01	1.40E+01 nc
-	-	-	-	-	-	1.87E+03	3.37E+05	-	1.86E+03	1.86E+03 nc
-	-	-	-	-	-	3.27E+04	5.89E+06	-	3.25E+04	3.25E+04 nc
-	-	-	-	-	-	1.12E+03	8.08E+03	-	9.85E+02	9.85E+02 nc
-	-	-	-	-	-	-	-	2.63E+00	2.63E+00	2.63E+00 nc
-	-	-	-	-	-	9.34E+02	3.37E+04	-	9.09E+02	9.09E+02 nc
-	-	-	-	-	-	2.34E+02	4.21E+04	-	2.32E+02	2.32E+02 nc
-	-	-	-	-	-	4.67E-01	8.41E+01	-	4.65E-01	4.65E-01 nc
-	-	-	-	-	-	2.35E+02	1.10E+03	-	1.94E+02	1.94E+02 nc

Copco No. 2 Wood Pile

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
A_{doz} (areal extent of dozing) acres	.	1
A_{excav} (area of excavation site) m ²	.	929
A_{grade} (areal extent of grading) acres	.	1
A (PEF Dispersion Constant)	2.4538	2.4538
A_{surf} (areal extent of site) m ²	2023.43	4046.86
A_{till} (areal extent of tilling) acres	.	0
B_{doz} (dozing blade length) m	.	3.7
B_{grade} (grading blade length) m	.	3.7
B (PEF Dispersion Constant)	17.5660	17.5660
C (PEF Dispersion Constant)	189.0426	189.0426
d_{excav} (average depth of excavation site) m	.	3
F_n Unitless Dispersion Correction Factor	0.185837208	0.185837208
F(x) (function dependant on U_{in}/U_t , derived using Cowherd et al. (1985))	0.194	0.194
M_{moist} (Gravimetric soil moisture content) %	7.9	7.9
$M_{moistexcav}$ (Gravimetric soil moisture content) %	12	12
M_{wind} (dust emitted by wind erosion) g	51288.84717	17607.827091700
N_{doz} (number of times site was dozed)	.	1
N_{dump} (number of times soil is dumped)	2	2
N_{grade} (number of times site was graded)	.	1
N_{till} (number of times soil is tilled)	2	2
Q/C_{es} (g/m ² -s per kg/m ³)	14.31407	12.552069848280
p_{enil} (density) g/cm ³ - chemical-specific	1.68	1.68
s_{doz} (soil silt content) %	6.9	6.9
AF_{con} (skin adherence factor - construction worker) mg/cm ²	0.3	0.3
AT_{con} (averaging time - construction worker) days	365	365
AT_{con} (averaging time - construction worker) days	350	350
BW_{con} (body weight - construction worker) kg	80	80
ED_{con} (exposure duration - construction worker) yr	1	1
EF_{con} (exposure frequency - construction worker) day/yr	250	250
ET_{con} (exposure time - construction worker) hr/day	8	8

Copco No. 2 Wood Pile

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
THQ (target hazard quotient) unitless	0.1	1
IRS _{con} (soil ingestion rate - construction worker) mg/day	330	330
LT (lifetime) yr	70	70
SA _{con} (surface area - construction worker) cm ² /day	3527	3527
TR (target cancer risk) unitless	1.0E-06	1.0E-06
S _{doz} (dozing speed) kph	11.4	11.4
S _{grade} (grading speed) kph	11.4	11.4
s _{soil} (soil silt content) %	18	18
t _c (overall duration of construction) hours	8400	8400
T _c (overall duration of construction) s	30240000	30240000
T (time over which traffic occurs) s	7200000	7200000
T _t (overall duration of traffic) s	7200000	7200000
U _m (mean annual wind speed) m/s	4.69	4.69
U _e (equivalent threshold value) m/s	11.32	11.32
V (fraction of vegetative cover)	0	0

Copco No. 2 Wood Pile Site-specific

Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref	GIABS	ABS	RBA	Soil Saturation Concentration (mg/kg)
Cobalt	7440-48-4	No	No	Inorganics	-		9.00E-03	U	3.00E-03	U	2.00E-05	U	1	-	1	-
Iron	7439-89-6	No	No	Inorganics	-		-		7.00E-01	U	-		1	-	1	-
Pentachlorophenol	87-86-5	No	No	Organics	4.00E-01	U	5.10E-06	U	3.00E-02	U	-		1	0.25	1	-

S (mg/L)	K _{oc} (cm ³ /g)	K _d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H ⁺ and HLC Ref	Normal Boiling Point (K)	BP Ref	Critical Temperature T _c (K)	T _c Ref	Chemical Type	D _{ia} (cm ² /s)	D _{iw} (cm ² /s)	D _A (cm ² /s)	Particulate Emission Factor (m ³ /kg)	Volatilization Factor Unlimited Reservoir (m ³ /kg)
-	-	4.50E+01	-	-		3203.15	U	7400	U	INORGANIC	-	-	-	1.02E+08	-
-	-	2.50E+01	-	-		3273.15	U	9340	U	INORGANIC	-	-	-	1.02E+08	-
1.40E+01	5.92E+02	-	2.45E-08	1.00E-06	U	583.15	U	-		HERB	2.95E-02	8.01E-06	-	1.02E+08	-

Volatilization Factor Mass Limit (m ³ /kg)	Volatilization Factor Selected (m ³ /kg)	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL THQ=1 (mg/kg)	Dermal SL THQ=1 (mg/kg)	Inhalation SL THQ=1 (mg/kg)	Noncarcinogenic SL THI=1 (mg/kg)	Screening Level (mg/kg)
-	-	-	-	3.48E+03	3.48E+03	1.02E+03	-	8.58E+03	9.10E+02	9.10E+02 nc
-	-	-	-	-	-	2.38E+05	-	-	2.38E+05	2.38E+05 nc max
-	-	6.19E+01	7.73E+01	6.14E+06	3.44E+01	1.02E+04	1.27E+04	-	5.65E+03	3.44E+01 ca

Copco No. 2 Powerhouse Transformer Fire

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
A _{doz} (areal extent of dozing) acres	.	0.01
A _{excav} (area of excavation site) m ²	.	50
A _{grade} (areal extent of grading) acres	.	0.01
A (PEF Dispersion Constant)	2.4538	2.4538
A _{surf} (areal extent of site) m ²	2023.43	2023.43
A _{till} (areal extent of tilling) acres	.	0
B _{doz} (dozing blade length) m	.	3.7
B _{grade} (grading blade length) m	.	3.7
B (PEF Dispersion Constant)	17.5660	17.5660
C (PEF Dispersion Constant)	189.0426	189.0426
d _{excav} (average depth of excavation site) m	.	3
F _n Unitless Dispersion Correction Factor	0.185837208	0.185837208
F(x) (function dependant on U _w /U _d , derived using Cowherd et al. (1985))	0.194	0.194
M _{moist} (Gravimetric soil moisture content) %	7.9	7.9
M _{moistexcav} (Gravimetric soil moisture content) %	12	12
M _{wind} (dust emitted by wind erosion) g	51288.84717	8803.9135458504
N _{doz} (number of times site was dozed)	.	1
N _{dump} (number of times soil is dumped)	2	2
N _{grade} (number of times site was graded)	.	1
N _{till} (number of times soil is tilled)	2	2
Q/C _{es} (g/m ² -s per kg/m ³)	14.31407	14.314066768501
p _{enil} (density) g/cm ³ - chemical-specific	1.68	1.68
s _{doz} (soil silt content) %	6.9	6.9
AF _{con} (skin adherence factor - construction worker) mg/cm ²	0.3	0.3
AT _{con} (averaging time - construction worker) days	365	365
AT _{con} (averaging time - construction worker) days	350	350
BW _{con} (body weight - construction worker) kg	80	80
ED _{con} (exposure duration - construction worker) yr	1	1
EF _{con} (exposure frequency - construction worker) day/yr	250	250
ET _{con} (exposure time - construction worker) hr/day	8	8

Copco No. 2 Powerhouse Transformer Fire

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
THQ (target hazard quotient) unitless	0.1	1
IRS _{con} (soil ingestion rate - construction worker) mg/day	330	330
LT (lifetime) yr	70	70
SA _{con} (surface area - construction worker) cm ² /day	3527	3527
TR (target cancer risk) unitless	1.0E-06	1.0E-06
S _{doz} (dozing speed) kph	11.4	11.4
S _{grade} (grading speed) kph	11.4	11.4
s _{soil} (soil silt content) %	18	18
t _c (overall duration of construction) hours	8400	8400
T _c (overall duration of construction) s	30240000	30240000
T (time over which traffic occurs) s	7200000	7200000
T _t (overall duration of traffic) s	7200000	7200000
U _m (mean annual wind speed) m/s	4.69	4.69
U _e (equivalent threshold value) m/s	11.32	11.32
V (fraction of vegetative cover)	0	0

Copco No. 2 Powerhouse Transformer Fire Site-specific Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref	GIABS	ABS	RBA
Aroclor 1260	11096-82-5	No	Yes	Organics	2.00E+00	U	5.71E-04	U	-		-		1	0.14	1
Benzo[a]pyrene	50-32-8	Yes	No	Organics	1.00E+00	U	6.00E-04	U	-		-		1	0.13	1
Dibenz[a,h]anthracene	53-70-3	Yes	No	Organics	1.00E+00	U	6.00E-04	U	-		-		1	0.13	1
Total Petroleum Hydrocarbons (Aliphatic Medium)	NA	No	Yes	Organics	-		-		1.00E-01	U	1.00E+00	U	1	-	1

Soil Saturation Concentration (mg/kg)	S (mg/L)	K _{oc} (cm ³ /g)	K _d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H ⁺ and HLC Ref	Normal Boiling Point (K)	BP Ref	Critical Temperature (K)	T _c Ref	Chemical Type	D _{ia} (cm ² /s)	D _{iw} (cm ² /s)	D _A (cm ² /s)	Particulate Emission Factor (m ³ /kg)
-	1.44E-02	3.50E+05	2.10E+03	3.36E-04	1.37E-02	U	689.15	U	987	U	PCB	2.20E-02	5.61E-06	7.68E-09	1.27E+08
-	1.62E-03	5.87E+05	-	4.57E-07	1.87E-05	U	768.15	U	969	U	PAH	2.55E-02	6.58E-06	-	1.27E+08
-	2.49E-03	1.91E+06	-	1.41E-07	5.76E-06	U	797.15	U	990	U	PAH	2.36E-02	6.02E-06	-	1.27E+08
6.86E+00	2.20E-01	7.96E+02	4.78E+00	3.40E+00	1.39E+02	U	424.15	U	594	U	BTEX	5.14E-02	6.77E-06	1.22E-02	1.27E+08

Volatilization Factor Unlimited Reservoir (m ³ /kg)	Volatilization Factor Mass Limit (m ³ /kg)	Volatilization Factor Selected (m ³ /kg)	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL THQ=1 (mg/kg)	Dermal SL THQ=1 (mg/kg)	Inhalation SL THQ=1 (mg/kg)	Noncarcinogenic SL THI=1 (mg/kg)	Screening Level (mg/kg)
-	-	2.85E+05	1.24E+01	2.76E+01	1.53E+02	8.10E+00	-	-	-	-	8.10E+00 ca
-	-	-	2.48E+01	5.94E+01	6.46E+04	1.75E+01	-	-	-	-	1.75E+01 ca
-	-	-	2.48E+01	5.94E+01	6.46E+04	1.75E+01	-	-	-	-	1.75E+01 ca
-	-	2.26E+02	-	-	-	-	3.39E+04	-	9.51E+02	9.25E+02	9.25E+02 nc sat

**Copco No. 2 Former Mobile Oil Containment Building and Copco No. 2 Underground Storage Tanks
Risk-Based Concentrations for Tapwater, Residential Exposure Scenario**

Type	COPC	CAS	CAS Lookup	DTSC Note 3 Cancer (ug/L)	DTSC Note 3 Non- cancer (ug/L)	EPA RSL Cancer (ug/L)	EPA RSL Non- cancer (ug/L)	RBC Cancer (ug/L)	RBC Non- cancer (ug/L)
TPH	Diesel Range Organics	DRO	DRO	--	--	--	--	--	1020
VOC	Chloroform	67-66-3	67-66-3	--	--	0.22	97	0.22	97
PAH	Benzo(a)anthracene	56-55-3	56-55-3	0.017	--	0.03	--	0.017	--
PAH	Benzo(a)pyrene	50-32-8	50-32-8	--	--	0.025	6	0.025	6
PAH	Benzo(b)fluoranthene	205-99-2	205-99-2	--	--	0.25	--	0.25	--
PAH	Dibenzo(a,h)anthracene	53-70-3	53-70-3	0.0061	--	0.025	--	0.0061	--

Notes:

^a Source: DTSC 2022a

^b Source: USEPA 2022a

^c Priority of: 1) DTSC Note 3 value for residential tapwater (DTSC 2022a); 2) EPA RSL for resident tapwater (EPA 2022a)

CAS = chemical abstract service

COPC = constituent of potential concern

DTSC = California Environmental Protection Agency, Department of Toxic Substances Control

EPA = U.S. Environmental Protection Agency

EPC = Exposure Point Concentration

ug/L = micrograms per liter

RBC = risk-based concentration

RSL = Regional Screening Level

Iron Gate Shooting Range

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
A _{doz} (areal extent of dozing) acres	.	6.5
A _{excav} (area of excavation site) m ²	.	26000
A _{grade} (areal extent of grading) acres	.	6.5
A (PEF Dispersion Constant)	2.4538	2.4538
A _{surf} (areal extent of site) m ²	2023.43	52204.494000000
A _{till} (areal extent of tilling) acres	.	0
B _{doz} (dozing blade length) m	.	3.7
B _{grade} (grading blade length) m	.	3.7
B (PEF Dispersion Constant)	17.5660	17.5660
C (PEF Dispersion Constant)	189.0426	189.0426
d _{excav} (average depth of excavation site) m	.	3
F _n Unitless Dispersion Correction Factor	0.185837208	0.185837208
F(x) (function dependant on U _m /U _d , derived using Cowherd et al. (1985))	0.194	0.194
M _{moist} (Gravimetric soil moisture content) %	7.9	7.9
M _{moistexcav} (Gravimetric soil moisture content) %	12	12
M _{wind} (dust emitted by wind erosion) g	51288.84717	227140.96948294
N _{doz} (number of times site was dozed)	.	1
N _{dump} (number of times soil is dumped)	2	2
N _{grade} (number of times site was graded)	.	1
N _{till} (number of times soil is tilled)	2	2
Q/C _{es} (g/m ² -s per kg/m ³)	14.31407	8.0787596196999
p _{enil} (density) g/cm ³ - chemical-specific	1.68	1.68
s _{doz} (soil silt content) %	6.9	6.9
AF _{con} (skin adherence factor - construction worker) mg/cm ²	0.3	0.3
AT _{con} (averaging time - construction worker) days	365	365
AT _{con} (averaging time - construction worker) days	350	350
BW _{con} (body weight - construction worker) kg	80	80
ED _{con} (exposure duration - construction worker) yr	1	1
EF _{con} (exposure frequency - construction worker) day/yr	250	250
ET _{con} (exposure time - construction worker) hr/day	8	8

Iron Gate Shooting Range

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
THQ (target hazard quotient) unitless	0.1	1
IRS _{con} (soil ingestion rate - construction worker) mg/day	330	330
LT (lifetime) yr	70	70
SA _{con} (surface area - construction worker) cm ² /day	3527	3527
TR (target cancer risk) unitless	1.0E-06	1.0E-06
S _{doz} (dozing speed) kph	11.4	11.4
S _{grade} (grading speed) kph	11.4	11.4
s _{soil} (soil silt content) %	18	18
t _c (overall duration of construction) hours	8400	8400
T _c (overall duration of construction) s	30240000	30240000
T (time over which traffic occurs) s	7200000	7200000
T _t (overall duration of traffic) s	7200000	7200000
U _m (mean annual wind speed) m/s	4.69	4.69
U _e (equivalent threshold value) m/s	11.32	11.32
V (fraction of vegetative cover)	0	0

Iron Gate Shooting Range Site-specific

Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)
Antimony (metallic)	7440-36-0	No	No	Inorganics	-		-		4.00E-04	P /Subchronic	1.00E-03
Benzo[a]pyrene	50-32-8	Yes	No	Organics	1.00E+00	I	6.00E-04	I	3.00E-04	I /Chronic	2.00E-06
Cobalt	7440-48-4	No	No	Inorganics	-		9.00E-03	P	3.00E-03	P /Subchronic	2.00E-05
Iron	7439-89-6	No	No	Inorganics	-		-		7.00E-01	P /Subchronic	-
Manganese (Non-diet)	7439-96-5	No	No	Inorganics	-		-		2.40E-02	G /Chronic	5.00E-05

Iron Gate Shooting Range Site-specific

Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

RfC Ref	GIABS	ABS	RBA	Soil Saturation Concentration (mg/kg)	S (mg/L)	K_{oc} (cm ³ /g)	K_d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H ⁺ and HLC Ref	Normal Boiling Point BP (K)
A /Subchronic	0.15	-	1	-	-	-	4.50E+01	-	-		1908.15
I /Chronic	1	0.13	1	-	1.62E-03	5.87E+05	-	4.57E-07	1.87E-05	PHYSPROP	768.15
P /Subchronic	1	-	1	-	-	-	4.50E+01	-	-		3200.15
	1	-	1	-	-	-	2.50E+01	-	-		3273.15
I /Chronic	0.04	-	1	-	-	-	6.50E+01	-	-		2368.15

Iron Gate Shooting Range Site-specific

Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

BP Ref	Critical Temperature T _c (K)	T _c Ref	Chemical Type	D _{ia} (cm ² /s)	D _{iw} (cm ² /s)	D _A (cm ² /s)	Particulate Emission Factor (m ³ /kg)	Volatilization Factor Unlimited Reservoir (m ³ /kg)	Volatilization Factor Mass Limit (m ³ /kg)	Volatilization Factor Selected (m ³ /kg)
PHYSPROP	5070	YAWS	INORGANIC	-	-	-	6.23E+07	-	-	-
PHYSPROP	969.27	EPA 2001 Fact Sheet	PAH	2.55E-02	6.58E-06	-	6.23E+07	-	-	-
CRC	7398.48	YAWS	INORGANIC	-	-	-	6.23E+07	-	-	-
PERRY	9340	CRC	INORGANIC	-	-	-	6.23E+07	-	-	-
PHYSPROP	4325	CRC	INORGANIC	-	-	-	6.23E+07	-	-	-

Iron Gate Shooting Range Site-specific

Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL THQ=1 (mg/kg)	Dermal SL THQ=1 (mg/kg)	Inhalation SL THQ=1 (mg/kg)	Noncarcinogenic SL THI=1 (mg/kg)	Screening Level (mg/kg)
-	-	-	-	1.36E+02	-	2.62E+05	1.36E+02	1.36E+02 nc
2.48E+01	5.94E+01	3.18E+04	1.75E+01	1.02E+02	2.44E+02	5.23E+02	6.32E+01	1.75E+01 ca**
-	-	2.12E+03	2.12E+03	1.02E+03	-	5.23E+03	8.52E+02	8.52E+02 nc
-	-	-	-	2.38E+05	-	-	2.38E+05	2.38E+05 nc max
-	-	-	-	8.15E+03	-	1.31E+04	5.02E+03	5.02E+03 nc

Iron Gate Hatchery Burn Pit

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
A_{doz} (areal extent of dozing) acres	.	0.04
A_{excav} (area of excavation site) m ²	.	150
A_{grade} (areal extent of grading) acres	.	0.04
A (PEF Dispersion Constant)	2.4538	2.4538
A_{surf} (areal extent of site) m ²	2023.43	2023.43
A_{till} (areal extent of tilling) acres	.	0
B_{doz} (dozing blade length) m	.	3.7
B_{grade} (grading blade length) m	.	3.7
B (PEF Dispersion Constant)	17.5660	17.5660
C (PEF Dispersion Constant)	189.0426	189.0426
d_{excav} (average depth of excavation site) m	.	3
F_n Unitless Dispersion Correction Factor	0.185837208	0.185837208
F(x) (function dependant on U_{in}/U_0 , derived using Cowherd et al. (1985))	0.194	0.194
M_{moist} (Gravimetric soil moisture content) %	7.9	7.9
$M_{moistexcav}$ (Gravimetric soil moisture content) %	12	12
M_{wind} (dust emitted by wind erosion) g	51288.84717	8803.9135458504
N_{doz} (number of times site was dozed)	.	1
N_{dump} (number of times soil is dumped)	2	2
N_{grade} (number of times site was graded)	.	1
N_{till} (number of times soil is tilled)	2	2
Q/C_{es} (g/m ² -s per kg/m ³)	14.31407	14.314066768501
p_{enil} (density) g/cm ³ - chemical-specific	1.68	1.68
s_{doz} (soil silt content) %	6.9	6.9
AF_{con} (skin adherence factor - construction worker) mg/cm ²	0.3	0.3
AT_{con} (averaging time - construction worker) days	365	365
AT_{con} (averaging time - construction worker) days	350	350
BW_{con} (body weight - construction worker) kg	80	80
ED_{con} (exposure duration - construction worker) yr	1	1
EF_{con} (exposure frequency - construction worker) day/yr	250	250
ET_{con} (exposure time - construction worker) hr/day	8	8

Iron Gate Hatchery Burn Pit

Site-specific Construction Worker Inputs

Variable	Construction Worker Soil - Other Default Value	Site-Specific Value
THQ (target hazard quotient) unitless	0.1	1
IRS _{con} (soil ingestion rate - construction worker) mg/day	330	330
LT (lifetime) yr	70	70
SA _{con} (surface area - construction worker) cm ² /day	3527	3527
TR (target cancer risk) unitless	1.0E-06	1.0E-06
S _{doz} (dozing speed) kph	11.4	11.4
S _{grade} (grading speed) kph	11.4	11.4
s _{soil} (soil silt content) %	18	18
t _c (overall duration of construction) hours	8400	8400
T _c (overall duration of construction) s	30240000	30240000
T (time over which traffic occurs) s	7200000	7200000
T _t (overall duration of traffic) s	7200000	7200000
U _m (mean annual wind speed) m/s	4.69	4.69
U _e (equivalent threshold value) m/s	11.32	11.32
V (fraction of vegetative cover)	0	0

Iron Gate Hatchery Burn Pit Site-specific

Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Chemical	CAS Number	Mutagen?	Volatile?	Chemical Type	SF _o (mg/kg-day) ⁻¹	SF _o Ref	IUR (ug/m ³) ⁻¹	IUR Ref	RfD (mg/kg-day)	RfD Ref	RfC (mg/m ³)	RfC Ref	GIABS	ABS	RBA	Soil Saturation Concentration (mg/kg)
Antimony (metallic)	7440-36-0	No	No	Inorganics	-		-		4.00E-04	U	1.00E-03	U	0.15	-	1	-
Arsenic, Inorganic	7440-38-2	No	No	Inorganics	1.50E+00	U	4.30E-03	U	-		-		1	0.03	0.6	-
Benzene	71-43-2	No	Yes	Organics	5.50E-02	U	7.80E-06	U	1.00E-02	U	8.00E-02	U	1	-	1	1.82E+03
Cobalt	7440-48-4	No	No	Inorganics	-		9.00E-03	U	3.00E-03	U	2.00E-05	U	1	-	1	-
Iron	7439-89-6	No	No	Inorganics	-		-		7.00E-01	U	-		1	-	1	-
Total Petroleum Hydrocarbons (Aliphatic Medium)	NA	No	Yes	Organics	-		-		1.00E-01	U	1.00E+00	U	1	-	1	6.86E+00

Iron Gate Hatchery Burn Pit Site-specific

Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

S (mg/L)	K _{oc} (cm ³ /g)	K _d (cm ³ /g)	HLC (atm-m ³ /mole)	Henry's Law Constant Used in Calcs (unitless)	H' and HLC Ref	Normal Boiling Point BP (K)	BP Ref	Critical Temperature T _c (K)	T _c Ref	Chemical Type	D _{ia} (cm ² /s)	D _{iw} (cm ² /s)	D _A (cm ² /s)	Particulate Emission Factor (m ³ /kg)	Volatilization Factor Unlimited Reservoir (m ³ /kg)
-	-	4.50E+01	-	-		1913.15	U	5070	U	INORGANIC	-	-	-	1.25E+08	-
-	-	2.90E+01	-	-		888.15	U	1670	U	INORGANIC	-	-	-	1.25E+08	-
1.79E+03	1.46E+02	8.76E-01	5.55E-03	2.27E-01	U	353.15	U	562	U	VOC	8.95E-02	1.03E-05	1.06E-03	1.25E+08	-
-	-	4.50E+01	-	-		3203.15	U	7400	U	INORGANIC	-	-	-	1.25E+08	-
-	-	2.50E+01	-	-		3273.15	U	9340	U	INORGANIC	-	-	-	1.25E+08	-
2.20E-01	7.96E+02	4.78E+00	3.40E+00	1.39E+02	U	424.15	U	594	U	BTEX	5.14E-02	6.77E-06	1.22E-02	1.25E+08	-

Iron Gate Hatchery Burn Pit Site-specific Construction Worker Regional Screening Levels (RSL) for Soil - Other Construction Activities

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; D = OW; W = TEF applied; E = RPF applied; G = see user's guide; U = user provided; ca = cancer; nc = noncancer; * = where: nc SL < 100X ca SL; ** = where nc SL < 10X ca SL; SSL values are based on DAF=1; max = ceiling limit exceeded; sat = Csat exceeded.

Volatilization Factor Mass Limit (m³/kg)	Volatilization Factor Selected (m³/kg)	Ingestion SL TR=1E-06 (mg/kg)	Dermal SL TR=1E-06 (mg/kg)	Inhalation SL TR=1E-06 (mg/kg)	Carcinogenic SL TR=1E-06 (mg/kg)	Ingestion SL THQ=1 (mg/kg)	Dermal SL THQ=1 (mg/kg)	Inhalation SL THQ=1 (mg/kg)	Noncarcinogenic SL THI=1 (mg/kg)	Screening Level (mg/kg)
-	-	-	-	-	-	1.36E+02	-	5.23E+05	1.36E+02	1.36E+02 nc
-	-	2.75E+01	1.72E+02	8.88E+03	2.37E+01	-	-	-	-	2.37E+01 ca
-	7.68E+02	4.50E+02	-	3.02E+01	2.83E+01	3.39E+03	-	2.58E+02	2.40E+02	2.83E+01 ca**
-	-	-	-	4.24E+03	4.24E+03	1.02E+03	-	1.05E+04	9.28E+02	9.28E+02 nc
-	-	-	-	-	-	2.38E+05	-	-	2.38E+05	2.38E+05 nc max
-	2.26E+02	-	-	-	-	3.39E+04	-	9.51E+02	9.25E+02	9.25E+02 nc sat

Appendix G
Ecological Risk Evaluation Tables

Table G-1. Ecological Exposure Pathway Analysis

Site	Code	Acreage	Future Use	Potentially Complete Exposure Pathway		Evaluate for Ecological Risk?	Comments
				Current Condition	Future Condition		
Copco No. 1 Debris Pile/Scrap Yard	C1DP	2.1	Natural Habitat	Yes	Yes	Yes	Detected analytes exceeding screening levels.
Copco No. 2 Burn Pit	C2BP	0.5	Natural Habitat	Yes	Yes	Yes	Detected analytes exceeding screening levels.
Copco No. 2 Former Mobil Oil Containment Building	C2CB	0.66	Recreation	No	Yes	Step 1 Only	No complete exposure pathway under current conditions. Potential for intermittent or transient use under future conditions. Data were screened against No Effect ESLs (Step 1) to be conservative.
Copco No. 2 Transformer Fire	C2TF	0.012	Recreation	No	Yes	Step 1 Only	No complete exposure pathway under current conditions. Potential for intermittent or transient use under future conditions. Data were screened against No Effect ESLs (Step 1) to be conservative.
Copco No. 2 USTs	C2UT	0.55	Recreation	No	No	Step 1 Only	No complete exposure pathway under current conditions. Potential for intermittent or transient use under future conditions. Data were screened against No Effect ESLs (Step 1) to be conservative.
Copco No. 2 Wood Pile	C2WP	0.35	Natural Habitat	Yes	Yes	Yes	Detected analytes exceeding screening levels.
Copco No. 2 Wood Stave Penstock	C2WS	3.8	Natural Habitat	Yes	Yes	Yes	Detected analytes exceeding screening levels.
Iron Gate Fish Hatchery Burn Pit	IGBP	0.04	Natural Habitat	Yes	Yes	Yes	Detected analytes exceeding screening levels.
Iron Gate Shooting Range	IGSR	12.9	Natural Habitat	Yes	Yes	Yes	Detected analytes exceeding screening levels.

Table G-2. Ecological Screening Levels and Site-Specific Ecological Preliminary Remedial Goals for California RECs

CAS Number	Class	Analyte	Background Cascade Mountains (mg/kg)	Ecological Screening Levels		Site-Specific EcoPRGs		
				No Effect ESL (mg/kg)	Wildlife Low Effect ESL (mg/kg)	EcoPRGs Developed?	Bird Low EcoPRG (mg/kg)	Mammal Low EcoPRG (mg/kg)
7440-36-0	Metal	Antimony	0.67	0.27	23	Yes	--	342
7440-38-2	Metal	Arsenic	19	6.8	51	Yes	145	372
7440-39-3	Metal	Barium	630	110	1200	No	--	--
7440-41-7	Metal	Beryllium	2.1	2.5	25	No	--	--
7440-42-8	Metal	Boron	--	2	10	Yes	--	64
7440-43-9	Metal	Cadmium	0.54	0.36	1.6	Yes	6.5	8.3
7440-47-3	Metal	Chromium	200	23	73	Yes	334	1950
7440-48-4	Metal	Cobalt	--	13	130	No	--	--
7440-50-8	Metal	Copper	73	28	43	Yes	320	980
7439-89-6	Metal	Iron	--	--	--	No	--	--
7439-92-1	Metal	Lead	34	11	23	Yes	721	4482
7439-96-5	Metal	Manganese	2100	220	2700	Yes	8400	3173
7439-97-6	Metal	Mercury	0.24	0.013	0.13	Yes	2.9	53
7439-98-7	Metal	Molybdenum	--	2	150	No	--	--
7440-02-0	Metal	Nickel	110	38	210	No	--	--
7782-49-2	Metal	Selenium	0.52	0.52	1	Yes	6.1	6.1
7440-22-4	Metal	Silver	0.17	4.2	26	No	--	--
7440-28-0	Metal	Thallium	2.8	0.05	4.2	No	--	--
7440-62-2	Metal	Vanadium	280	7.8	11	Yes	61	810
7440-66-6	Metal	Zinc	170	46	120	Yes	1076	7743
35822-46-9	DXN	1,2,3,4,6,7,8-HpCDD	--	2.9E-05	1.9E-04	No	--	--
67562-39-4	DXN	1,2,3,4,6,7,8-HpCDF	--	2.9E-05	1.9E-04	No	--	--
55673-89-7	DXN	1,2,3,4,7,8,9-HpCDF	--	2.9E-05	1.9E-04	No	--	--
39227-28-6	DXN	1,2,3,4,7,8-HxCDD	--	2.9E-06	1.9E-05	No	--	--
70648-26-9	DXN	1,2,3,4,7,8-HxCDF	--	2.9E-06	1.9E-05	No	--	--
57653-85-7	DXN	1,2,3,6,7,8-HxCDD	--	2.9E-06	1.9E-05	No	--	--
57117-44-9	DXN	1,2,3,6,7,8-HxCDF	--	2.9E-06	1.9E-05	No	--	--
19408-74-3	DXN	1,2,3,7,8,9-HxCDD	--	2.9E-06	1.9E-05	No	--	--
72918-21-9	DXN	1,2,3,7,8,9-HxCDF	--	2.9E-06	1.9E-05	No	--	--
40321-76-4	DXN	1,2,3,7,8-PeCDD	--	2.9E-07	1.9E-06	No	--	--
57117-41-6	DXN	1,2,3,7,8-PeCDF	--	9.7E-06	6.3E-05	No	--	--
60851-34-5	DXN	2,3,4,6,7,8-HxCDF	--	2.9E-06	1.9E-05	No	--	--
57117-31-4	DXN	2,3,4,7,8-PeCDF	--	9.7E-07	6.3E-06	No	--	--
1746-01-6	DXN	2,3,7,8-TCDD	--	2.9E-07	1.9E-06	No	--	--
TEQ-BO	DXN	2,3,7,8-TCDD TEQ Bird	--	1.6E-05	--	Yes	8.6E-05	--

Table G-2. Ecological Screening Levels and Site-Specific Ecological Preliminary Remedial Goals for California RECs

CAS Number	Class	Analyte	Background Cascade Mountains (mg/kg)	Ecological Screening Levels		Site-Specific EcoPRGs		
				No Effect ESL (mg/kg)	Wildlife Low Effect ESL (mg/kg)	EcoPRGs Developed?	Bird Low EcoPRG (mg/kg)	Mammal Low EcoPRG (mg/kg)
TEQ-M0	DXN	2,3,7,8-TCDD TEQ Mammal	--	2.9E-07	1.9E-06	Yes	--	6.8E-06
51207-31-9	DXN	2,3,7,8-TCDF	--	2.9E-06	1.9E-05	No	--	--
72-54-8	DXN	4,4'-DDD	--	0.0063	3.2E-02	No	--	--
72-55-9	DXN	4,4'-DDE	--	0.11	0.55	No	--	--
50-29-3	DXN	4,4'-DDT	--	0.044	0.22	No	--	--
3268-87-9	DXN	OCDD	--	9.7E-04	6.3E-03	No	--	--
39001-02-0	DXN	OCDF	--	9.7E-04	6.3E-03	No	--	--
99-35-4	EXPL	1,3,5-Trinitrobenzene	--	10	28	No	--	--
99-65-0	EXPL	1,3-Dinitrobenzene	--	0.072	0.16	No	--	--
118-96-7	EXPL	2,4,6-Trinitrotoluene	--	7.5	13	No	--	--
121-14-2	EXPL	2,4-Dinitrotoluene	--	6	60	No	--	--
606-20-2	EXPL	2,6-Dinitrotoluene	--	4	40	No	--	--
35572-78-2	EXPL	2-Amino-4,6-dinitrotoluene	--	16	140	No	--	--
88-72-2	EXPL	2-Nitrotoluene	--	0.19	98	No	--	--
99-08-1	EXPL	3-Nitrotoluene	--	0.13	120	No	--	--
19406-51-0	EXPL	4-Amino-2,6-dinitrotoluene	--	12	120	No	--	--
99-99-0	EXPL	4-Nitrotoluene	--	21	210	No	--	--
2691-41-0	EXPL	HMX	--	16	160	No	--	--
98-95-3	EXPL	Nitrobenzene	--	2.2	22	No	--	--
121-82-4	EXPL	RDX	--	2.3	4.3	No	--	--
479-45-8	EXPL	Tetryl	--	0.018	7.2	No	--	--
83-32-9	PAH	Acenaphthene	--	0.25	1300	No	--	--
208-96-8	PAH	Acenaphthylene	--	120	1200	No	--	--
120-12-7	PAH	Anthracene	--	6.8	2100	No	--	--
56-55-3	PAH	Benzo(a)anthracene	--	0.73	7.3	Yes	683	155
50-32-8	PAH	Benzo(a)pyrene	--	62	190	No	--	--
205-99-2	PAH	Benzo(b)fluoranthene	--	18	440	No	--	--
191-24-2	PAH	Benzo(g,h,i)perylene	--	25	250	No	--	--
207-08-9	PAH	Benzo(k)fluoranthene	--	71	710	No	--	--
218-01-9	PAH	Chrysene	--	3.1	31	No	--	--
53-70-3	PAH	Dibenzo(a,h)anthracene	--	14	140	No	--	--
206-44-0	PAH	Fluoranthene	--	10	23	Yes	360	80
86-73-7	PAH	Fluorene	--	3.7	19	No	--	--
193-39-5	PAH	Indeno(1,2,3-cd)pyrene	--	71	710	No	--	--
91-20-3	PAH	Naphthalene	--	1	27	No	--	--

Table G-2. Ecological Screening Levels and Site-Specific Ecological Preliminary Remedial Goals for California RECs

CAS Number	Class	Analyte	Background Cascade Mountains (mg/kg)	Ecological Screening Levels		Site-Specific EcoPRGs		
				No Effect ESL (mg/kg)	Wildlife Low Effect ESL (mg/kg)	EcoPRGs Developed?	Bird Low EcoPRG (mg/kg)	Mammal Low EcoPRG (mg/kg)
85-01-8	PAH	Phenanthrene	--	5.5	12	Yes	642	145
129-00-0	PAH	Pyrene	--	10	230	No	--	--
12674-11-2	PCB	Aroclor 1016	--	1.1	3.1	No	--	--
11104-28-2	PCB	Aroclor 1221	--	--	--	No	--	--
11141-16-5	PCB	Aroclor 1232	--	--	--	No	--	--
53469-21-9	PCB	Aroclor 1242	--	0.041	0.41	No	--	--
12672-29-6	PCB	Aroclor 1248	--	0.0073	0.073	No	--	--
11097-69-1	PCB	Aroclor 1254	--	0.041	0.41	No	--	--
11096-82-5	PCB	Aroclor 1260	--	0.88	1.2	No	--	--
37324-23-5	PCB	Aroclor 1262	--	--	--	No	--	--
11100-14-4	PCB	Aroclor 1268	--	--	--	No	--	--
309-00-2	PEST	Aldrin	--	0.037	0.18	No	--	--
60-57-1	PEST	Dieldrin	--	0.0045	0.009	No	--	--
1031-07-8	PEST	Endosulfan sulfate	--	0.0065	--	No	--	--
72-20-8	PEST	Endrin	--	0.0014	0.014	No	--	--
7421-93-4	PEST	Endrin aldehyde	--	--	--	No	--	--
76-44-8	PEST	Heptachlor	--	0.059	0.59	No	--	--
1024-57-3	PEST	Heptachlor epoxide	--	0.0015	--	No	--	--
120-82-1	SVOC	1,2,4-Trichlorobenzene	--	0.27	2.7	No	--	--
95-50-1	SVOC	1,2-Dichlorobenzene	--	0.09	9.2	No	--	--
541-73-1	SVOC	1,3-Dichlorobenzene	--	0.08	7.4	No	--	--
106-46-7	SVOC	1,4-Dichlorobenzene	--	0.89	3.5	No	--	--
90-12-0	SVOC	1-Methylnaphthalene	--	--	--	No	--	--
95-95-4	SVOC	2,4,5-Trichlorophenol	--	4	--	No	--	--
88-06-2	SVOC	2,4,6-Trichlorophenol	--	9.94	--	No	--	--
120-83-2	SVOC	2,4-Dichlorophenol	--	0.05	--	No	--	--
105-67-9	SVOC	2,4-Dimethylphenol	--	0.04	--	No	--	--
51-28-5	SVOC	2,4-Dinitrophenol	--	0.061	--	No	--	--
121-14-2	SVOC	2,4-Dinitrotoluene	--	6	60	No	--	--
606-20-2	SVOC	2,6-Dinitrotoluene	--	4	40	No	--	--
91-58-7	SVOC	2-Chloronaphthalene	--	--	--	No	--	--
95-57-8	SVOC	2-Chlorophenol	--	0.39	3.9	No	--	--
91-57-6	SVOC	2-Methylnaphthalene	--	16	160	No	--	--
95-48-7	SVOC	2-Methylphenol	--	0.67	7	No	--	--
88-74-4	SVOC	2-Nitroaniline	--	5.3	10	No	--	--

Table G-2. Ecological Screening Levels and Site-Specific Ecological Preliminary Remedial Goals for California RECs

CAS Number	Class	Analyte	Background Cascade Mountains (mg/kg)	Ecological Screening Levels		Site-Specific EcoPRGs		
				No Effect ESL (mg/kg)	Wildlife Low Effect ESL (mg/kg)	EcoPRGs Developed?	Bird Low EcoPRG (mg/kg)	Mammal Low EcoPRG (mg/kg)
88-75-5	SVOC	2-Nitrophenol	--	--	--	No	--	--
65794-96-9	SVOC	3 & 4-Methylphenol (m,p-Cresols)	--	0.69	7	No	--	--
91-94-1	SVOC	3,3'-Dichlorobenzidine	--	0.03	--	No	--	--
99-09-2	SVOC	3-Nitroaniline	--	--	--	No	--	--
534-52-1	SVOC	4,6-Dinitro-2-methylphenol	--	--	--	No	--	--
101-55-3	SVOC	4-Bromophenyl phenyl ether	--	--	--	No	--	--
59-50-7	SVOC	4-Chloro-3-methylphenol	--	--	--	No	--	--
106-47-8	SVOC	4-Chloroaniline	--	1	10	No	--	--
7005-72-3	SVOC	4-Chlorophenyl phenyl ether	--	--	--	No	--	--
100-01-6	SVOC	4-Nitroaniline	--	--	--	No	--	--
100-02-7	SVOC	4-Nitrophenol	--	--	--	No	--	--
103-33-3	SVOC	Azobenzene	--	--	--	No	--	--
65-85-0	SVOC	Benzoic acid	--	0.01	10	No	--	--
100-51-6	SVOC	Benzyl alcohol	--	0.002	1200	No	--	--
108-60-1	SVOC	Bis (2-chloro-1-methylethyl) ether	--	--	--	No	--	--
111-91-1	SVOC	Bis (2-chloroethoxy) methane	--	--	--	No	--	--
111-44-4	SVOC	Bis (2-chloroethyl) ether	--	--	--	No	--	--
39638-32-9	SVOC	Bis (2-chloroisopropyl) ether	--	--	--	No	--	--
117-81-7	SVOC	Bis (2-ethylhexyl) phthalate	--	0.02	0.2	Yes	--	193
85-68-7	SVOC	Butyl benzyl phthalate	--	90	900	No	--	--
86-74-8	SVOC	Carbazole	--	79	790	No	--	--
132-64-9	SVOC	Dibenzofuran	--	6.1	61	No	--	--
84-66-2	SVOC	Diethyl phthalate	--	100	1000	No	--	--
131-11-3	SVOC	Dimethyl phthalate	--	10	100	No	--	--
84-74-2	SVOC	Di-N-Butylphthalate	--	0.011	0.11	No	--	--
117-84-0	SVOC	Di-n-octyl phthalate	--	0.91	9.1	No	--	--
118-74-1	SVOC	Hexachlorobenzene	--	0.079	0.79	No	--	--
87-68-3	SVOC	Hexachlorobutadiene	--	0.009	--	Yes	47	6.9
77-47-4	SVOC	Hexachlorocyclopentadiene	--	0.001	--	No	--	--
67-72-1	SVOC	Hexachloroethane	--	0.024	--	No	--	--
78-59-1	SVOC	Isophorone	--	--	--	No	--	--
98-95-3	SVOC	Nitrobenzene	--	2.2	22	No	--	--
621-64-7	SVOC	N-Nitrosodi-N-propylamine	--	--	--	No	--	--
86-30-6	SVOC	N-Nitrosodiphenylamine	--	0.545	--	No	--	--
87-86-5	SVOC	Pentachlorophenol	--	0.36	3.6	Yes	37	18

Table G-2. Ecological Screening Levels and Site-Specific Ecological Preliminary Remedial Goals for California RECs

CAS Number	Class	Analyte	Background Cascade Mountains (mg/kg)	Ecological Screening Levels		Site-Specific EcoPRGs		
				No Effect ESL (mg/kg)	Wildlife Low Effect ESL (mg/kg)	EcoPRGs Developed?	Bird Low EcoPRG (mg/kg)	Mammal Low EcoPRG (mg/kg)
108-95-2	SVOC	Phenol	--	0.79	8	No	--	--
110-86-1	SVOC	Pyridine	--	--	--	No	--	--
DRO	TPH	Diesel Range Organics	--	--	--	No	--	--
ERO	TPH	Extended Range Organics	--	--	--	No	--	--
GRO	TPH	Gasoline Range Organics	--	--	--	No	--	--
630-20-6	VOC	1,1,1,2-Tetrachloroethane	--	0.07	--	No	--	--
71-55-6	VOC	1,1,1-Trichloroethane	--	260	2600	No	--	--
79-34-5	VOC	1,1,2,2-Tetrachloroethane	--	0.127	--	No	--	--
76-13-1	VOC	1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	--	No	--	--
79-00-5	VOC	1,1,2-Trichloroethane	--	0.32	--	No	--	--
75-34-3	VOC	1,1-Dichloroethane	--	210	2100	No	--	--
75-35-4	VOC	1,1-Dichloroethene	--	11	110	No	--	--
563-58-6	VOC	1,1-Dichloropropene	--	--	--	No	--	--
87-61-6	VOC	1,2,3-Trichlorobenzene	--	20	--	No	--	--
96-18-4	VOC	1,2,3-Trichloropropane	--	--	--	No	--	--
120-82-1	VOC	1,2,4-Trichlorobenzene	--	0.27	2.7	No	--	--
95-63-6	VOC	1,2,4-Trimethylbenzene	--	0.09	--	No	--	--
96-12-8	VOC	1,2-Dibromo-3-Chloropropane	--	--	--	No	--	--
106-93-4	VOC	1,2-Dibromoethane	--	--	--	No	--	--
95-50-1	VOC	1,2-Dichlorobenzene	--	0.09	9.2	No	--	--
107-06-2	VOC	1,2-Dichloroethane	--	0.85	1.6	No	--	--
78-87-5	VOC	1,2-Dichloropropane	--	0.28	--	No	--	--
108-67-8	VOC	1,3,5-Trimethylbenzene	--	0.07	--	No	--	--
541-73-1	VOC	1,3-Dichlorobenzene	--	0.08	7.4	No	--	--
142-28-9	VOC	1,3-Dichloropropane	--	--	--	No	--	--
106-46-7	VOC	1,4-Dichlorobenzene	--	0.89	3.5	No	--	--
594-20-7	VOC	2,2-Dichloropropane	--	--	--	No	--	--
78-93-3	VOC	2-Butanone	--	350	920	No	--	--
95-49-8	VOC	2-Chlorotoluene	--	--	--	No	--	--
591-78-6	VOC	2-Hexanone	--	0.36	3.6	No	--	--
106-43-4	VOC	4-Chlorotoluene	--	--	--	No	--	--
108-10-1	VOC	4-Methyl-2-Pentanone	--	9.7	97	No	--	--
67-64-1	VOC	Acetone	--	1.2	6.3	No	--	--
71-43-2	VOC	Benzene	--	24	240	No	--	--
108-86-1	VOC	Bromobenzene	--	--	--	No	--	--

Table G-2. Ecological Screening Levels and Site-Specific Ecological Preliminary Remedial Goals for California RECs

CAS Number	Class	Analyte	Background Cascade Mountains (mg/kg)	Ecological Screening Levels		Site-Specific EcoPRGs		
				No Effect ESL (mg/kg)	Wildlife Low Effect ESL (mg/kg)	EcoPRGs Developed?	Bird Low EcoPRG (mg/kg)	Mammal Low EcoPRG (mg/kg)
74-97-5	VOC	Bromochloromethane	--	--	--	No	--	--
75-27-4	VOC	Bromodichloromethane	--	--	--	No	--	--
75-25-2	VOC	Bromoform	--	--	--	No	--	--
74-83-9	VOC	Bromomethane	--	--	--	No	--	--
75-15-0	VOC	Carbon disulfide	--	0.81	8.1	No	--	--
56-23-5	VOC	Carbon tetrachloride	--	--	--	No	--	--
108-90-7	VOC	Chlorobenzene	--	2.4	24	No	--	--
75-00-3	VOC	Chloroethane	--	--	--	No	--	--
67-66-3	VOC	Chloroform	--	8	21	No	--	--
74-87-3	VOC	Chloromethane	--	--	--	No	--	--
156-59-2	VOC	cis-1,2-Dichloroethene	--	24	240	No	--	--
10061-01-5	VOC	cis-1,3-Dichloropropene	--	--	--	No	--	--
124-48-1	VOC	Dibromochloromethane	--	--	--	No	--	--
74-95-3	VOC	Dibromomethane	--	--	--	No	--	--
75-71-8	VOC	Dichlorodifluoromethane	--	--	--	No	--	--
100-41-4	VOC	Ethylbenzene	--	0.27	--	No	--	--
87-68-3	VOC	Hexachlorobutadiene	--	0.009	--	No	--	--
98-82-8	VOC	Isopropylbenzene	--	--	--	No	--	--
1634-04-4	VOC	Methyl tert-butyl ether (MTBE)	--	--	--	No	--	--
75-09-2	VOC	Methylene Chloride	--	2.6	22	No	--	--
91-20-3	VOC	Naphthalene	--	1	27	No	--	--
104-51-8	VOC	n-Butylbenzene	--	--	--	No	--	--
103-65-1	VOC	n-Propylbenzene	--	--	--	No	--	--
99-87-6	VOC	p-Isopropyltoluene	--	--	--	No	--	--
135-98-8	VOC	sec-Butylbenzene	--	--	--	No	--	--
100-42-5	VOC	Styrene	--	1.2	12	No	--	--
98-06-6	VOC	tert-Butylbenzene	--	--	--	No	--	--
127-18-4	VOC	Tetrachloroethene	--	0.18	0.94	No	--	--
108-88-3	VOC	Toluene	--	23	230	No	--	--
156-60-5	VOC	trans-1,2-Dichloroethene	--	24	240	No	--	--
10061-02-6	VOC	trans-1,3-Dichloropropene	--	--	--	No	--	--
79-01-6	VOC	Trichloroethene	--	42	420	No	--	--
75-69-4	VOC	Trichlorofluoromethane	--	52	350	No	--	--
108-05-4	VOC	Vinyl acetate	--	--	--	No	--	--
75-01-4	VOC	Vinyl chloride	--	0.12	1.2	No	--	--

Table G-2. Ecological Screening Levels and Site-Specific Ecological Preliminary Remedial Goals for California RECs

CAS Number	Class	Analyte	Background Cascade Mountains (mg/kg)	Ecological Screening Levels		Site-Specific EcoPRGs		
				No Effect ESL (mg/kg)	Wildlife Low Effect ESL (mg/kg)	EcoPRGs Developed?	Bird Low EcoPRG (mg/kg)	Mammal Low EcoPRG (mg/kg)
95-47-6	VOC	Xylene, o	--	1.4	1.8	No	--	--
179601-23-1	VOC	Xylenes, m & p	--	1.4	1.8	No	--	--
1330-20-7	VOC	Xylenes, Total	--	1.4	1.8	No	--	--

Notes:

-- = not applicable or not available

CAS = Chemical Abstracts Service

DXN = dioxin/furan

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

EXPL = explosive

mg/kg = milligrams per kilogram

PAH = polycyclic aromatic hydrocarbon

PCB = polychlorinated biphenyl

PEST = pesticide

SVOC = semivolatile organic compound

TPH = total petroleum hydrocarbons

VOC = volatile organic compound

Table G-3. Toxicity Reference Values for Birds

COPEC	Derivation of No Effect TRV								Derivation of Low Effect TRV							
	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Effects	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Effects	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)
Antimony	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	Mallard Duck	2.24	NOAEL	chronic	lowest NOAEL from studies for growth, reproduction, survival - used as TRV for EcoSSL value	USEPA, 2005a	1	2.24	Mallard Duck	4.51	LOAEL	chronic	geometric mean of reproduction and growth LOAELs from studies selected for development of the EcoSSLs	USEPA 2005a	1	4.51
Boron	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	Mallard, quail, chicken	1.47	NOAEL	Chronic	Geometric mean of growth and reproduction NOAELs - used as TRV for EcoSSL value	USEPA 2005c	1	1.47	Mallard, quail, chicken	6.35	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2005c	1	6.35
Chromium	Chicken, duck, turkey	2.66	NOAEL	Chronic	Geometric mean of growth and reproduction NOAELs - used as TRV for EcoSSL value	USEPA 2008b	1	2.66	chicken/ duck/ turkey	16	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2008a	1	16
Copper	Chicken, turkey, duck	4.05	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA 2007b	1	4.05	chicken, duck, turkey	34.9	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2007b	1	34.9
Lead	Japanese quail, chicken, kestrel, mallard	1.63	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA 2005d	1	1.63	Japanese quail, chicken, kestrel	44.63	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2005d	1	44.63
Manganese	Chicken, turkey, quail	179	NOAEL	Chronic	Geometric mean of growth and reproduction NOAELs - used as TRV for EcoSSL value	USEPA 2007c	1	179	chicken, turkey, quail	377	LOAEL	chronic	Geometric mean of reproduction and growth LOAELs from studies selected for development of the EcoSSLs	USEPA 2007c	1	377
Mercury	Japanese quail	0.45	NOAEL	Chronic	Decreased fertility and hatchability	Sample et al. 1996	1	0.45	Japanese quail	0.9	LOAEL	Chronic	Reproduction - decreased fertility/hatchability	Sample et al. 1996	1	0.9
Selenium	quail, kestrel, mallard, chicken	0.29	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA, 2007d	1	0.29	quail, kestrel, mallard, chicken	0.819	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2007d	1	0.819
Vanadium	chicken	0.344	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA, 2005e	1	0.34	chicken	1.7	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA, 2005e	1	1.7

Table G-3. Toxicity Reference Values for Birds

COPEC	Derivation of No Effect TRV								Derivation of Low Effect TRV							
	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Effects	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Effects	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)
Zinc	Chicken, quail, duck	66.1	NOAEL	Chronic	Geometric mean of growth and reproduction NOAELs - used as TRV for EcoSSL value	USEPA 2007e	1	66.1	Chicken, quail, duck	171	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2007e	1	171
2,3,7,8-TCDD TEQ Bird	Ring-Necked Pheasant	0.000014	NOAEL	Chronic	Reproduction	Sample et al., 1996	1	0.00	Ring-Necked Pheasant	0.00014	LOAEL	Chronic	Reproduction	Sample et al., 1996	1	0.00014
Bis (2-ethylhexyl) phthalate	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	Japanese quail	3.185	NOAEL	Chronic	No overt signs of toxicity	Schwetz et al., 1974	1	3.19	Final No Effect TRV adjusted upward to derive Final Low Effect TRV.	--	--	--	--	--	0.2	16
Benzo(a)anthracene	Chicken	39.4	NOAEL	Subchronic	Benzo(a)pyrene: Reproductive - fertility and malformation, dietary concentration = 559 mg/kg	Rigdon and Neal, 1963	1	39	Final No Effect TRV adjusted upward to derive Final Low Effect TRV.	--	--	--	--	--	0.2	197
Fluoranthene	Chicken	39.4	NOAEL	Subchronic	Benzo(a)pyrene: Reproductive - fertility and malformation, dietary concentration = 559 mg/kg	Rigdon and Neal, 1963	1	39	Final No Effect TRV adjusted upward to derive Final Low Effect TRV.	--	--	--	--	--	0.2	197
Phenanthrene	Chicken	39.4	NOAEL	Subchronic	Benzo(a)pyrene: Reproductive - fertility and malformation, dietary concentration = 559 mg/kg	Rigdon and Neal, 1963	1	39	Final No Effect TRV adjusted upward to derive Final Low Effect TRV.	--	--	--	--	--	0.2	197
Pentachlorophenol	mixed species	6.73	NOAEL	Chronic	Lowest NOAEL for reproduction, growth, or survival	USEPA, 2007g	1	6.73	mixed species	52.0	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2007g	1	52

Notes:

^aUncertainty factors were applied to normalize the endpoints as follows:

Endpoint	Type	To Final	To Final
		No Effect Level TRV	Low Effect Level TRV
NOAEL	Chronic	1	--
LOAEL	Chronic	--	1

-- = not available, could not be located, or not applicable

LOAEL = lowest observed adverse effect level

mg/kg-d = milligrams per kilogram body weight per day

NOAEL = no observed adverse effect level

TRV = toxicity reference value

Table G-4. Toxicity Reference Values for Mammals

COPEC	Derivation of No Effect TRV								Derivation of Low Effect TRV							
	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Comments	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Comments	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)
Antimony	Rat	0.059	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA 2005a	1	0.059	Rat	2.76	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2005a	1	2.76
Arsenic	Dog	1.04	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA, 2005b	1	1.04	rat	4.55	LOAEL	Chronic	Geometric mean of reproduction and growth LOAELs from studies selected for development of the EcoSSLs	USEPA 2005b	1	4.55
Boron	rat	10.3	BMDL5	Chronic	Reproductive - reduced fetal body weight	USEPA, 2021	1	10.3	rabbit	43.7	LOAEL	Chronic	Developmental effects	Heindel et al., 1994 in USEPA 2021	1	43.7
Cadmium	Rat, mouse, dog, cattle, sheep	0.77	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA 2005c	1	0.77	Rat, mouse, dog, cattle, sheep	6.9	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2005c	1	6.9
Chromium	pig, cattle, rat, mouse	2.4	NOAEL	Chronic	Geometric mean of NOAELs from reproduction and growth studies - used as the TRV for EcoSSL	USEPA 2008	1	2.4	pig, cattle, rat, mouse	58.2	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2008	1	58.2
Copper	Mink, mouse, rat, pig, rabbit, cattle	5.6	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA 2007b	1	5.6	Mink, mouse, rat, pig, rabbit, cattle	82.7	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2007b	1	82.7
Lead	Hamster, mouse, Rat	4.7	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA 2005d	1	4.7	Hamster, mouse, Rat	186	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2005d	1	186
Manganese	pig, rat, hamster, cattle, sheep, rabbit	51.1	NOAEL	Chronic	Geometric mean of NOAELs from reproduction and growth studies - used as the TRV for EcoSSL	USEPA 2007c	1	51.1	pig, rat, hamster, cattle, sheep, rabbit	146	LOAEL	Chronic	Geometric mean of reproduction and growth LOAELs from studies selected for development of the EcoSSLs	USEPA 2007c	1	146
Mercury	Mink	1.41	NOAEL	Chronic	Reproduction - number of kits, success rate of kits	LANL 2020	1	1.41	Mink	14.1	LOAEL	Chronic	Reproduction - number, survival, and development of kits	LANL 2020	1	14.1
Selenium	rat, mouse, pig	0.14	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA, 2007d	1	0.143	rat, mouse, pig	0.66	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2007d	1	0.66
Vanadium	mouse/rat/sheep /pig	4.16	NOAEL	Chronic	Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA, 2005e	1	4.16	mouse/rat/sheep /pig	9.40	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2005e	1	9.4

Table G-4. Toxicity Reference Values for Mammals

COPEC	Derivation of No Effect TRV								Derivation of Low Effect TRV							
	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Comments	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)	Test Species	Toxicity Value (mg/kg-d)	Study Endpoint	Type	Comments	Source	Uncertainty Factor ^a	Final No Effect TRV (mg/kg-d)
Zinc	Rat, pig, hamster, rabbit, mouse, cattle, sheep	75.40	NOAEL	Chronic	Geometric mean of NOAELs from reproduction and growth studies - used as the TRV for EcoSSL	USEPA 2007e	1	75.4	Rat, pig, hamster, rabbit, mouse, cattle, sheep	298	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2007e	1	298
2,3,7,8-TCDD TEQ Mammal	rat	0.000001	NOAEL	Chronic	Reproduction - fertility and neonatal	Sample et al., 1996	1	0.000001	rat	0.00001	LOAEL	Chronic	Reproduction - fertility and neonatal	Sample et al. 1996	1	0.00001
Hexachlorobutadiene	rat	0.2	NOAEL	Chronic	Renal - neoplasms	ATSDR, 2021	1	0.2	rat	2	LOAEL	Chronic	Renal - neoplasms	ATSDR 2021	1	2
Bis (2-ethylhexyl) phthalate	mouse	18.30	NOAEL	Chronic	reproduction	Sample et al., 1996	1	18.3	mouse	183	LOAEL	Chronic	reproduction	Sample et al. 1996	1	183
Benzo(a)anthracene	rat, mouse, guinea pig	0.62	NOAEL	Chronic	Benzo(a)pyrene: Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA, 2007f	1	0.615	rat, mouse, guinea pig	38	LOAEL	Chronic	Benzo(a)pyrene: Geometric mean of reproduction and growth LOAELs from studies selected for development of the EcoSSLs	USEPA 2007f	1	38.4
Fluoranthene	rat, mouse, guinea pig	0.62	NOAEL	Chronic	Benzo(a)pyrene: Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA, 2007f	1	0.615	rat, mouse, guinea pig	38	LOAEL	Chronic	Benzo(a)pyrene: Geometric mean of reproduction and growth LOAELs from studies selected for development of the EcoSSLs	USEPA 2007f	1	38.4
Phenanthrene	rat, mouse, guinea pig	0.62	NOAEL	Chronic	Benzo(a)pyrene: Highest bounded NOAEL lower than the lowest bounded LOAEL for reproduction, growth or survival - used as TRV for EcoSSL	USEPA, 2007f	1	0.615	rat, mouse, guinea pig	38	LOAEL	Chronic	Benzo(a)pyrene: Geometric mean of reproduction and growth LOAELs from studies selected for development of the EcoSSLs	USEPA 2007f	1	38.4
Pentachlorophenol	rat, mouse	8.42	NOAEL	Chronic	Geometric mean of NOAEL values for growth and reproduction	USEPA, 2007g	1	8.42	rat, mouse	22.7	LOAEL	Chronic	Geometric mean of LOAELs reported for reproductive and growth endpoints.	USEPA 2007g	1	22.7

Notes:

^a Uncertainty factors were applied to normalize the endpoints as follows:

Endpoint	Type	To Final	
		No Effect Level TRV	Low Effect Level TRV
NOAEL/BMDL5	Chronic	1	--
LOAEL	Chronic	--	1

-- = not available, could not be located, or not applicable
 BMDL5 = benchmark dose level 5%
 LOAEL = lowest observed adverse effect level
 mg/kg-d = milligrams per kilogram body weight per day
 NOAEL = no observed adverse effect level
 TRV = toxicity reference value

Table G-5. Bioaccumulation Factors and Uptake Regression Models for Terrestrial Exposures

Type	COPEC	Terrestrial Plants				Soil Invertebrate				Small Mammals			
		BAF	B0	B1	Source	BAF	B0	B1	Source	BAF	B0	B1	Source
METAL	Antimony	regression	-3.233	0.938	USEPA 2007a	0.0073	--	--	LANL 2020	0.05*[invert]	--	--	USEPA 2007a
METAL	Arsenic	0.03752	--	--	USEPA 2007a	regression	-1.42	0.706	USEPA 2007a	regression	-4.847	0.819	USEPA 2007a
METAL	Boron	4	--	--	Baes et al. 1984	1	--	--	default	0.000506	--	--	LANL 2020
METAL	Cadmium	regression	-0.475	0.546	USEPA 2007a	regression	2.114	0.795	USEPA 2007a	regression	-1.257	0.472	USEPA 2007a
METAL	Chromium	0.0075	--	--	LANL 2020	0.161	--	--	LANL 2020	0.00066	--	--	LANL 2020
METAL	Copper	regression	0.668	0.394	USEPA 2007a	0.515	--	--	USEPA 2007a	regression	2.042	0.144	USEPA 2007a
METAL	Lead	0.117	--	--	LANL 2020	0.225	--	--	Sample et al. 1998a	regression	0.0761	0.442	USEPA 2007a
METAL	Manganese	0.25	--	--	Baes et al. 1984	0.0605	--	--	Sample et al. 1998a	0.000384	--	--	LANL 2020
METAL	Mercury	regression	-0.996	0.544	Bechtel-Jacobs 1998	1.693	--	--	Sample et al. 1998a	0.0543	--	--	Sample et al. 1998b
METAL	Selenium	regression	-0.677	1.104	USEPA 2007a	regression	-0.08	0.733	USEPA 2007a	regression	-0.415	0.466	USEPA 2007a
METAL	Vanadium	0.00485	--	--	USEPA 2007a	0.042	--	--	USEPA 2007a	0.00019	--	--	LANL 2020
METAL	Zinc	regression	1.575	0.554	USEPA 2007a	regression	4.449	0.328	USEPA 2007a	regression	4.3632	0.071	USEPA 2007a
DIOXIN	2,3,7,8-TCDD TEQ Bird	0.105	--	--	LANL 2020	9.5	--	--	LANL 2020	0.0937	--	--	LANL 2020
DIOXIN	2,3,7,8-TCDD TEQ Mammal	0.105	--	--	LANL 2020	9.5	--	--	LANL 2020	0.0937	--	--	LANL 2020
PAH	Benzo(a)anthracene	regression	-2.708	0.594	USEPA 2007a	1.59	--	--	USEPA 2007a	0	--	--	USEPA 2007a
PAH	Fluoranthene	0.5	--	--	USEPA 2007a	3.04	--	--	USEPA 2007a	0	--	--	USEPA 2007a
PAH	Phenanthrene	regression			USEPA 2007a	1.7	--	--	USEPA 2007a	0	--	--	USEPA 2007a
SVOC	Bis (2-ethylhexyl) phthalate	0.05	--	--	LANL 2020	logKow	--	--	USEPA 2007a	0.779	--	--	LANL 2020
SVOC	Hexachlorobutadiene	0.695			USEPA 2007a, logKow	logKow	--	--	USEPA 2007a	1	--	--	default
SVOC	Pentachlorophenol	0.506	--	--	LANL 2020	logKow	--	--	USEPA 2007a	0.777	--	--	LANL 2020

Notes:

-- = not applicable

BAF = bioaccumulation factor

PCB = polychlorinated biphenyls

TEQ = dioxin toxicity equivalents

TPH = total petroleum hydrocarbons

Log Kow Models

-Soil to plant: BAF for semivolatile organics with log Kows between 3 and 8 were derived using $\log BAF = -0.4057 \cdot (\log Kow) + 1.781$ (rinsed plants, EPA, 2007a)

-Soil to invertebrate: BAF for semivolatile organics with logKow between 2 and 8 were derived assuming $foc=1\%$ and $C_{worm} = 10^{((0.87 \cdot \log Kow) - 2) \cdot C_{soil} / (foc \cdot 10^{((0.679 \cdot \log Kow) + 0.663)})}$

LogKows

Bis(2-ethylhexyl) phthalate = 7.6

Hexachlorobutadiene = 4.78

Pentachlorophenol = 8.27

Table G-6. Calculation of Ecological Preliminary Remedial Goals (EcoPRGs)

Analyte	Receptor	Food Intake (kg/kg-d) ^a	Area Use Factor	Exposure and Uptake Values												Uptake by Plants		Uptake by Invertebrates		Uptake by Small Mammals		Incidental Soil Ingestion		Total Daily Dosage (mg/kg-d)	TRVs		Target HQ		Receptor-specific EcoPRGs	
				Plant BAF/Regression	Regression		Estimated Plant Concentration (mg/kg)	Invertebrate BAF/Regression	Regression		Estimated Invertebrate Concentration (mg/kg)	Small Mammal BAF/Regression	Regression		Estimated Small Mammal Concentration	Diet Proportion	Dosage from Plants (mg/kg-d)	Diet Proportion	Dosage from Invertebrates (mg/kg-d)	Diet Proportion	Dosage from Small Mammals (mg/kg-d)	Diet Proportion	Incidental Soil Dosage (mg/kg-d)		No Effect TRV (mg/kg-d)	Low Effect TRV (mg/kg-d)	No Effect TRV-based HQ	Low Effect TRV-based HQ	No Effect EcoPRG (mg/kg)	Low Effect EcoPRG (mg/kg)
					B0	B1			B0	B1			B0	B1																
Antimony	Hermit thrush	0.198	1	regression	-3.233	0.938	3.9E-02	0.0073	--	--	7.3E-03	0.05*[invert]	--	--	3.7E-04	0.15	1.17E-03	0.85	1.23E-03	--	--	0.104	2.06E-02	2.30E-02	--	--	1.0	1.0	--	--
Antimony	Mourning dove	0.144	1	regression	-3.233	0.938	3.9E-02	0.0073	--	--	7.3E-03	0.05*[invert]	--	--	3.7E-04	1	5.69E-03	--	--	--	--	0.061	8.80E-03	1.45E-02	--	--	1.0	1.0	--	--
Antimony	Red-tailed hawk	0.084	1	regression	-3.233	0.938	3.9E-02	0.0073	--	--	7.3E-03	0.05*[invert]	--	--	3.7E-04	--	--	--	--	1	3.06E-05	0.024	2.01E-03	2.04E-03	--	--	1.0	1.0	--	--
Antimony	Deer mouse	0.170	1	regression	-3.233	0.938	9.4E+00	0.0073	--	--	2.5E+00	0.05*[invert]	--	--	1.2E-01	1	1.69E+00	--	--	--	--	0.020	1.16E+00	2.76E+00	0.059	2.76	1.0	1.0	6	342
Antimony	Vagrant shrew	0.170	1	regression	-3.233	0.938	1.1E+01	0.0073	--	--	3.0E+00	0.05*[invert]	--	--	1.5E-01	0.1	1.91E-01	0.9	4.62E-01	--	--	0.030	2.11E+00	2.76E+00	0.059	2.76	1.0	1.0	9	413
Antimony	Coyote	0.029	1	regression	-3.233	0.938	8.0E+01	0.0073	--	--	2.4E+01	0.05*[invert]	--	--	1.2E+00	--	--	--	1	3.55E-02	0.028	2.72E+00	2.76E+00	0.059	2.76	1.0	1.0	71	3338	
Arsenic	Hermit thrush	0.198	1	0.03752	--	--	5.4E+00	regression	-1.421	0.706	8.1E+00	regression	-4.8471	0.8188	4.6E-01	0.15	1.62E-01	0.85	1.36E+00	--	--	0.104	2.98E+00	4.51E+00	2.24	4.51	1.0	1.0	67	145
Arsenic	Mourning dove	0.144	1	0.03752	--	--	1.2E+01	regression	-1.421	0.706	1.4E+01	regression	-4.8471	0.8188	8.8E-01	1	1.72E+00	--	--	--	--	0.061	2.79E+00	4.51E+00	2.24	4.51	1.0	1.0	158	317
Arsenic	Red-tailed hawk	0.084	1	0.03752	--	--	7.8E+01	regression	-1.421	0.706	5.3E+01	regression	-4.8471	0.8188	4.1E+00	--	--	--	1	3.42E-01	0.024	4.17E+00	4.51E+00	2.24	4.51	1.0	1.0	1017	2069	
Arsenic	Deer mouse	0.170	1	0.03752	--	--	1.7E+01	regression	-1.421	0.706	1.8E+01	regression	-4.8471	0.8188	1.2E+00	1	2.97E+00	--	--	--	--	0.020	1.58E+00	4.55E+00	1.04	4.55	1.0	1.0	106	465
Arsenic	Vagrant shrew	0.170	1	0.03752	--	--	1.4E+01	regression	-1.421	0.706	1.6E+01	regression	-4.8471	0.8188	1.0E+00	0.1	2.37E-01	0.9	2.41E+00	--	--	0.030	1.90E+00	4.55E+00	1.04	4.55	1.0	1.0	62	372
Arsenic	Coyote	0.029	1	0.03752	--	--	2.0E+02	regression	-1.421	0.706	1.0E+02	regression	-4.8471	0.8188	8.7E+00	--	--	--	1	2.55E-01	0.028	4.29E+00	4.55E+00	1.04	4.55	1.0	1.0	1182	5262	
Boron	Hermit thrush	0.198	1	4	--	--	4.0E+00	1	--	--	1.0E+00	0.000506	--	--	5.1E-04	0.15	1.19E-01	0.85	1.68E-01	--	--	0.104	2.06E-02	3.07E-01	--	--	1.0	1.0	--	--
Boron	Mourning dove	0.144	1	4	--	--	4.0E+00	1	--	--	1.0E+00	0.000506	--	--	5.1E-04	1	5.77E-01	--	--	--	--	0.061	8.80E-03	5.86E-01	--	--	1.0	1.0	--	--
Boron	Red-tailed hawk	0.084	1	4	--	--	4.0E+00	1	--	--	1.0E+00	0.000506	--	--	5.1E-04	--	--	--	1	4.25E-05	0.024	2.01E-03	2.06E-03	--	--	1.0	1.0	--	--	
Boron	Deer mouse	0.170	1	4	--	--	2.6E+02	1	--	--	6.4E+01	0.000506	--	--	3.2E-02	1	4.35E-01	--	--	--	--	0.020	2.17E-01	4.37E-01	10.3	43.7	1.0	1.0	15	64
Boron	Vagrant shrew	0.170	1	4	--	--	7.7E+02	1	--	--	1.9E+02	0.000506	--	--	9.8E-02	0.1	1.31E+01	0.9	2.96E+01	--	--	0.030	9.86E-01	4.37E+01	10.3	43.7	1.0	1.0	46	193
Boron	Coyote	0.029	1	4	--	--	2.1E+05	1	--	--	5.3E+04	0.000506	--	--	2.7E+01	--	--	--	1	7.76E-01	0.028	4.29E+01	4.37E+01	10.3	43.7	1.0	1.0	12397	52595	
Cadmium	Hermit thrush	0.198	1	regression	-0.475	0.546	1.7E+00	regression	2.114	0.795	3.7E+01	regression	-1.2571	0.4723	6.9E-01	0.15	5.12E-02	0.85	6.16E+00	--	--	0.104	1.34E-01	6.34E-01	1.47	6.35	1.0	1.0	1	6.5
Cadmium	Mourning dove	0.144	1	regression	-0.475	0.546	1.7E+01	regression	2.114	0.795	1.0E+03	regression	-1.2571	0.4723	5.0E+00	1	2.49E+00	--	--	--	--	0.061	3.86E+00	6.35E+00	1.47	6.35	1.0	1.0	66	439
Cadmium	Red-tailed hawk	0.084	1	regression	-0.475	0.546	4.6E+01	regression	2.114	0.795	4.4E+03	regression	-1.2571	0.4723	1.2E+01	--	--	--	1	9.90E-01	0.024	5.36E+00	6.35E+00	1.47	6.35	1.0	1.0	506	2661	
Cadmium	Deer mouse	0.170	1	regression	-0.475	0.546	2.4E+01	regression	2.114	0.795	1.7E+03	regression	-1.2571	0.4723	6.8E+00	1	4.12E+00	--	--	--	--	0.020	2.78E+00	6.90E+00	0.77	6.9	1.0	1.0	29	818
Cadmium	Vagrant shrew	0.170	1	regression	-0.475	0.546	2.0E+00	regression	2.114	0.795	4.5E+01	regression	-1.2571	0.4723	7.7E-01	0.1	3.36E-02	0.9	6.82E+00	--	--	0.030	4.24E-02	6.90E+00	0.77	6.9	1.0	1.0	1	8.3
Cadmium	Coyote	0.029	1	regression	-0.475	0.546	8.3E+01	regression	2.114	0.795	1.0E+04	regression	-1.2571	0.4723	2.0E+01	--	--	--	1	5.70E-01	0.028	6.33E+00	6.90E+00	0.77	6.9	1.0	1.0	717	7756	
Chromium	Hermit thrush	0.198	1	0.0075	--	--	2.5E+00	0.161	--	--	5.4E+01	0.00066	--	--	2.2E-01	0.15	7.44E-02	0.85	9.05E+00	--	--	0.104	6.88E+00	1.60E+01	2.66	16	1.0	1.0	56	334
Chromium	Mourning dove	0.144	1	0.0075	--	--	1.2E+01	0.161	--	--	2.6E+02	0.00066	--	--	1.1E+00	1	1.75E+00	--	--	--	--	0.061	1.42E+01	1.60E+01	2.66	16	1.0	1.0	269	1618
Chromium	Red-tailed hawk	0.084	1	0.0075	--	--	5.8E+01	0.161	--	--	1.2E+03	0.00066	--	--	5.1E+00	--	--	--	1	4.28E-01	0.024	1.56E+01	1.60E+01	2.66	16	1.0	1.0	1285	7731	
Chromium	Deer mouse	0.170	1	0.0075	--	--	9.3E+01	0.161	--	--	2.0E+03	0.00066	--	--	8.2E+00	1	1.59E+01	--	--	--	--	0.020	4.23E+01	5.82E+01	2.4	58.2	1.0	1.0	513	12445
Chromium	Vagrant shrew	0.170	1	0.0075	--	--	1.5E+01	0.161	--	--	3.1E+02	0.00066	--	--	1.3E+00	0.1	2.49E-01	0.9	4.80E+01	--	--	0.030	9.94E+00	5.82E+01	2.4	58.2	1.0	1.0	80	1950
Chromium	Coyote	0.029	1	0.0075	--	--	5.2E+02	0.161	--	--	1.1E+04	0.00066	--	--	4.6E+01	--	--	--	1	1.34E+00	0.028	5.69E+01	5.82E+01	2.4	58.2	1.0	1.0	2873	69670	
Copper	Hermit thrush	0.198	1	regression	0.668	0.394	1.9E+01	0.515	--	--	1.6E+02	regression	2.042	0.1444	1.8E+01	0.15	5.62E-01	0.85	2.77E+01	--	--	0.104	6.59E+00	3.49E+01	4.05	34.9	1.0	1.0	36	320
Copper	Mourning dove	0.144	1	regression	0.668	0.394	4.7E+01	0.515	--	--	1.6E+03	regression	2.042	0.1444	2.5E+01	1	6.76E+00	--	--	--	--	0.061	2.81E+01	3.49E+01	4.05	34.9	1.0	1.0	201	3196
Copper	Red-tailed hawk	0.084	1	regression	0.668	0.394	8.8E+01	0.515	--	--	8.3E+03	regression	2.042	0.1444	3.1E+01	--	--	--	1	2.62E+00	0.024	3.23E+01	3.49E+01	4.05	34.9	1.0	1.0	1125	16026	
Copper	Deer mouse	0.170	1	regression	0.668	0.394	9.6E+01	0.515	--	--	1.0E+04	regression	2.042	0.1444	3.2E+01	1	1.63E-01	--	--	--	--	0.020	6.64E+01	8.27E+01	5.6	82.7	1.0	1.0	510	19531
Copper	Vagrant shrew	0.170	1	regression	0.668	0.394	2.9E+01	0.515	--	--	5.0E+02	regression	2.042	0.1444	2.1E+01	0.1	5.00E-01	0.9	7.72E+01	--	--	0.030	5.00E+00	8.27E+01	5.6	82.7	1.0	1.0	65	980
Copper	Coyote	0.029	1	regression	0.668	0.394	1.8E+02	0.515	--	--	5.1E+04	regression	2.042	0.1444	4.1E+01	--	--	--	1	1.18E+00	0.028	8.15E+01	8.27E+01	5.6	82.7	1.0	1.0	5899	99864	
Lead	Hermit thrush	0.198	1	0.117	--	--	8.4E+01	0.225	--	--	1.6E+02	regression	0.0761	0.4422	2.0E+01	0.15	2.50E+00	0.85	2.73E+01	--	--	0.104	1.48E+01	4.46E+01	1.63	44.63	1.0	1.0	26	721
Lead	Mourning dove	0.144	1	0.117	--	--	2.0E+02	0.225	--	--	3.9E+02	regression	0.0761	0.4422	2.9E+01	1	2.93E-01	--	--	--	--	0.061	1.53E+01	4.46E+01	1.63	44.63	1.0	1.0	63	1737
Lead	Red-tailed hawk	0.084	1	0.117	--	--	2.2E+03	0.225	--	--	4.2E+03	regression	0.0761	0.4422	8.4E+01	--	--	--	1	7.01E+00	0.024	3.76E+01	4.46E+01	1.63						

Table G-6. Calculation of Ecological Preliminary Remedial Goals (EcoPRGs)

Analyte	Receptor	Food Intake (kg/kg-d) ^a	Area Use Factor	Exposure and Uptake Values											Uptake by Plants		Uptake by Invertebrates		Uptake by Small Mammals		Incidental Soil Ingestion		Total Daily Dosage (mg/kg-d)	TRVs		Target HQ		Receptor-specific EcoPRGs		
				Plant BAF/Regression	Regression		Estimated Plant Concentration (mg/kg)	Invertebrate BAF/Regression	Regression		Estimated Invertebrate Concentration (mg/kg)	Small Mammal BAF/Regression	Regression		Estimated Small Mammal Concentration	Diet Proportion	Dosage from Plants (mg/kg-d)	Diet Proportion	Dosage from Invertebrates (mg/kg-d)	Diet Proportion	Dosage from Small Mammals (mg/kg-d)	Diet Proportion ^b		Incidental Soil Dosage (mg/kg-d)	No Effect TRV (mg/kg-d)	Low Effect TRV (mg/kg-d)	No Effect TRV-based HQ	Low Effect TRV-based HQ	No Effect EcoPRG (mg/kg)	Low Effect EcoPRG (mg/kg)
					B0	B1			B0	B1			B0	B1																
Benzo(a)anthracene	Deer mouse	0.170	1	regression	-2.7078	0.5944	1.6E+01	1.59	--	--	1.7E+04	0	--	--	0.0E+00	1	2.78E+00	--	--	--	0.020	3.56E+01	3.84E+01	0.615	38.4	1.0	1.0	123	10472	
Benzo(a)anthracene	Vagrant shrew	0.170	1	regression	-2.7078	0.5944	1.3E+00	1.59	--	--	2.5E+02	0	--	--	0.0E+00	0.1	2.27E-02	0.9	3.76E+01	--	0.030	7.88E-01	3.84E+01	0.615	38.4	1.0	1.0	2	155	
Benzo(a)anthracene	Coyote	0.029	1	regression	-2.7078	0.5944	4.0E+01	1.59	--	--	7.5E+04	0	--	--	0.0E+00	--	--	--	1	0.00E+00	0.028	3.84E+01	3.84E+01	0.615	38.4	1.0	1.0	754	47051	
Fluoranthene	Hermit thrush	0.198	1	0.5	--	--	1.8E+02	3.04	--	--	1.1E+03	0	--	--	0.0E+00	0.15	5.34E+00	0.85	1.84E+02	--	0.104	7.41E+00	1.97E+02	39.37	196.85	1.0	1.0	72	360	
Fluoranthene	Mourning dove	0.144	1	0.5	--	--	1.2E+03	3.04	--	--	7.4E+03	0	--	--	0.0E+00	1	1.75E+02	--	--	--	0.061	2.14E+01	1.97E+02	39.37	196.85	1.0	1.0	486	2431	
Fluoranthene	Red-tailed hawk	0.084	1	0.5	--	--	4.9E+04	3.04	--	--	3.0E+05	0	--	--	0.0E+00	--	--	--	1	0.00E+00	0.024	1.97E+02	1.97E+02	39.37	196.85	1.0	1.0	19546	97732	
Fluoranthene	Deer mouse	0.170	1	0.5	--	--	2.2E+02	3.04	--	--	1.3E+05	0	--	--	0.0E+00	1	3.69E+01	--	--	--	0.020	1.48E+00	3.84E+01	0.615	38.4	1.0	1.0	7	434	
Fluoranthene	Vagrant shrew	0.170	1	0.5	--	--	4.0E+01	3.04	--	--	2.4E+02	0	--	--	0.0E+00	0.1	6.82E-01	0.9	3.73E+01	--	0.030	4.09E-01	3.84E+01	0.615	38.4	1.0	1.0	1	80	
Fluoranthene	Coyote	0.029	1	0.5	--	--	2.4E+04	3.04	--	--	1.4E+05	0	--	--	0.0E+00	--	--	--	1	0.00E+00	0.028	3.84E+01	3.84E+01	0.615	38.4	1.0	1.0	754	47051	
Phenanthrene	Hermit thrush	0.198	1	regression	--	--	1.0E+00	1.7	--	--	1.1E+03	0	--	--	0.0E+00	0.15	2.97E-02	0.85	1.84E+02	--	0.104	1.32E+01	1.97E+02	39	197	1.0	1.0	128	642	
Phenanthrene	Mourning dove	0.144	1	regression	--	--	1.0E+00	1.7	--	--	3.8E+04	0	--	--	0.0E+00	1	1.44E-01	--	--	--	0.061	1.97E+02	1.97E+02	39	197	1.0	1.0	4456	22344	
Phenanthrene	Red-tailed hawk	0.084	1	regression	--	--	1.0E+00	1.7	--	--	1.7E+05	0	--	--	0.0E+00	--	--	--	1	0.00E+00	0.024	1.97E+02	1.97E+02	39	197	1.0	1.0	19546	97732	
Phenanthrene	Deer mouse	0.170	1	regression	--	--	1.0E+00	1.7	--	--	1.9E+04	0	--	--	0.0E+00	1	1.70E-01	--	--	--	0.020	3.82E+01	3.84E+01	0.615	38.4	1.0	1.0	131	11240	
Phenanthrene	Vagrant shrew	0.170	1	regression	--	--	1.0E+00	1.7	--	--	2.5E+02	0	--	--	0.0E+00	0.1	1.70E-02	0.9	3.76E+01	--	0.030	7.38E-01	3.84E+01	0.615	38.4	1.0	1.0	2	145	
Phenanthrene	Coyote	0.029	1	regression	--	--	1.0E+00	1.7	--	--	8.0E+04	0	--	--	0.0E+00	--	--	--	1	0.00E+00	0.028	3.84E+01	3.84E+01	0.615	38.4	1.0	1.0	754	47051	
Bis (2-ethylhexyl) phthalate	Hermit thrush	0.198	1	0.05	--	--	5.0E-02	logKow	--	--	6.1E+00	0.779	--	--	7.8E-01	0.15	1.48E-03	0.85	1.03E+00	--	0.104	2.06E-02	1.06E+00	--	--	1.0	1.0	--	--	
Bis (2-ethylhexyl) phthalate	Mourning dove	0.144	1	0.05	--	--	5.0E-02	logKow	--	--	6.1E+00	0.779	--	--	7.8E-01	1	7.22E-03	--	--	--	0.061	8.80E-03	1.60E-02	--	--	1.0	1.0	--	--	
Bis (2-ethylhexyl) phthalate	Red-tailed hawk	0.084	1	0.05	--	--	5.0E-02	logKow	--	--	6.1E+00	0.779	--	--	7.8E-01	--	--	--	1	6.54E-02	0.024	2.01E-03	6.74E-02	--	--	1.0	1.0	--	--	
Bis (2-ethylhexyl) phthalate	Deer mouse	0.170	1	0.05	--	--	7.7E+02	logKow	--	--	9.4E+04	0.779	--	--	1.2E+04	1	1.31E+02	--	--	--	0.020	5.23E+01	1.83E+02	18.3	183	1.0	1.0	1537	15373	
Bis (2-ethylhexyl) phthalate	Vagrant shrew	0.170	1	0.05	--	--	9.7E+00	logKow	--	--	1.2E+03	0.779	--	--	1.5E+02	0.1	1.64E-01	0.9	1.82E+02	--	0.030	9.86E-01	1.83E+02	18.3	183	1.0	1.0	19	193	
Bis (2-ethylhexyl) phthalate	Coyote	0.029	1	0.05	--	--	3.9E+02	logKow	--	--	4.8E+04	0.779	--	--	6.1E+03	--	--	--	1	1.77E+02	0.028	6.35E+00	1.83E+02	18.3	183	1.0	1.0	778	7780	
Hexachlorobutadiene	Hermit thrush	0.198	1	0.6946307	--	--	3.3E+01	logKow	--	--	8.3E+01	1	--	--	4.7E+01	0.15	9.65E-01	0.85	1.40E+01	--	0.104	9.63E-01	1.59E+01	3	16	1.0	1.0	9	47	
Hexachlorobutadiene	Mourning dove	0.144	1	0.6946307	--	--	1.0E+02	logKow	--	--	2.6E+02	1	--	--	1.5E+02	1	1.46E+01	--	--	--	0.061	1.29E+00	1.59E+01	3	16	1.0	1.0	29	146	
Hexachlorobutadiene	Red-tailed hawk	0.084	1	0.6946307	--	--	1.3E+02	logKow	--	--	3.3E+02	1	--	--	1.9E+02	--	--	--	1	1.56E+01	0.024	3.73E-01	1.59E+01	3	16	1.0	1.0	37	185	
Hexachlorobutadiene	Deer mouse	0.170	1	0.6946307	--	--	1.1E+01	logKow	--	--	2.9E+01	1	--	--	1.6E+01	1	1.94E+00	--	--	--	0.020	5.60E-02	2.00E+00	0.2	2	1.0	1.0	2	16	
Hexachlorobutadiene	Vagrant shrew	0.170	1	0.6946307	--	--	4.8E+00	logKow	--	--	1.2E+01	1	--	--	6.9E+00	0.1	8.17E-02	0.9	1.88E+00	--	0.030	3.53E-02	2.00E+00	0.2	2	1.0	1.0	1	6.9	
Hexachlorobutadiene	Coyote	0.029	1	0.6946307	--	--	4.6E+01	logKow	--	--	1.2E+02	1	--	--	6.7E+01	--	--	--	1	1.95E+00	0.028	5.45E-02	2.00E+00	0.2	2	1.0	1.0	7	67	
Pentachlorophenol	Hermit thrush	0.198	1	0.506	--	--	1.8E+01	logKow	--	--	3.0E+02	0.777	--	--	2.8E+01	0.15	5.49E-01	0.85	5.07E+01	--	0.104	7.52E-01	5.20E+01	7	52	1.0	1.0	5	37	
Pentachlorophenol	Mourning dove	0.144	1	0.506	--	--	3.2E+02	logKow	--	--	5.2E+03	0.777	--	--	4.9E+02	1	4.64E+01	--	--	--	0.061	5.59E+00	5.20E+01	7	52	1.0	1.0	82	635	
Pentachlorophenol	Red-tailed hawk	0.084	1	0.506	--	--	3.9E+02	logKow	--	--	6.4E+03	0.777	--	--	6.0E+02	--	--	--	1	5.04E+01	0.024	1.56E+00	5.20E+01	7	52	1.0	1.0	100	774	
Pentachlorophenol	Deer mouse	0.170	1	0.506	--	--	1.3E+02	logKow	--	--	2.1E+03	0.777	--	--	2.0E+02	1	2.18E+01	--	--	--	0.020	8.63E-01	2.27E+01	8.42	22.7	1.0	1.0	94	254	
Pentachlorophenol	Vagrant shrew	0.170	1	0.506	--	--	9.0E+00	logKow	--	--	1.5E+02	0.777	--	--	1.4E+01	0.1	1.53E-01	0.9	2.25E+01	--	0.030	9.07E-02	2.27E+01	8.42	22.7	1.0	1.0	7	18	
Pentachlorophenol	Coyote	0.029	1	0.506	--	--	4.9E+02	logKow	--	--	8.0E+03	0.777	--	--	7.5E+02	--	--	--	1	2.19E+01	0.028	7.90E-01	2.27E+01	8.42	22.7	1.0	1.0	359	967	

Notes:
^a Food intake rates (IRF) were calculated using allometric relationships for the receptor group as listed below and normalized to body weight in units of kg/kg-bw/d using the following regression from Nagy (2001): Food Ingestion Rate (grams dry matter ingested/day/gram body weight) = (a x BW^b)/BW

Receptor	Group	a	b	bw	IRF
Hermit thrush	insectivorous birds	0.54	0.705	0.0301	0.198
Mourning dove	granivore (all birds)	0.638	0.685	0.112	0.144
Red-tailed hawk	carnivorous birds	0.849	0.663	0.96	0.084
Coyote	carnivorous mammals	0.102	0.864	10	0.029
Deer mouse	rodentia	0.332	0.774	0.0193	0.170
Vagrant shrew	insectivorous mamma	0.373	0.622	0.008	0.170

^b Soil ingestion rates are as follows:

Receptor	Soil ingestion %	Notes/Source
Hermit thrush	10.4%	Assume similar to woodcock (Beyer et al., 1994)
Mourning dove	6.1%	Median soil ingestion rate estimated for mourning dove in Table 3 of the USEPA EcoSSL guidance (2007a)
Red-tailed hawk	2.4%	Median soil ingestion rate estimated for red-tailed hawk in Table 3 of the USEPA EcoSSL guidance (2007a)
Coyote	2.8%	Assumed comparable to red fox (Beyer et al., 1994)
Deer mouse	2.0%	Value for white-footed mouse from Beyer et al., 1994
Vagrant shrew	3.0%	90th percentile for shrews as derived by USEPA EcoSSL guidance (2007a)

-- = not available
 BAF = bioaccumulation factor
 EcoPRG = ecological preliminary remedial goal
 HQ = hazard quotient
 kg = kilogram
 kg/kg-d = kilogram per kilogram per day
 mg/kg = milligram per kilogram
 mg/kg-d = milligram per kilogram per day
 TEQ = dioxin toxicity equivalents
 TPH = total petroleum hydrocarbons
 TRV = wildlife toxicity reference value

Most conservative receptor-specific EcoPRG for birds or mammals

Table G-7. Area Use Factors for Ecological Receptors

Representative Species	Home Range (ac)	C1DP - Total		C1DP - Area 1		C1DP - Area 2		C1DP - Area 3		C1DP - Area 4	
		Exposure Area (ac)	Area Use Factor (AUF)	Exposure Area (ac)	Area Use Factor (AUF)	Exposure Area (ac)	Area Use Factor (AUF)	Exposure Area (ac)	Area Use Factor (AUF)	Exposure Area (ac)	Area Use Factor (AUF)
Hermit thrush	1.784	2.1	1	0.06	0.0336	0.06	0.0336	0.25	0.1401	0.06	0.0336
Mourning dove	247	2.1	0.0085	0.06	0.0002	0.06	0.0002	0.25	0.0010	0.06	0.0002
Red-tailed hawk	193	2.1	0.0109	0.06	0.0003	0.06	0.0003	0.25	0.0013	0.06	0.0003
Coyote	70	2.1	0.0301	0.06	0.0009	0.06	0.0009	0.25	0.0036	0.06	0.0009
Deer mouse	2.34	2.1	0.8974	0.06	0.0256	0.06	0.0256	0.25	0.1068	0.06	0.0256
Vagrant shrew	1.07	2.1	1	0.06	0.0561	0.06	0.0561	0.25	0.2336	0.06	0.0561

Representative	Home	C2WP		C2WS		IGBP		IGSR	
		Exposure Area (ac)	Area Use Factor (AUF)	Exposure Area (ac)	Area Use Factor (AUF)	Exposure Area (ac)	Area Use Factor (AUF)	Exposure Area (ac)	Area Use Factor (AUF)
Hermit thrush	1.784	0.35	0.1962	3.8	1	0.04	0.0224	12.9	1
Mourning dove	247	0.35	0.0014	3.8	0.0154	0.04	0.0002	12.9	0.0522
Red-tailed hawk	193	0.35	0.0018	3.8	0.0197	0.04	0.0002	12.9	0.0668
Coyote	70	0.35	0.0050	3.8	0.0545	0.04	0.0006	12.9	0.1851
Deer mouse	2.34	0.35	0.1496	3.8	1	0.04	0.0171	12.9	1
Vagrant shrew	1.07	0.35	0.3271	3.8	1	0.04	0.0374	12.9	1

Notes:

Area Use Factor (AUF) - calculated by dividing the acreage of the exposure area by receptor's foraging range. If the foraging range is smaller than the site acreage, the AUF defaults to 1.

The AUFs for the hermit thrush and the vagrant shrew were selected for use in the risk estimates as these were the receptors with the lowest (most conservative EcoPRGs) for the majority of analytes evaluated in Step 3.

REC Site	Code
Copco No. 1 Debris Pile/Scrap Yard	C1DP
Copco No. 2 Burn Pit	C2BP
Copco No. 2 Former Mobil Oil Containment Bldg	C2CB
Copco No. 2 Transformer Fire	C2TF
Copco No. 2 USTs	C2UT
Copco No. 2 Wood Pile	C2WP
Copco No. 2 Wood Stave Penstock	C2WS
Iron Gate Fish Hatchery Burn Pit	IGBP
Iron Gate Fish Hatchery Settling Ponds	IGSP
Iron Gate Shooting Range	IGSR

Table G-8. Uncertainty Analysis

Assessment Element	Uncertainty	Magnitude of Impact	Direction of Impact
Problem Formulation			
Fate and Transport	It is assumed that chemical concentrations will not change over time, and that concentrations are constant during the exposure duration. Natural attenuation and/or other degradation processes may be significant in some areas resulting in an over-estimation of exposure.	Moderate	Over-estimation of exposure/risk
Representative Species	Representative species were selected to reduce uncertainty; however, differences among species including physiology, reproductive biology, and/or foraging habits can result in different exposures and sensitivities for different receptors.	Low	Over- or under-estimation of exposure/risk
Exposure Pathway Analysis	Exposure routes that are considered minor (inhalation and dermal exposure) were not included in the risk estimation. Although exposure via these routes still contributes to the total risk to each receptor, potential risks may be underestimated because these routes were not quantified.	Low	Under-estimation of exposure/risk
Analysis			
Wildlife Exposure Factors	Exposure parameters for birds and mammals were either modeled using allometric relationships (e.g., food ingestion rates) or were estimated using data from a similar species (soil ingestion rates). Use of modeling and surrogates is a potential source of uncertainty depending on the differences between site-exposures vs. laboratory exposures and differences in the selected representative species and the surrogate	Low	Over- or under-estimation of exposure/risk
Bioaccumulation Factors	Literature-based BAFs and regression models were used to estimate bioaccumulation. These uptake rates may differ from site-specific rates.	Moderate	Over- or under-estimation of exposure/risk
Bioavailability	Bioavailability of analytes is assumed to be 100%. This likely overestimates risk from some analytes.	Low	Over-estimation of exposure/risk
Exposure Point Concentrations	Risks were estimated on a sample-specific basis. This provides a very conservative evaluation as representative species do not spend their entire lifetime at one sample location. Their actual exposure varies as they forage or travel in the vicinity of the site.	Moderate	Over-estimation of exposure/risk
Risk Characterization			
Risk Estimation	Potential ecological risks were quantified using the HQ approach. The magnitude of the HQ indicates potential for ecological risk, but is not an exact estimation of risk. For example, the actual risk from a chemical with an HQ of 70 could be less than that for a chemical with an HQ of 20 because of uncertainties involved in estimating exposure, selection of effects criteria (TRVs), or field conditions affecting exposure.	Moderate	Over- or under-estimation of risks

Notes:

HQ = hazard quotient

LOAEL = lowest observed adverse effect level

NOAEL = no observed adverse effect level

TRV = toxicity reference value

Table G-12. Ecological Risk Estimates - Copco No. 2 Transformer Fire

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c		Screening HQs		Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary							
										No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal	Bkg HQ	No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF EcoPRG HQ	Mammal AUF EcoPRG HQ
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Acenaphthene	mg/kg	0.015		Y	--	0.25	1300	--	--	0.0067	0.0112	--	6E-02	1E-05	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Acenaphthene	mg/kg	0.0008	J	Y	--	0.25	1300	--	--	0.0067	0.0112	--	3E-03	6E-07	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Acenaphthene	mg/kg	0.0005	U	N	--	0.25	1300	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Acenaphthene	mg/kg	0.0005	U	N	--	0.25	1300	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Acenaphthylene	mg/kg	0.01		Y	--	120	1200	--	--	0.0067	0.0112	--	8E-05	8E-06	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Acenaphthylene	mg/kg	0.003	J	Y	--	120	1200	--	--	0.0067	0.0112	--	3E-05	3E-06	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Acenaphthylene	mg/kg	0.0005	U	N	--	120	1200	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Acenaphthylene	mg/kg	0.0004	U	N	--	120	1200	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Anthracene	mg/kg	0.04		Y	--	6.8	2100	--	--	0.0067	0.0112	--	6E-03	2E-05	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Anthracene	mg/kg	0.0054		Y	--	6.8	2100	--	--	0.0067	0.0112	--	8E-04	3E-06	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Anthracene	mg/kg	0.0005	U	N	--	6.8	2100	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Anthracene	mg/kg	0.0005	U	N	--	6.8	2100	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Benzo(a)anthracene	mg/kg	0.13		Y	--	0.73	7.3	683	155	0.0067	0.0112	--	2E-01	2E-02	2E-04	8E-04	1E-06	9E-06	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Benzo(a)anthracene	mg/kg	0.022		Y	--	0.73	7.3	683	155	0.0067	0.0112	--	3E-02	3E-03	3E-05	1E-04	2E-07	2E-06	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Benzo(a)anthracene	mg/kg	0.0016	U	N	--	0.73	7.3	683	155	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Benzo(a)anthracene	mg/kg	0.0015	U	N	--	0.73	7.3	683	155	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Benzo(a)pyrene	mg/kg	0.31		Y	--	62	190	--	--	0.0067	0.0112	--	5E-03	2E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Benzo(a)pyrene	mg/kg	0.072		Y	--	62	190	--	--	0.0067	0.0112	--	1E-03	4E-04	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Benzo(a)pyrene	mg/kg	0.0008	U	N	--	62	190	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Benzo(a)pyrene	mg/kg	0.0007	U	N	--	62	190	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Benzo(b)fluoranthene	mg/kg	0.55		Y	--	18	440	--	--	0.0067	0.0112	--	3E-02	1E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Benzo(b)fluoranthene	mg/kg	0.14		Y	--	18	440	--	--	0.0067	0.0112	--	8E-03	3E-04	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Benzo(b)fluoranthene	mg/kg	0.001	U	N	--	18	440	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Benzo(b)fluoranthene	mg/kg	0.001	U	N	--	18	440	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Benzo(g,h,i)perylene	mg/kg	0.39		Y	--	25	250	--	--	0.0067	0.0112	--	2E-02	2E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Benzo(g,h,i)perylene	mg/kg	0.088		Y	--	25	250	--	--	0.0067	0.0112	--	4E-03	4E-04	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Benzo(g,h,i)perylene	mg/kg	0.0005	U	N	--	25	250	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Benzo(g,h,i)perylene	mg/kg	0.0004	U	N	--	25	250	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Benzo(k)fluoranthene	mg/kg	0.19		Y	--	71	710	--	--	0.0067	0.0112	--	3E-03	3E-04	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Benzo(k)fluoranthene	mg/kg	0.047		Y	--	71	710	--	--	0.0067	0.0112	--	7E-04	7E-05	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Benzo(k)fluoranthene	mg/kg	0.0005	U	N	--	71	710	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Benzo(k)fluoranthene	mg/kg	0.0005	U	N	--	71	710	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Chrysene	mg/kg	0.24		Y	--	3.1	31	--	--	0.0067	0.0112	--	8E-02	8E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Chrysene	mg/kg	0.052		Y	--	3.1	31	--	--	0.0067	0.0112	--	2E-02	2E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Chrysene	mg/kg	0.0013	U	N	--	3.1	31	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Chrysene	mg/kg	0.0013	U	N	--	3.1	31	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Dibenzo(a,h)anthracene	mg/kg	0.06		Y	--	14	140	--	--	0.0067	0.0112	--	4E-03	4E-04	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Dibenzo(a,h)anthracene	mg/kg	0.014		Y	--	14	140	--	--	0.0067	0.0112	--	1E-03	1E-04	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Dibenzo(a,h)anthracene	mg/kg	0.0006	U	N	--	14	140	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Dibenzo(a,h)anthracene	mg/kg	0.0006	U	N	--	14	140	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Fluoranthene	mg/kg	0.23		Y	--	10	23	360	80	0.0067	0.0112	--	2E-02	1E-02	6E-04	3E-03	4E-06	3E-05	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Fluoranthene	mg/kg	0.031		Y	--	10	23	360	80	0.0067	0.0112	--	3E-03	1E-03	9E-05	4E-04	6E-07	4E-06	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Fluoranthene	mg/kg	0.0012	U	N	--	10	23	360	80	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Fluoranthene	mg/kg	0.0012	U	N	--	10	23	360	80	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Fluorene	mg/kg	0.0087		Y	--	3.7	19	--	--	0.0067	0.0112	--	2E-03	5E-04	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Fluorene	mg/kg	0.0005	U	N	--	3.7	19	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Fluorene	mg/kg	0.0005	U	N	--	3.7	19	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Fluorene	mg/kg	0.0004	U	N	--	3.7	19	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Indeno(1,2,3-cd)pyrene	mg/kg	0.38		Y	--	71	710	--	--	0.0067	0.0112	--	5E-03	5E-04	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Indeno(1,2,3-cd)pyrene	mg/kg	0.088		Y	--	71	710	--	--	0.0067	0.0112	--	1E-03	1E-04	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Indeno(1,2,3-cd)pyrene	mg/kg	0.0005	U	N	--	71	710	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-03	O	PAH	Indeno(1,2,3-cd)pyrene	mg/kg	0.0005	U	N	--	71	710	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Transformer Fire	C2TF-01	O	PAH	Naphthalene	mg/kg	0.027		Y																					

Table G-12. Ecological Risk Estimates - Copco No. 2 Transformer Fire

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c		Screening HQs			Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary											
										No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal	Bkg HQ	No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF HQ	Mammal AUF EcoPRG HQ					
CA-Copco No. 2 Transformer Fire	C2TF-03	O	VOC	Xylenes, m & p	mg/kg	0.0007	U	N	--	1.4	1.8	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CA-Copco No. 2 Transformer Fire	C2TF-01	O	VOC	Xylenes, m & p	mg/kg	0.0006	U	N	--	1.4	1.8	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CA-Copco No. 2 Transformer Fire	C2TF-01	O	VOC	Xylenes, m & p	mg/kg	0.0006	UJ	N	--	1.4	1.8	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CA-Copco No. 2 Transformer Fire	C2TF-03	O	VOC	Xylenes, m & p	mg/kg	0.0006	U	N	--	1.4	1.8	--	--	0.0067	0.0112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

^a Screening Levels - No Effect ESLs are based on no observed adverse effect levels (NOAELs) and are the most conservative among plants, invertebrates, birds, and mammals. Low Effect ESLs are based on lowest observed adverse effect levels (LOAELs) for birds and mammals.

^b Site-specific ecological preliminary remedial goals (EcoPRGs) are risk-based concentrations calculated for receptors that would potentially be found in the area around the Klamath project sites. The bird and mammal EcoPRGs selected for use in the risk estimates are the most conservative of the risk-based values calculated for birds and mammals from the major feeding guilds (herbivores, invertebrates, and carnivores) using LOAEL toxicity values and an AUF=1 (100% site use). Supporting information and calculation of EcoPRGs is presented in Appendix G, Table G-2 through Table G-7.

^c Area use factors for the hermit thrush and vagrant shrew were selected for use in the risk estimates as these two receptors had the most conservative risk-based concentrations. The AUF is calculated from the receptors home range vs the size of the REC. Supporting information and calculation of AUFs is presented in Appendix G, Table G-7.

-- = not available or not applicable

<1 = less than 1

>1 = greater than 1

AUF = area use factor

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient - all values presented to 1 significant figure

ND = not detected

Step 1 = analyte was eliminated in Step 1 of the ecological risk evaluation. No Effect screening HQ was less than 1.

Step 2 = analyte was retained after Step 1 (the screening HQ >1), but was eliminated in Step 2 (the refined HQ <1).

Table G-14. Ecological Risk Estimates - Copco No. 2 USTs

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c		Screening HQs			Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary								
										No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal	Bkg HQ	No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF EcoPRG HQ	Mammal AUF EcoPRG HQ		
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Acenaphthene	mg/kg	0.0007	J	Y	--	0.25	1300	--	--	0.3083	0.514	--	3E-03	5E-07	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Acenaphthene	mg/kg	0.0008	U	N	--	0.25	1300	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Acenaphthene	mg/kg	0.0007	U	N	--	0.25	1300	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Acenaphthene	mg/kg	0.0007	U	N	--	0.25	1300	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Acenaphthene	mg/kg	0.0006	U	N	--	0.25	1300	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Acenaphthylene	mg/kg	0.0031	J	Y	--	120	1200	--	--	0.3083	0.514	--	3E-05	3E-06	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Acenaphthylene	mg/kg	0.0007	U	N	--	120	1200	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Acenaphthylene	mg/kg	0.0006	U	N	--	120	1200	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Acenaphthylene	mg/kg	0.0006	U	N	--	120	1200	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Acenaphthylene	mg/kg	0.0005	U	N	--	120	1200	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Anthracene	mg/kg	0.0018	J	Y	--	6.8	2100	--	--	0.3083	0.514	--	3E-04	9E-07	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Anthracene	mg/kg	0.0011	J	Y	--	6.8	2100	--	--	0.3083	0.514	--	2E-04	5E-07	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Anthracene	mg/kg	0.001	J	Y	--	6.8	2100	--	--	0.3083	0.514	--	1E-04	5E-07	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Anthracene	mg/kg	0.0009	J	Y	--	6.8	2100	--	--	0.3083	0.514	--	1E-04	4E-07	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Anthracene	mg/kg	0.0006	U	N	--	6.8	2100	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Benzo(a)anthracene	mg/kg	0.0051	J	Y	--	0.73	7.3	683	155	0.3083	0.514	--	7E-03	7E-04	7E-06	3E-05	2E-06	2E-05	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Benzo(a)anthracene	mg/kg	0.0021	U	N	--	0.73	7.3	683	155	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Benzo(a)anthracene	mg/kg	0.002	U	N	--	0.73	7.3	683	155	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Benzo(a)anthracene	mg/kg	0.0018	U	N	--	0.73	7.3	683	155	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Benzo(a)anthracene	mg/kg	0.0018	U	N	--	0.73	7.3	683	155	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Benzo(a)pyrene	mg/kg	0.0054	J	Y	--	62	190	--	--	0.3083	0.514	--	9E-05	3E-05	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Benzo(a)pyrene	mg/kg	0.001	U	N	--	62	190	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Benzo(a)pyrene	mg/kg	0.001	U	N	--	62	190	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Benzo(a)pyrene	mg/kg	0.0009	U	N	--	62	190	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Benzo(a)pyrene	mg/kg	0.0009	U	N	--	62	190	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Benzo(b)fluoranthene	mg/kg	0.012	J	Y	--	18	440	--	--	0.3083	0.514	--	7E-04	3E-05	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Benzo(b)fluoranthene	mg/kg	0.0034	J	Y	--	18	440	--	--	0.3083	0.514	--	2E-04	8E-06	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Benzo(b)fluoranthene	mg/kg	0.0014	U	N	--	18	440	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Benzo(b)fluoranthene	mg/kg	0.0013	U	N	--	18	440	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Benzo(b)fluoranthene	mg/kg	0.0012	U	N	--	18	440	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Benzo(g,h,i)perylene	mg/kg	0.0093	J	Y	--	25	250	--	--	0.3083	0.514	--	4E-04	4E-05	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Benzo(g,h,i)perylene	mg/kg	0.0061	J	Y	--	25	250	--	--	0.3083	0.514	--	2E-04	2E-05	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Benzo(g,h,i)perylene	mg/kg	0.004	J	Y	--	25	250	--	--	0.3083	0.514	--	2E-04	2E-05	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Benzo(g,h,i)perylene	mg/kg	0.0021	J	Y	--	25	250	--	--	0.3083	0.514	--	8E-05	8E-06	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Benzo(g,h,i)perylene	mg/kg	0.0006	U	N	--	25	250	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Benzo(k)fluoranthene	mg/kg	0.0043	J	Y	--	71	710	--	--	0.3083	0.514	--	6E-05	6E-06	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Benzo(k)fluoranthene	mg/kg	0.0007	U	N	--	71	710	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Benzo(k)fluoranthene	mg/kg	0.0007	U	N	--	71	710	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Benzo(k)fluoranthene	mg/kg	0.0006	U	N	--	71	710	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Benzo(k)fluoranthene	mg/kg	0.0006	U	N	--	71	710	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Chrysene	mg/kg	0.0093	J	Y	--	3.1	31	--	--	0.3083	0.514	--	3E-03	3E-04	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Chrysene	mg/kg	0.0018	U	N	--	3.1	31	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Chrysene	mg/kg	0.0017	U	N	--	3.1	31	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Chrysene	mg/kg	0.0016	U	N	--	3.1	31	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Chrysene	mg/kg	0.0015	U	N	--	3.1	31	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Dibenzo(a,h)anthracene	mg/kg	0.0044	J	Y	--	14	140	--	--	0.3083	0.514	--	3E-04	3E-05	--	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Dibenzo(a,h)anthracene	mg/kg	0.0008	U	N	--	14	140	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Dibenzo(a,h)anthracene	mg/kg	0.0008	U	N	--	14	140	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Dibenzo(a,h)anthracene	mg/kg	0.0008	U	N	--	14	140	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Dibenzo(a,h)anthracene	mg/kg	0.0007	U	N	--	14	140	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Fluoranthene	mg/kg	0.01	J																								

Table G-14. Ecological Risk Estimates - Copco No. 2 USTs

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c		Screening HQs			Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary							
										No Effect	Low Effect	Bird	Mammal	Bird	Mammal	Bkg HQ	No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF EcoPRG HQ	Mammal AUF EcoPRG HQ	
										ESL	ESL	EcoPRG	EcoPRG																	
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Naphthalene	mg/kg	0.02		Y	--	1	27	--	--	0.3083	0.514	--	2E-02	7E-04	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Naphthalene	mg/kg	0.0029	J	Y	--	1	27	--	--	0.3083	0.514	--	3E-03	1E-04	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Naphthalene	mg/kg	0.0025	U	N	--	1	27	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Naphthalene	mg/kg	0.0024	U	N	--	1	27	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Naphthalene	mg/kg	0.0022	U	N	--	1	27	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Naphthalene	mg/kg	0.0022	U	N	--	1	27	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Naphthalene	mg/kg	0.0021	U	N	--	1	27	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Naphthalene	mg/kg	0.0019	U	N	--	1	27	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Naphthalene	mg/kg	0.0018	U	N	--	1	27	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Naphthalene	mg/kg	0.0016	U	N	--	1	27	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Phenanthrene	mg/kg	0.0073		Y	--	5.5	12	642	145	0.3083	0.514	--	1E-03	6E-04	1E-05	5E-05	4E-06	3E-05	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Phenanthrene	mg/kg	0.0048	J	Y	--	5.5	12	642	145	0.3083	0.514	--	9E-04	4E-04	7E-06	3E-05	2E-06	2E-05	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Phenanthrene	mg/kg	0.0019	U	N	--	5.5	12	642	145	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Phenanthrene	mg/kg	0.0019	U	N	--	5.5	12	642	145	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Phenanthrene	mg/kg	0.0016	U	N	--	5.5	12	642	145	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	PAH	Pyrene	mg/kg	0.009		Y	--	10	230	--	--	0.3083	0.514	--	9E-04	4E-05	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-13	O	PAH	Pyrene	mg/kg	0.0057		Y	--	10	230	--	--	0.3083	0.514	--	6E-04	2E-05	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-11	O	PAH	Pyrene	mg/kg	0.0032	J	Y	--	10	230	--	--	0.3083	0.514	--	3E-04	1E-05	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-10	O	PAH	Pyrene	mg/kg	0.0016	J	Y	--	10	230	--	--	0.3083	0.514	--	2E-04	7E-06	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-12	O	PAH	Pyrene	mg/kg	0.0013	J	Y	--	10	230	--	--	0.3083	0.514	--	1E-04	6E-06	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-13	O	SVOC	1-Methylnaphthalene	mg/kg	0.0023	J	Y	--	--	--	--	--	0.3083	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Copco No. 2 USTs	C2UT-12	O	SVOC	1-Methylnaphthalene	mg/kg	0.001	J	Y	--	--	--	--	--	0.3083	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Copco No. 2 USTs	C2UT-14	O	SVOC	1-Methylnaphthalene	mg/kg	0.0008	U	N	--	--	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	SVOC	1-Methylnaphthalene	mg/kg	0.0007	U	N	--	--	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	SVOC	1-Methylnaphthalene	mg/kg	0.0006	U	N	--	--	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-13	O	SVOC	2-Methylnaphthalene	mg/kg	0.0048	J	Y	--	16	160	--	--	0.3083	0.514	--	3E-04	3E-05	--	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1
CA-Copco No. 2 USTs	C2UT-14	O	SVOC	2-Methylnaphthalene	mg/kg	0.0027	U	N	--	16	160	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-12	O	SVOC	2-Methylnaphthalene	mg/kg	0.0024	U	N	--	16	160	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	SVOC	2-Methylnaphthalene	mg/kg	0.0023	U	N	--	16	160	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	SVOC	2-Methylnaphthalene	mg/kg	0.0021	U	N	--	16	160	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	TPH	Diesel Range Organics	mg/kg	17	J	Y	--	--	--	--	--	0.3083	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Copco No. 2 USTs	C2UT-13	O	TPH	Diesel Range Organics	mg/kg	14	J	Y	--	--	--	--	--	0.3083	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Copco No. 2 USTs	C2UT-14	O	TPH	Diesel Range Organics	mg/kg	14	J	Y	--	--	--	--	--	0.3083	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Copco No. 2 USTs	C2UT-11	O	TPH	Diesel Range Organics	mg/kg	12	J	Y	--	--	--	--	--	0.3083	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Copco No. 2 USTs	C2UT-12	O	TPH	Diesel Range Organics	mg/kg	12	U	N	--	--	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	TPH	Extended Range Organics	mg/kg	62		Y	--	--	--	--	--	0.3083	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Copco No. 2 USTs	C2UT-13	O	TPH	Extended Range Organics	mg/kg	60		Y	--	--	--	--	--	0.3083	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Copco No. 2 USTs	C2UT-11	O	TPH	Extended Range Organics	mg/kg	54		Y	--	--	--	--	--	0.3083	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Copco No. 2 USTs	C2UT-14	O	TPH	Extended Range Organics	mg/kg	48	J	Y	--	--	--	--	--	0.3083	0.514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Copco No. 2 USTs	C2UT-12	O	TPH	Extended Range Organics	mg/kg	24	U	N	--	--	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	TPH	Gasoline Range Organics	mg/kg	2	U	N	--	--	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-14	O	TPH	Gasoline Range Organics	mg/kg	1.8	U	N	--	--	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-13	O	TPH	Gasoline Range Organics	mg/kg	1.7	U	N	--	--	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-12	O	TPH	Gasoline Range Organics	mg/kg	1.6	U	N	--	--	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	TPH	Gasoline Range Organics	mg/kg	1.4	U	N	--	--	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-10	O	VOC	1,1,1,2-Tetrachloroethane	mg/kg	0.0008	U	N	--	0.07	--	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-11	O	VOC	1,1,1,2-Tetrachloroethane	mg/kg	0.0008	U	N	--	0.07	--																			

Table G-14. Ecological Risk Estimates - Copco No. 2 USTs

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c		Screening HQs			Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary												
										No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal	Bkg HQ	No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF HQ	Mammal AUF HQ						
CA-Copco No. 2 USTs	C2UT-10	O	VOC	Xylenes, Total	mg/kg	0.0013	U	N	--	1.4	1.8	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CA-Copco No. 2 USTs	C2UT-11	O	VOC	Xylenes, Total	mg/kg	0.0012	U	N	--	1.4	1.8	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CA-Copco No. 2 USTs	C2UT-13	O	VOC	Xylenes, Total	mg/kg	0.0011	U	N	--	1.4	1.8	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CA-Copco No. 2 USTs	C2UT-14	O	VOC	Xylenes, Total	mg/kg	0.0011	UJ	N	--	1.4	1.8	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 USTs	C2UT-12	O	VOC	Xylenes, Total	mg/kg	0.0009	U	N	--	1.4	1.8	--	--	0.3083	0.514	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

^a Screening Levels - No Effect ESLs are based on no observed adverse effect levels (NOAELs) and are the most conservative among plants, invertebrates, birds, and mammals. Low Effect ESLs are based on lowest observed adverse effect levels (LOAELs) for birds and mammals.

^b Site-specific ecological preliminary remedial goals (EcoPRGs) are risk-based concentrations calculated for receptors that would potentially be found in the area around the Klamath project sites. The bird and mammal EcoPRGs selected for use in the risk estimates are the most conservative of the risk-based values calculated for birds and mammals from the major feeding guilds (herbivores, invertebrates, and carnivores) using LOAEL toxicity values and an AUF=1 (100% site use). Supporting information and calculation of EcoPRGs is presented in Appendix G, Table G-2 through Table G-7.

^c Area use factors for the hermit thrush and vagrant shrew were selected for use in the risk estimates as these two receptors had the most conservative risk-based concentrations. The AUF is calculated from the receptors home range vs the size of the REC. Supporting information and calculation of AUFs is presented in Appendix G, Table G-7.

-- = not available or not applicable

<1 = less than 1

>1 = greater than 1

AUF = area use factor

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient - all values presented to 1 significant figure

ND = not detected

Step 1 = analyte was eliminated in Step 1 of the ecological risk evaluation. No Effect screening HQ was less than 1.

Step 2 = analyte was retained after Step 1 (the screening HQ >1), but was eliminated in Step 2 (the refined HQ <1).

Table G-15. Ecological Risk Estimates - Copco No. 2 Burn Pit

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c		Bkg HQ	Screening HQs		Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary											
										No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal		No Effect HQ	Low Effect HQ	Bird	Mammal	Bird	Mammal	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG	Mammal EcoPRG	Bird AUF	Mammal AUF					
CA-Copco No. 2 Burn Pit	C2BP-08	0	VOC	Xylenes, Total	mg/kg	0.0013	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-08	0	VOC	Xylenes, Total	mg/kg	0.0013	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-09	0	VOC	Xylenes, Total	mg/kg	0.0013	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-12	0	VOC	Xylenes, Total	mg/kg	0.0013	UJ	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-12	0	VOC	Xylenes, Total	mg/kg	0.0013	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-06	0	VOC	Xylenes, Total	mg/kg	0.0012	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-07	0	VOC	Xylenes, Total	mg/kg	0.0012	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-10	0	VOC	Xylenes, Total	mg/kg	0.0012	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-12	0	VOC	Xylenes, Total	mg/kg	0.0012	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-12	0	VOC	Xylenes, Total	mg/kg	0.0012	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-01	0	VOC	Xylenes, Total	mg/kg	0.0011	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-01	0	VOC	Xylenes, Total	mg/kg	0.0011	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-03	0	VOC	Xylenes, Total	mg/kg	0.0011	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-05	0	VOC	Xylenes, Total	mg/kg	0.0011	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-07	0	VOC	Xylenes, Total	mg/kg	0.0011	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-09	0	VOC	Xylenes, Total	mg/kg	0.0011	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-09	0	VOC	Xylenes, Total	mg/kg	0.0011	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-10	0	VOC	Xylenes, Total	mg/kg	0.0011	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-10	0	VOC	Xylenes, Total	mg/kg	0.0011	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-02	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-03	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-03	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-04	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-04	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-06	0	VOC	Xylenes, Total	mg/kg	0.001	UJ	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-08	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-10	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-11	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-11	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-05	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-06	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-04	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-07	0	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-09	0	VOC	Xylenes, Total	mg/kg	0.0009	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-11	0	VOC	Xylenes, Total	mg/kg	0.0009	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Copco No. 2 Burn Pit	C2BP-04	0	VOC	Xylenes, Total	mg/kg	0.0009	U	N	--	1.4	1.8	--	--	0.2803	0.4673	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

^a Screening Levels - No Effect ESLs are based on no observed adverse effect levels (NOAELs) and are the most conservative among plants, invertebrates, birds, and mammals. Low Effect ESLs are based on lowest observed adverse effect levels (LOAELs) for birds and mammals.

^b Site-specific ecological preliminary remedial goals (EcoPRGs) are risk-based concentrations calculated for receptors that would potentially be found in the area around the Klamath project sites. The bird and mammal EcoPRGs selected for use in the risk estimates are the most conservative of the risk-based values calculated for birds and mammals from the major feeding guilds (herbivores, invertebrates, and carnivores) using LOAEL toxicity values and an AUF=1 (100% site use). Supporting information and calculation of EcoPRGs is presented in Appendix G, Table G-2 through Table G-7.

^c Area use factors for the hermit thrush and vagrant shrew were selected for use in the risk estimates as these two receptors had the most conservative risk-based concentrations. The AUF is calculated from the receptors home range versus the size of the REC. Supporting information and calculation of AUFs is presented in Appendix G, Table G-7.

-- = not available or not applicable

<1 = less than 1

>1 = greater than 1

AUF = area use factor

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient - all values presented to 1 significant figure

ND = not detected

Step 1 = analyte was eliminated in Step 1 of the ecological risk evaluation. No Effect screening HQ was less than 1.

Step 2 = analyte was retained after Step 1 (the screening HQ >1), but was eliminated in Step 2 (the refined HQ <1).

Table G-16. Ecological Risk Estimates - Iron Gate Shooting Range

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c		Bkg HQ	Screening HQs		Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary														
										No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal		No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF EcoPRG HQ	Mammal AUF EcoPRG HQ								
CA-Iron Gate Shooting Range	IGSR-16	O	SVOC	2-Methylnaphthalene	mg/kg	0.0023	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-17	O	SVOC	2-Methylnaphthalene	mg/kg	0.0023	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-21	O	SVOC	2-Methylnaphthalene	mg/kg	0.0023	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-27	O	SVOC	2-Methylnaphthalene	mg/kg	0.0023	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-01	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-02	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-03	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-03	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-06	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-10	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-10	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-10	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-13	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-19	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-21	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-25	O	SVOC	2-Methylnaphthalene	mg/kg	0.0022	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-02	O	SVOC	2-Methylnaphthalene	mg/kg	0.0021	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-04	O	SVOC	2-Methylnaphthalene	mg/kg	0.0021	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-06	O	SVOC	2-Methylnaphthalene	mg/kg	0.0021	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-09	O	SVOC	2-Methylnaphthalene	mg/kg	0.0021	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-26	O	SVOC	2-Methylnaphthalene	mg/kg	0.0021	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-03	O	SVOC	2-Methylnaphthalene	mg/kg	0.002	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-09	O	SVOC	2-Methylnaphthalene	mg/kg	0.002	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-11	O	SVOC	2-Methylnaphthalene	mg/kg	0.002	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-19	O	SVOC	2-Methylnaphthalene	mg/kg	0.002	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-23	O	SVOC	2-Methylnaphthalene	mg/kg	0.002	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-26	O	SVOC	2-Methylnaphthalene	mg/kg	0.0019	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Shooting Range	IGSR-01	O	SVOC	2-Methylnaphthalene	mg/kg	0.0018	U	N	--	16	160	--	--	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

^a Screening Levels - No Effect ESLs are based on no observed adverse effect levels (NOAELs) and are the most conservative among plants, invertebrates, birds, and mammals. Low Effect ESLs are based on lowest observed adverse effect levels (LOAELs) for birds and mammals.

^b Site-specific ecological preliminary remedial goals (EcoPRGs) are risk-based concentrations calculated for receptors that would potentially be found in the area around the Klamath project sites. The bird and mammal EcoPRGs selected for use in the risk estimates are the most conservative of the risk-based values calculated for birds and mammals from the major feeding guilds (herbivores, invertebrates, and carnivores) using LOAEL toxicity values and an AUF=1 (100% site use). Supporting information and calculation of EcoPRGs is presented in Appendix G, Table G-2 through Table G-7.

^c Area use factors for the hermit thrush and vagrant shrew were selected for use in the risk estimates as these two receptors had the most conservative risk-based concentrations. The AUF is calculated from the receptors home range vs the size of the REC. Supporting information and calculation of AUFs is presented in Appendix G, Table G-7.

-- = not available or not applicable

<1 = less than 1

>1 = greater than 1

AUF = area use factor

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient - all values presented to 1 significant figure

ND = not detected

Step 1 = analyte was eliminated in Step 1 of the ecological risk evaluation. No Effect screening HQ was less than 1.

Step 2 = analyte was retained after Step 1 (the screening HQ >1), but was eliminated in Step 2 (the refined HQ <1).

Table G-17. Ecological Risk Estimates - Iron Gate Fish Hatchery Burn Pit

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c		Bkg HQ	Screening HQs		Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary						
										No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal		No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF EcoPRG HQ	Mammal AUF EcoPRG HQ
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Antimony	mg/kg	7.8		Y	0.67	0.27	23	--	342	0.0224	0.0374	1E+01	3E+01	3E-01	--	2E-02	--	9E-04	1E+01	3E+01	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Antimony	mg/kg	3.2	J	Y	0.67	0.27	23	--	342	0.0224	0.0374	5E+00	1E+01	1E-01	--	9E-03	--	3E-04	5E+00	1E+01	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Antimony	mg/kg	0.41		Y	0.67	0.27	23	--	342	0.0224	0.0374	6E-01	2E+00	2E-02	--	1E-03	--	4E-05	<1	2E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Antimony	mg/kg	0.36		Y	0.67	0.27	23	--	342	0.0224	0.0374	5E-01	1E+00	2E-02	--	1E-03	--	4E-05	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Antimony	mg/kg	0.35		Y	0.67	0.27	23	--	342	0.0224	0.0374	5E-01	1E+00	2E-02	--	1E-03	--	4E-05	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Antimony	mg/kg	0.28	J	Y	0.67	0.27	23	--	342	0.0224	0.0374	4E-01	1E+00	1E-02	--	8E-04	--	3E-05	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Antimony	mg/kg	0.21	J	Y	0.67	0.27	23	--	342	0.0224	0.0374	3E-01	8E-01	9E-03	--	6E-04	--	2E-05	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Antimony	mg/kg	0.2	J	Y	0.67	0.27	23	--	342	0.0224	0.0374	3E-01	7E-01	9E-03	--	6E-04	--	2E-05	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Arsenic	mg/kg	86	J	Y	19	6.8	51	145	372	0.0224	0.0374	5E+00	1E+01	2E+00	6E-01	2E-01	1E-02	9E-03	5E+00	1E+01	2E+00	<1	<1	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Arsenic	mg/kg	33		Y	19	6.8	51	145	372	0.0224	0.0374	2E+00	5E+00	6E-01	2E-01	9E-02	2E-01	9E-02	5E+00	5E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Arsenic	mg/kg	9	J	Y	19	6.8	51	145	372	0.0224	0.0374	5E-01	1E+00	2E-01	6E-02	2E-02	1E-03	9E-04	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Arsenic	mg/kg	6.9	J	Y	19	6.8	51	145	372	0.0224	0.0374	4E-01	1E+00	1E-01	5E-02	2E-02	1E-03	7E-04	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Arsenic	mg/kg	5.5		Y	19	6.8	51	145	372	0.0224	0.0374	3E-01	8E-01	1E-01	4E-02	1E-02	8E-04	6E-04	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Arsenic	mg/kg	4.6		Y	19	6.8	51	145	372	0.0224	0.0374	2E-01	7E-01	9E-02	3E-02	1E-02	7E-04	5E-04	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Arsenic	mg/kg	3.7		Y	19	6.8	51	145	372	0.0224	0.0374	2E-01	5E-01	7E-02	3E-02	1E-02	6E-04	4E-04	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Arsenic	mg/kg	2.9		Y	19	6.8	51	145	372	0.0224	0.0374	2E-01	4E-01	6E-02	2E-02	8E-03	4E-04	3E-04	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Barium	mg/kg	230		Y	630	110	1200	--	--	0.0224	0.0374	4E-01	2E+00	2E-01	--	--	--	--	<1	2E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Barium	mg/kg	200		Y	630	110	1200	--	--	0.0224	0.0374	3E-01	2E+00	2E-01	--	--	--	--	<1	2E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Barium	mg/kg	150	J	Y	630	110	1200	--	--	0.0224	0.0374	2E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Barium	mg/kg	150		Y	630	110	1200	--	--	0.0224	0.0374	2E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Barium	mg/kg	130		Y	630	110	1200	--	--	0.0224	0.0374	2E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Barium	mg/kg	130		Y	630	110	1200	--	--	0.0224	0.0374	2E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Barium	mg/kg	120	J	Y	630	110	1200	--	--	0.0224	0.0374	2E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Barium	mg/kg	120		Y	630	110	1200	--	--	0.0224	0.0374	2E-01	1E+00	1E-01	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Beryllium	mg/kg	0.8		Y	2.1	2.5	25	--	--	0.0224	0.0374	4E-01	3E-01	3E-02	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Beryllium	mg/kg	0.7		Y	2.1	2.5	25	--	--	0.0224	0.0374	3E-01	3E-01	3E-02	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Beryllium	mg/kg	0.69		Y	2.1	2.5	25	--	--	0.0224	0.0374	3E-01	3E-01	3E-02	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Beryllium	mg/kg	0.69		Y	2.1	2.5	25	--	--	0.0224	0.0374	3E-01	3E-01	3E-02	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Beryllium	mg/kg	0.68		Y	2.1	2.5	25	--	--	0.0224	0.0374	3E-01	3E-01	3E-02	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Beryllium	mg/kg	0.66		Y	2.1	2.5	25	--	--	0.0224	0.0374	3E-01	3E-01	3E-02	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Beryllium	mg/kg	0.6		Y	2.1	2.5	25	--	--	0.0224	0.0374	3E-01	2E-01	2E-02	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Beryllium	mg/kg	0.6		Y	2.1	2.5	25	--	--	0.0224	0.0374	3E-01	2E-01	2E-02	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Boron	mg/kg	40	J	Y	--	2	10	--	64	0.0224	0.0374	--	2E+01	4E+00	--	6E-01	--	2E-02	--	2E+01	4E+00	--	<1	--	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Boron	mg/kg	17	J	Y	--	2	10	--	64	0.0224	0.0374	--	9E+00	2E+00	--	3E-01	--	1E-02	--	9E+00	2E+00	--	<1	--	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Boron	mg/kg	10	J	Y	--	2	10	--	64	0.0224	0.0374	--	5E+00	1E+00	--	2E-01	--	6E-03	--	5E+00	1E+00	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Boron	mg/kg	8.4	J	Y	--	2	10	--	64	0.0224	0.0374	--	4E+00	8E-01	--	1E-01	--	5E-03	--	4E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Boron	mg/kg	6.8	J	Y	--	2	10	--	64	0.0224	0.0374	--	3E+00	7E-01	--	1E-01	--	4E-03	--	3E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Boron	mg/kg	6.3	J	Y	--	2	10	--	64	0.0224	0.0374	--	3E+00	6E-01	--	1E-01	--	4E-03	--	3E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Boron	mg/kg	5.3	U	N	--	2	10	--	64	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Boron	mg/kg	4.7	U	N	--	2	10	--	64	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Cadmium	mg/kg	0.25	J	Y	0.54	0.36	1.6	6.5	8.3	0.0224	0.0374	5E-01	7E-01	2E-01	4E-02	3E-02	9E-04	1E-03	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Cadmium	mg/kg	0.18	J	Y	0.54	0.36	1.6	6.5	8.3	0.0224	0.0374	3E-01	5E-01	1E-01	3E-02	2E-02	6E-04	8E-04	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Cadmium	mg/kg	0.11	J	Y	0.54	0.36	1.6	6.5	8.3	0.0224	0.0374	2E-01	3E-01	7E-02	2E-02	1E-02	4E-04	5E-04	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Cadmium	mg/kg	0.1	J	Y	0.54	0.36	1.6	6.5	8.3	0.0224	0.0374	2E-01	3E-01	6E-02	2E-02	1E-02	3E-04	5E-04	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Cadmium	mg/kg	0.1	J	Y	0.54	0.36	1.6	6.5	8.3	0.0224	0.0374	2E-01	3E-01	6E-02	2E-02	1E-02	3E-04	5E-04	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Cadmium	mg/kg	0.093	J	Y	0.54	0.36	1.6	6.5	8.3	0.0224	0.0374	2E-01	3E-01	6E-02	1E-02	1E-02	3E-04	4E-04	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Cadmium	mg/kg	0.088	J	Y	0.54	0.36	1.6	6.5	8.3	0.0224	0.0374	2E-01	2E-01	6E-02	1E-02	1E-02	3E-04	4E-04	<1	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Cadmium	mg/kg	0.077	J	Y	0.54	0.36	1.6	6.5	8.3	0.0224	0.0374	1E-01	2E-01	5E-02	1E-02	9E-03	3E-04	3E-04	<1	<1	<1	step 1	step		

Table G-17. Ecological Risk Estimates - Iron Gate Fish Hatchery Burn Pit

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c		Bkg HQ	Screening HQs		Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary							
										No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal		No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF EcoPRG HQ	Mammal AUF EcoPRG HQ	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Copper	mg/kg	32		Y	73	28	43	320	980	0.0224	0.0374	4E-01	1E+00	7E-01	1E-01	3E-02	2E-03	1E-03	<1	1E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Copper	mg/kg	29		Y	73	28	43	320	980	0.0224	0.0374	4E-01	1E+00	7E-01	9E-02	3E-02	2E-03	1E-03	<1	1E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Iron	mg/kg	53000		Y	--	--	--	--	--	0.0224	0.0374	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Iron	mg/kg	51000		Y	--	--	--	--	--	0.0224	0.0374	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Iron	mg/kg	49000		Y	--	--	--	--	--	0.0224	0.0374	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Iron	mg/kg	49000		Y	--	--	--	--	--	0.0224	0.0374	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Iron	mg/kg	49000		Y	--	--	--	--	--	0.0224	0.0374	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Iron	mg/kg	47000		Y	--	--	--	--	--	0.0224	0.0374	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Iron	mg/kg	47000		Y	--	--	--	--	--	0.0224	0.0374	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Iron	mg/kg	44000		Y	--	--	--	--	--	0.0224	0.0374	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Lead	mg/kg	68		Y	34	11	23	721	4482	0.0224	0.0374	2E+00	6E+00	3E+00	9E-02	2E-02	2E-03	6E-04	2E+00	6E+00	3E+00	<1	<1	<1	<1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Lead	mg/kg	25	J	Y	34	11	23	721	4482	0.0224	0.0374	7E-01	2E+00	1E+00	3E-02	6E-03	8E-04	2E-04	<1	2E+00	1E+00	<1	<1	<1	<1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Lead	mg/kg	9.8		Y	34	11	23	721	4482	0.0224	0.0374	3E-01	9E-01	4E-01	1E-02	2E-03	3E-04	8E-05	<1	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Lead	mg/kg	7.7		Y	34	11	23	721	4482	0.0224	0.0374	2E-01	7E-01	3E-01	1E-02	2E-03	2E-04	6E-05	<1	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Lead	mg/kg	6.8		Y	34	11	23	721	4482	0.0224	0.0374	2E-01	6E-01	3E-01	9E-03	2E-03	2E-04	6E-05	<1	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Lead	mg/kg	5.8		Y	34	11	23	721	4482	0.0224	0.0374	2E-01	5E-01	3E-01	8E-03	1E-03	2E-04	5E-05	<1	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Lead	mg/kg	5.4		Y	34	11	23	721	4482	0.0224	0.0374	2E-01	5E-01	2E-01	7E-03	1E-03	2E-04	5E-05	<1	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Lead	mg/kg	5.1		Y	34	11	23	721	4482	0.0224	0.0374	2E-01	5E-01	2E-01	7E-03	1E-03	2E-04	4E-05	<1	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Manganese	mg/kg	1400		Y	2100	220	2700	8400	3173	0.0224	0.0374	7E-01	6E+00	5E-01	2E-01	4E-01	4E-03	2E-02	<1	6E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Manganese	mg/kg	1400		Y	2100	220	2700	8400	3173	0.0224	0.0374	7E-01	6E+00	5E-01	2E-01	4E-01	4E-03	2E-02	<1	6E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Manganese	mg/kg	1200		Y	2100	220	2700	8400	3173	0.0224	0.0374	6E-01	5E+00	4E-01	1E-01	4E-01	3E-03	1E-02	<1	5E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Manganese	mg/kg	1100		Y	2100	220	2700	8400	3173	0.0224	0.0374	5E-01	5E+00	4E-01	1E-01	3E-01	3E-03	1E-02	<1	5E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Manganese	mg/kg	1100		Y	2100	220	2700	8400	3173	0.0224	0.0374	5E-01	5E+00	4E-01	1E-01	3E-01	3E-03	1E-02	<1	5E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Manganese	mg/kg	1100		Y	2100	220	2700	8400	3173	0.0224	0.0374	5E-01	5E+00	4E-01	1E-01	3E-01	3E-03	1E-02	<1	5E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Manganese	mg/kg	810		Y	2100	220	2700	8400	3173	0.0224	0.0374	4E-01	4E+00	3E-01	1E-01	3E-01	2E-03	1E-02	<1	4E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Mercury	mg/kg	0.092		Y	0.24	0.013	0.13	2.9	53	0.0224	0.0374	4E-01	7E+00	7E-01	3E-02	2E-03	7E-04	6E-05	<1	7E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Mercury	mg/kg	0.066		Y	0.24	0.013	0.13	2.9	53	0.0224	0.0374	3E-01	5E+00	5E-01	2E-02	1E-03	5E-04	5E-05	<1	5E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Mercury	mg/kg	0.034		Y	0.24	0.013	0.13	2.9	53	0.0224	0.0374	1E-01	3E+00	3E-01	1E-02	6E-04	3E-04	2E-05	<1	3E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Mercury	mg/kg	0.034		Y	0.24	0.013	0.13	2.9	53	0.0224	0.0374	1E-01	3E+00	3E-01	1E-02	6E-04	3E-04	2E-05	<1	3E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Mercury	mg/kg	0.026	J	Y	0.24	0.013	0.13	2.9	53	0.0224	0.0374	1E-01	2E+00	2E-01	9E-03	5E-04	2E-04	2E-05	<1	2E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Mercury	mg/kg	0.02	J	Y	0.24	0.013	0.13	2.9	53	0.0224	0.0374	8E-02	2E+00	2E-01	7E-03	4E-04	2E-04	1E-05	<1	2E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Mercury	mg/kg	0.018	J	Y	0.24	0.013	0.13	2.9	53	0.0224	0.0374	8E-02	1E+00	1E-01	6E-03	3E-04	1E-04	1E-05	<1	1E+00	<1	step 2	step 2	step 2	step 2	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Mercury	mg/kg	0.0079	J	Y	0.24	0.013	0.13	2.9	53	0.0224	0.0374	3E-02	6E-01	6E-02	3E-03	1E-04	6E-05	6E-06	<1	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Molybdenum	mg/kg	1.3		Y	--	2	150	--	--	0.0224	0.0374	--	7E-01	9E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Molybdenum	mg/kg	1		Y	--	2	150	--	--	0.0224	0.0374	--	5E-01	7E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Molybdenum	mg/kg	0.92		Y	--	2	150	--	--	0.0224	0.0374	--	5E-01	6E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Molybdenum	mg/kg	0.8		Y	--	2	150	--	--	0.0224	0.0374	--	4E-01	5E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Molybdenum	mg/kg	0.78		Y	--	2	150	--	--	0.0224	0.0374	--	4E-01	5E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Molybdenum	mg/kg	0.77		Y	--	2	150	--	--	0.0224	0.0374	--	4E-01	5E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Molybdenum	mg/kg	0.52		Y	--	2	150	--	--	0.0224	0.0374	--	3E-01	3E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Molybdenum	mg/kg	0.48		Y	--	2	150	--	--	0.0224	0.0374	--	2E-01	3E-03	--	--	--	--	--	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Nickel	mg/kg	14	J	Y	110	38	210	--	--	0.0224	0.0374	1E-01	4E-01	7E-02	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	I	Metal	Nickel	mg/kg	13		Y	110	38	210	--	--	0.0224	0.0374	1E-01	3E-01	6E-02	--	--	--	--	<1	<1	<1	step 1	step 1	step 1	step 1	

Table G-17. Ecological Risk Estimates - Iron Gate Fish Hatchery Burn Pit

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c		Bkg HQ	Screening HQs		Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary						
										No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal		No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF EcoPRG HQ	Mammal AUF EcoPRG HQ
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Thallium	mg/kg	0.098	J	Y	2.8	0.05	4.2	--	--	0.0224	0.0374	4E-02	2E+00	2E-02	--	--	--	--	<1	2E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Thallium	mg/kg	0.092	J	Y	2.8	0.05	4.2	--	--	0.0224	0.0374	3E-02	2E+00	2E-02	--	--	--	--	<1	2E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Thallium	mg/kg	0.087	J	Y	2.8	0.05	4.2	--	--	0.0224	0.0374	3E-02	2E+00	2E-02	--	--	--	--	<1	2E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Thallium	mg/kg	0.065	J	Y	2.8	0.05	4.2	--	--	0.0224	0.0374	2E-02	1E+00	2E-02	--	--	--	--	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Vanadium	mg/kg	140	Y	Y	280	7.8	11	61	810	0.0224	0.0374	5E-01	2E+01	1E+01	2E+00	2E-01	5E-02	6E-03	<1	2E+01	1E+01	2E+00	<1	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Vanadium	mg/kg	140	Y	Y	280	7.8	11	61	810	0.0224	0.0374	5E-01	2E+01	1E+01	2E+00	2E-01	5E-02	6E-03	<1	2E+01	1E+01	2E+00	<1	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Vanadium	mg/kg	140	Y	Y	280	7.8	11	61	810	0.0224	0.0374	5E-01	2E+01	1E+01	2E+00	2E-01	5E-02	6E-03	<1	2E+01	1E+01	2E+00	<1	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Vanadium	mg/kg	130	Y	Y	280	7.8	11	61	810	0.0224	0.0374	5E-01	2E+01	1E+01	2E+00	2E-01	5E-02	6E-03	<1	2E+01	1E+01	2E+00	<1	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Vanadium	mg/kg	130	Y	Y	280	7.8	11	61	810	0.0224	0.0374	5E-01	2E+01	1E+01	2E+00	2E-01	5E-02	6E-03	<1	2E+01	1E+01	2E+00	<1	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Vanadium	mg/kg	130	Y	Y	280	7.8	11	61	810	0.0224	0.0374	5E-01	2E+01	1E+01	2E+00	2E-01	5E-02	6E-03	<1	2E+01	1E+01	2E+00	<1	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Zinc	mg/kg	240	Y	Y	170	46	120	1076	7743	0.0224	0.0374	1E+00	5E+00	2E+00	2E-01	3E-02	5E-03	1E-03	1E+00	5E+00	2E+00	<1	<1	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	I	Metal	Zinc	mg/kg	150	Y	Y	170	46	120	1076	7743	0.0224	0.0374	9E-01	3E+00	1E+00	1E-01	2E-02	3E-03	7E-04	<1	3E+00	1E+00	<1	<1	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Zinc	mg/kg	130	J	Y	170	46	120	1076	7743	0.0224	0.0374	8E-01	3E+00	1E+00	1E-01	2E-02	3E-03	6E-04	<1	3E+00	1E+00	<1	<1	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	I	Metal	Zinc	mg/kg	96	Y	Y	170	46	120	1076	7743	0.0224	0.0374	6E-01	2E+00	8E-01	9E-02	1E-02	2E-03	5E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Zinc	mg/kg	78	J	Y	170	46	120	1076	7743	0.0224	0.0374	5E-01	2E+00	7E-01	7E-02	1E-02	2E-03	4E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Zinc	mg/kg	73	Y	Y	170	46	120	1076	7743	0.0224	0.0374	4E-01	2E+00	6E-01	7E-02	9E-03	2E-03	4E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Zinc	mg/kg	70	Y	Y	170	46	120	1076	7743	0.0224	0.0374	4E-01	2E+00	6E-01	7E-02	9E-03	1E-03	3E-04	<1	2E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	I	Metal	Zinc	mg/kg	65	Y	Y	170	46	120	1076	7743	0.0224	0.0374	4E-01	1E+00	5E-01	6E-02	8E-03	1E-03	3E-04	<1	1E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	O	DXN	2,3,7,8-TCDD TEQ Bird	mg/kg	5E-06	Y	Y	--	2E-05	--	9E-05	--	0.0224	0.0374	--	3E-01	--	6E-02	--	1E-03	--	--	<1	--	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	O	DXN	2,3,7,8-TCDD TEQ Bird	mg/kg	2E-06	Y	Y	--	2E-05	--	9E-05	--	0.0224	0.0374	--	1E-01	--	2E-02	--	4E-04	--	--	<1	--	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	O	DXN	2,3,7,8-TCDD TEQ Bird	mg/kg	1E-06	Y	Y	--	2E-05	--	9E-05	--	0.0224	0.0374	--	9E-02	--	2E-02	--	4E-04	--	--	<1	--	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	DXN	2,3,7,8-TCDD TEQ Bird	mg/kg	9E-07	Y	Y	--	2E-05	--	9E-05	--	0.0224	0.0374	--	6E-02	--	1E-02	--	2E-04	--	--	<1	--	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	DXN	2,3,7,8-TCDD TEQ Bird	mg/kg	5E-07	Y	Y	--	2E-05	--	9E-05	--	0.0224	0.0374	--	3E-02	--	5E-03	--	1E-04	--	--	<1	--	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	DXN	2,3,7,8-TCDD TEQ Bird	mg/kg	6E-08	Y	Y	--	2E-05	--	9E-05	--	0.0224	0.0374	--	4E-03	--	7E-04	--	2E-05	--	--	<1	--	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	DXN	2,3,7,8-TCDD TEQ Bird	mg/kg	9E-09	Y	Y	--	2E-05	--	9E-05	--	0.0224	0.0374	--	6E-04	--	1E-04	--	2E-06	--	--	<1	--	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	DXN	2,3,7,8-TCDD TEQ Bird	mg/kg	8E-10	Y	Y	--	2E-05	--	9E-05	--	0.0224	0.0374	--	5E-05	--	9E-06	--	2E-07	--	--	<1	--	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	O	DXN	2,3,7,8-TCDD TEQ Mammal	mg/kg	1E-05	Y	Y	--	3E-07	2E-06	--	6.8E-06	0.0224	0.0374	--	3E+01	5E+00	--	1E+00	--	5E-02	--	3E+01	5E+00	--	1E+00	--	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	O	DXN	2,3,7,8-TCDD TEQ Mammal	mg/kg	3E-06	Y	Y	--	3E-07	2E-06	--	6.8E-06	0.0224	0.0374	--	1E+01	1E+00	--	4E-01	--	2E-02	--	1E+01	1E+00	--	<1	--	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	O	DXN	2,3,7,8-TCDD TEQ Mammal	mg/kg	2E-06	Y	Y	--	3E-07	2E-06	--	6.8E-06	0.0224	0.0374	--	7E+00	1E+00	--	3E-01	--	1E-02	--	7E+00	1E+00	--	<1	--	<1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	DXN	2,3,7,8-TCDD TEQ Mammal	mg/kg	2E-06	Y	Y	--	3E-07	2E-06	--	6.8E-06	0.0224	0.0374	--	6E+00	9E-01	--	2E-01	--	9E-03	--	6E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	DXN	2,3,7,8-TCDD TEQ Mammal	mg/kg	1E-06	Y	Y	--	3E-07	2E-06	--	6.8E-06	0.0224	0.0374	--	5E+00	7E-01	--	2E-01	--	7E-03	--	5E+00	<1	step 2	step 2	step 2	step 2
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	DXN	2,3,7,8-TCDD TEQ Mammal	mg/kg	9E-08	Y	Y	--	3E-07	2E-06	--	6.8E-06	0.0224	0.0374	--	3E-01	5E-02	--	1E-02	--	5E-04	--	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	DXN	2,3,7,8-TCDD TEQ Mammal	mg/kg	6E-08	Y	Y	--	3E-07	2E-06	--	6.8E-06	0.0224	0.0374	--	2E-01	3E-02	--	9E-03	--	3E-04	--	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	DXN	2,3,7,8-TCDD TEQ Mammal	mg/kg	2E-09	Y	Y	--	3E-07	2E-06	--	6.8E-06	0.0224	0.0374	--	8E-03	1E-03	--	3E-04	--	1E-05	--	<1	<1	step 1	step 1	step 1	step 1
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	O	PAH	Acenaphthene	mg/kg	0.0054	U	N	--	0.25	1300	--	--	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	PAH	Acenaphthene	mg/kg	0.0053	U	N	--	0.25	1300	--	--	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-02	O	PAH	Acenaphthene	mg/kg	0.0052	U	N	--	0.25	1300	--	--	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C1	O	PAH	Acenaphthene	mg/kg	0.0051	U	N	--	0.25	1300	--	--	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	PAH	Acenaphthene	mg/kg	0.005	U	N	--	0.25	1300	--	--	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	PAH	Acenaphthene	mg/kg	0.0025	U	N	--	0.25	1300	--	--	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-C2	O	PAH	Acenaphthene	mg/kg	0.0007	UJ	N	--	0.25	1300	--	--	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	PAH	Acenaphthene	mg/kg	0.0007	UJ	N	--	0.25	1300	--	--	0.0224	0.0374	ND	ND	ND	ND	ND									

Table G-17. Ecological Risk Estimates - Iron Gate Fish Hatchery Burn Pit

REC Name	Location ID	Type	Class	Analyte	Units	Result	Qualifier	Detect	BTV	Screening Levels ^a		Site-Specific EcoPRGs ^b		Area Use Factors ^c			Screening HQs		Site-Specific EcoPRG HQs		Area Use Adjusted EcoPRG HQs		Summary											
										No Effect ESL	Low Effect ESL	Bird EcoPRG	Mammal EcoPRG	Bird	Mammal	Bkg HQ	No Effect HQ	Low Effect HQ	Bird HQ	Mammal HQ	Bird HQ	Mammal HQ	Bkg HQ	No Effect HQ	Low Effect HQ	Bird EcoPRG HQ	Mammal EcoPRG HQ	Bird AUF HQ	Mammal AUF HQ					
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	VOC	Xylenes, Total	mg/kg	0.0085	U	N	--	1.4	1.8	--	--	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	VOC	Xylenes, Total	mg/kg	0.001	U	N	--	1.4	1.8	--	--	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
CA-Iron Gate Fish Hatchery Burn Pit	IGBP-01	O	VOC	Xylenes, Total	mg/kg	0.0008	U	N	--	1.4	1.8	--	--	0.0224	0.0374	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

^a Screening Levels - No Effect ESLs are based on no observed adverse effect levels (NOAELs) and are the most conservative among plants, invertebrates, birds, and mammals. Low Effect ESLs are based on lowest observed adverse effect levels (LOAELs) for birds and mammals.

^b Site-specific ecological preliminary remedial goals (EcoPRGs) are risk-based concentrations calculated for receptors that would potentially be found in the area around the Klamath project sites. The bird and mammal EcoPRGs selected for use in the risk estimates are the most conservative of the risk-based values calculated for birds and mammals from the major feeding guilds (herbivores, invertebrates, and carnivores) using LOAEL toxicity values and an AUF=1 (100% site use). Supporting information and calculation of EcoPRGs is presented in Appendix G, Table G-2 through Table G-7.

^c Area use factors for the hermit thrush and vagrant shrew were selected for use in the risk estimates as these two receptors had the most conservative risk-based concentrations. The AUF is calculated from the receptors home range versus the size of the REC. Supporting information and calculation of AUFs is presented in Appendix G, Table G-7.

-- = not available or not applicable

<1 = less than 1

>1 = greater than 1

AUF = area use factor

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HQ = hazard quotient - all values presented to 1 significant figure

ND = not detected

Step 1 = analyte was eliminated in Step 1 of the ecological risk evaluation. No Effect screening HQ was less than 1.

Step 2 = analyte was retained after Step 1 (the screening HQ>1), but was eliminated in Step 2 (the refined HQ <1).

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location Result	Detect	Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted HI	Summary HI	
								ESL ^a	Low Effect HO				Location-Specific HI	AUF Adjusted HI
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-04	PAH-LMW	Naphthalene	mg/kg	0.0013	Y	27	5E-05	5E-05	0.0561	3E-06	<1	<1
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-05	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0032	Y	155	2E-05	4E-04	0.0561	2E-05	<1	<1
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-05	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0067	Y	440	2E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-05	PAH-HMW	Chrysene	mg/kg	0.006	Y	31	2E-04					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-05	PAH-HMW	Fluoranthene	mg/kg	0.0076	Y	80	1E-04					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-05	PAH-HMW	Pyrene	mg/kg	0.006	Y	230	3E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-05	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0031	Y	--	--	5E-04	0.0561	3E-05	<1	<1
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-05	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0041	Y	160	3E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-05	PAH-LMW	Anthracene	mg/kg	0.0033	Y	2100	2E-06					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-05	PAH-LMW	Naphthalene	mg/kg	0.011	Y	27	4E-04					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-05	PAH-LMW	Phenanthrene	mg/kg	0.0092	Y	145	6E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-06	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0017	Y	155	1E-05	6E-05	0.0561	3E-06	<1	<1
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-06	PAH-HMW	Fluoranthene	mg/kg	0.0028	Y	80	4E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-06	PAH-HMW	Pyrene	mg/kg	0.0021	Y	230	9E-06					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-06	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0037	Y	--	--	3E-03	0.0561	2E-04	<1	<1
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-06	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0045	Y	160	3E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-06	PAH-LMW	Naphthalene	mg/kg	0.077	Y	27	3E-03					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-06	PAH-LMW	Phenanthrene	mg/kg	0.018	Y	145	1E-04					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-12	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0016	Y	155	1E-05	6E-05	0.2336	1E-05	<1	<1
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-12	PAH-HMW	Fluoranthene	mg/kg	0.0035	Y	80	4E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-12	PAH-HMW	Pyrene	mg/kg	0.002	Y	230	9E-06					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-12	PAH-LMW	Phenanthrene	mg/kg	0.00078	Y	145	5E-06	5E-06	0.2336	1E-06	<1	<1
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-HMW	Benzo(a)anthracene	mg/kg	0.038	Y	155	2E-04	4E-03	0.2336	8E-04	<1	<1
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-HMW	Benzo(a)pyrene	mg/kg	0.011	Y	190	6E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.039	Y	440	9E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.012	Y	710	2E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-HMW	Chrysene	mg/kg	0.043	Y	31	1E-03					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-HMW	Fluoranthene	mg/kg	0.12	Y	80	2E-03					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-HMW	Pyrene	mg/kg	0.077	Y	230	3E-04					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0071	Y	--	--	2E-03	0.2336	5E-04	<1	<1
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-LMW	2-Methylnaphthalene	mg/kg	0.011	Y	160	7E-05					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-LMW	Acenaphthylene	mg/kg	0.0064	Y	1200	5E-06					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-LMW	Anthracene	mg/kg	0.013	Y	2100	6E-06					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-LMW	Naphthalene	mg/kg	0.045	Y	27	2E-03					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-14	PAH-LMW	Phenanthrene	mg/kg	0.058	Y	145	4E-04					
CA-Copco No. 1 Debris Pile/Scrap Yard	SO	C1DP-16	PAH-LMW	Naphthalene	mg/kg	0.0017	Y	27	6E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-01	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0041	Y	155	3E-05	2E-04	0.4673	9E-05	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-01	PAH-HMW	Chrysene	mg/kg	0.0039	Y	31	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-01	PAH-HMW	Fluoranthene	mg/kg	0.003	Y	80	4E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-01	PAH-HMW	Pyrene	mg/kg	0.003	Y	230	1E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-01	PAH-LMW	Phenanthrene	mg/kg	0.00097	Y	145	7E-06	7E-06	0.4673	3E-06	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-02	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0051	Y	155	3E-05	2E-04	0.4673	1E-04	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-02	PAH-HMW	Chrysene	mg/kg	0.0044	Y	31	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-02	PAH-HMW	Fluoranthene	mg/kg	0.0041	Y	80	5E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-02	PAH-HMW	Pyrene	mg/kg	0.0041	Y	230	2E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-02	PAH-LMW	Phenanthrene	mg/kg	0.0015	Y	145	1E-05	1E-05	0.4673	5E-06	<1	<1

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location		Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted HI	Summary HI	
						Result	Detect	ESL ^a	Low Effect HO				Location-Specific HI	AUF Adjusted HI
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-HMW	Benzo(a)anthracene	mg/kg	0.011	Y	155	7E-05	7E-04	0.4673	3E-04	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-HMW	Benzo(a)pyrene	mg/kg	0.019	Y	190	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.018	Y	440	4E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.0062	Y	710	9E-06					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-HMW	Chrysene	mg/kg	0.011	Y	31	4E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0048	Y	140	3E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-HMW	Fluoranthene	mg/kg	0.0057	Y	80	7E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.012	Y	710	2E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-HMW	Pyrene	mg/kg	0.008	Y	230	3E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-LMW	Acenaphthene	mg/kg	0.00057	Y	1300	4E-07	1E-04	0.4673	5E-05	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-LMW	Acenaphthylene	mg/kg	0.0013	Y	1200	1E-06					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-LMW	Fluorene	mg/kg	0.0012	Y	19	6E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-LMW	Naphthalene	mg/kg	0.00094	Y	27	3E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-03	PAH-LMW	Phenanthrene	mg/kg	0.0021	Y	145	1E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-HMW	Benzo(a)anthracene	mg/kg	0.04	Y	155	3E-04	3E-03	0.4673	1E-03	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-HMW	Benzo(a)pyrene	mg/kg	0.076	Y	190	4E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.069	Y	440	2E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.057	Y	250	2E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.0082	Y	710	1E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-HMW	Chrysene	mg/kg	0.046	Y	31	1E-03					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0045	Y	140	3E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-HMW	Fluoranthene	mg/kg	0.009	Y	80	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.074	Y	710	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-HMW	Pyrene	mg/kg	0.011	Y	230	5E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-LMW	Acenaphthene	mg/kg	0.0011	Y	1300	8E-07	1E-03	0.4673	6E-04	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-LMW	Naphthalene	mg/kg	0.032	Y	27	1E-03					
CA-Copco No. 2 Burn Pit	SO	C2BP-04	PAH-LMW	Phenanthrene	mg/kg	0.0092	Y	145	6E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-05	PAH-LMW	1-Methylnaphthalene	mg/kg	0.019	Y	--	--	1E-04	0.4673	6E-05	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-05	PAH-LMW	2-Methylnaphthalene	mg/kg	0.018	Y	160	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-05	PAH-LMW	Phenanthrene	mg/kg	0.0026	Y	145	2E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-HMW	Benzo(a)anthracene	mg/kg	20	Y	155	1E-01	1E+00	0.4673	7E-01	1E+00	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-HMW	Benzo(a)pyrene	mg/kg	35	Y	190	2E-01					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-HMW	Benzo(b)fluoranthene	mg/kg	32	Y	440	7E-02					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	19	Y	250	8E-02					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.015	Y	710	2E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-HMW	Chrysene	mg/kg	23	Y	31	7E-01					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	2.1	Y	140	2E-02					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-HMW	Fluoranthene	mg/kg	8.3	Y	80	1E-01					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	25	Y	710	4E-02					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-HMW	Pyrene	mg/kg	14	Y	230	6E-02					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-LMW	1-Methylnaphthalene	mg/kg	0.12	Y	--	--	6E-02	0.4673	3E-02	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-LMW	2-Methylnaphthalene	mg/kg	0.16	Y	160	1E-03					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-LMW	Acenaphthene	mg/kg	0.56	Y	1300	4E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-LMW	Anthracene	mg/kg	0.61	Y	2100	3E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-LMW	Fluorene	mg/kg	0.2	Y	19	1E-02					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-LMW	Naphthalene	mg/kg	0.85	Y	27	3E-02					
CA-Copco No. 2 Burn Pit	SO	C2BP-06	PAH-LMW	Phenanthrene	mg/kg	1.9	Y	145	1E-02					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location Result	Detect	Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted HI	Summary HI	
								ESL ^a	Low Effect HO				Location-Specific HI	AUF Adjusted HI
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-HMW	Benzo(a)anthracene	mg/kg	0.013	Y	155	8E-05	7E-04	0.4673	3E-04	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-HMW	Benzo(a)pyrene	mg/kg	0.024	Y	190	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.025	Y	440	6E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.0028	Y	710	4E-06					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-HMW	Chrysene	mg/kg	0.0095	Y	31	3E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-HMW	Fluoranthene	mg/kg	0.0062	Y	80	8E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.017	Y	710	2E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-HMW	Pyrene	mg/kg	0.0066	Y	230	3E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0033	Y	--	--	3E-04	0.4673	2E-04	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0032	Y	160	2E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-LMW	Acenaphthene	mg/kg	0.0011	Y	1300	8E-07					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-LMW	Anthracene	mg/kg	0.0009	Y	2100	4E-07					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-LMW	Naphthalene	mg/kg	0.008	Y	27	3E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-07	PAH-LMW	Phenanthrene	mg/kg	0.004	Y	145	3E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-HMW	Benzo(a)anthracene	mg/kg	0.021	Y	155	1E-04	3E-03	0.4673	1E-03	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-HMW	Benzo(a)pyrene	mg/kg	0.039	Y	190	2E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.047	Y	440	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.026	Y	250	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.019	Y	710	3E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-HMW	Chrysene	mg/kg	0.033	Y	31	1E-03					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-HMW	Fluoranthene	mg/kg	0.083	Y	80	1E-03					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.031	Y	710	4E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-HMW	Pyrene	mg/kg	0.066	Y	230	3E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-LMW	1-Methylnaphthalene	mg/kg	0.058	Y	--	--	2E-02	0.4673	9E-03	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-LMW	2-Methylnaphthalene	mg/kg	0.082	Y	160	5E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-LMW	Acenaphthene	mg/kg	0.0026	Y	1300	2E-06					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-LMW	Acenaphthylene	mg/kg	0.15	Y	1200	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-LMW	Anthracene	mg/kg	0.028	Y	2100	1E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-LMW	Fluorene	mg/kg	0.016	Y	19	8E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-LMW	Naphthalene	mg/kg	0.42	Y	27	2E-02					
CA-Copco No. 2 Burn Pit	SO	C2BP-08	PAH-LMW	Phenanthrene	mg/kg	0.23	Y	145	2E-03					
CA-Copco No. 2 Burn Pit	SO	C2BP-09	PAH-HMW	Pyrene	mg/kg	0.0015	Y	230	7E-06	7E-06	0.4673	3E-06	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-09	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0011	Y	160	7E-06	7E-05	0.4673	3E-05	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-09	PAH-LMW	Naphthalene	mg/kg	0.0014	Y	27	5E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-09	PAH-LMW	Phenanthrene	mg/kg	0.0012	Y	145	8E-06					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0025	Y	155	2E-05	3E-04	0.4673	1E-04	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-HMW	Benzo(a)pyrene	mg/kg	0.002	Y	190	1E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.005	Y	440	1E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.0027	Y	250	1E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-HMW	Chrysene	mg/kg	0.005	Y	31	2E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-HMW	Fluoranthene	mg/kg	0.0062	Y	80	8E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0031	Y	710	4E-06					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-HMW	Pyrene	mg/kg	0.0048	Y	230	2E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-LMW	1-Methylnaphthalene	mg/kg	0.013	Y	--	--	3E-03	0.4673	2E-03	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-LMW	2-Methylnaphthalene	mg/kg	0.022	Y	160	1E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-LMW	Acenaphthylene	mg/kg	0.0028	Y	1200	2E-06					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-LMW	Anthracene	mg/kg	0.0028	Y	2100	1E-06					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-LMW	Naphthalene	mg/kg	0.082	Y	27	3E-03					
CA-Copco No. 2 Burn Pit	SO	C2BP-10	PAH-LMW	Phenanthrene	mg/kg	0.019	Y	145	1E-04					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location		Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted HI	Summary HI	
						Result	Detect	ESL ^a	Low Effect HO				Location-Specific HI	AUF Adjusted HI
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0024	Y	155	2E-05	1E-04	0.4673	7E-05	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-HMW	Benzo(a)pyrene	mg/kg	0.0021	Y	190	1E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0032	Y	440	7E-06					
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-HMW	Chrysene	mg/kg	0.0018	Y	31	6E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-HMW	Fluoranthene	mg/kg	0.0028	Y	80	4E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0023	Y	710	3E-06					
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-HMW	Pyrene	mg/kg	0.0029	Y	230	1E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0067	Y	--	--	9E-04	0.4673	4E-04	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-LMW	2-Methylnaphthalene	mg/kg	0.011	Y	160	7E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-LMW	Naphthalene	mg/kg	0.022	Y	27	8E-04					
CA-Copco No. 2 Burn Pit	SO	C2BP-11	PAH-LMW	Phenanthrene	mg/kg	0.0049	Y	145	3E-05					
CA-Copco No. 2 Burn Pit	SO	C2BP-12	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0014	Y	155	9E-06	3E-05	0.4673	1E-05	<1	<1
CA-Copco No. 2 Burn Pit	SO	C2BP-12	PAH-HMW	Fluoranthene	mg/kg	0.0015	Y	80	2E-05				<1	
CA-Copco No. 2 Burn Pit	SO	C2BP-12	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0013	Y	160	8E-06	6E-05	0.4673	3E-05		<1
CA-Copco No. 2 Burn Pit	SO	C2BP-12	PAH-LMW	Naphthalene	mg/kg	0.0015	Y	27	6E-05					
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-08	PAH-HMW	Fluoranthene	mg/kg	0.0025	Y	80	3E-05	4E-05	0.6168	3E-05	<1	<1
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-08	PAH-HMW	Pyrene	mg/kg	0.0024	Y	230	1E-05					
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-08	PAH-LMW	Naphthalene	mg/kg	0.002	Y	27	7E-05	7E-05	0.6168	5E-05	<1	<1
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-13	PAH-HMW	Benzo(a)pyrene	mg/kg	0.0014	Y	190	7E-06	2E-04	0.6168	1E-04	<1	<1
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-13	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0049	Y	440	1E-05					
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-13	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.0021	Y	250	8E-06					
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-13	PAH-HMW	Chrysene	mg/kg	0.004	Y	31	1E-04					
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-13	PAH-HMW	Fluoranthene	mg/kg	0.0031	Y	80	4E-05					
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-13	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0023	Y	710	3E-06					
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-13	PAH-HMW	Pyrene	mg/kg	0.0031	Y	230	1E-05					
CA-Copco No. 2 Former Mobil Oil Containment Bldg	SO	C2CB-14	PAH-HMW	Chrysene	mg/kg	0.0065	Y	31	2E-04	2E-04	0.6168	1E-04	<1	<1
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-HMW	Benzo(a)anthracene	mg/kg	0.13	Y	155	8E-04	2E-02	0.0112	2E-04	<1	<1
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-HMW	Benzo(a)pyrene	mg/kg	0.31	Y	190	2E-03					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.55	Y	440	1E-03					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.39	Y	250	2E-03					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.19	Y	710	3E-04					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-HMW	Chrysene	mg/kg	0.24	Y	31	8E-03					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.06	Y	140	4E-04					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-HMW	Fluoranthene	mg/kg	0.23	Y	80	3E-03					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.38	Y	710	5E-04					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-HMW	Pyrene	mg/kg	0.27	Y	230	1E-03					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0058	Y	--	--	2E-03	0.0112	3E-05	<1	<1
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-LMW	2-Methylnaphthalene	mg/kg	0.011	Y	160	7E-05					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-LMW	Acenaphthene	mg/kg	0.015	Y	1300	1E-05					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-LMW	Acenaphthylene	mg/kg	0.01	Y	1200	8E-06					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-LMW	Anthracene	mg/kg	0.04	Y	2100	2E-05					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-LMW	Fluorene	mg/kg	0.0087	Y	19	5E-04					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-LMW	Naphthalene	mg/kg	0.027	Y	27	1E-03					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PAH-LMW	Phenanthrene	mg/kg	0.11	Y	145	8E-04					
CA-Copco No. 2 Transformer Fire	SO	C2TF-01	PCB	Aroclor 1262	mg/kg	1	Y	--	--	0E+00	0.0112	0E+00	<1	<1
CA-Copco No. 2 Transformer Fire	SO	C2TF-03	PCB	Aroclor 1260	mg/kg	0.0064	Y	1.2	5E-03	5E-03	0.0112	6E-05	<1	<1
CA-Copco No. 2 USTs	SO	C2UT-10	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.0021	Y	250	8E-06	4E-05	0.514	2E-05	<1	<1
CA-Copco No. 2 USTs	SO	C2UT-10	PAH-HMW	Fluoranthene	mg/kg	0.0022	Y	80	3E-05					
CA-Copco No. 2 USTs	SO	C2UT-10	PAH-HMW	Pyrene	mg/kg	0.0016	Y	230	7E-06					
CA-Copco No. 2 USTs	SO	C2UT-10	PAH-LMW	Anthracene	mg/kg	0.0011	Y	2100	5E-07	5E-07	0.514	3E-07	<1	<1
CA-Copco No. 2 USTs	SO	C2UT-11	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.0093	Y	250	4E-05	8E-05	0.514	4E-05	<1	<1
CA-Copco No. 2 USTs	SO	C2UT-11	PAH-HMW	Fluoranthene	mg/kg	0.0021	Y	80	3E-05					
CA-Copco No. 2 USTs	SO	C2UT-11	PAH-HMW	Pyrene	mg/kg	0.0032	Y	230	1E-05					
CA-Copco No. 2 USTs	SO	C2UT-12	PAH-HMW	Pyrene	mg/kg	0.0013	Y	230	6E-06					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location Result	Detect	Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted HI	Summary HI	
								ESL ^a	Low Effect HO				Location-Specific HI	AUF Adjusted HI
CA-Copco No. 2 USTs	SO	C2UT-12	PAH-LMW	1-Methylnaphthalene	mg/kg	0.00096	Y	--	--	1E-04	0.514	6E-05	<1	<1
CA-Copco No. 2 USTs	SO	C2UT-12	PAH-LMW	Anthracene	mg/kg	0.00095	Y	2100	5E-07					
CA-Copco No. 2 USTs	SO	C2UT-12	PAH-LMW	Naphthalene	mg/kg	0.0029	Y	27	1E-04					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0034	Y	440	8E-06	1E-04	0.514	7E-05	<1	<1
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.004	Y	250	2E-05					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-HMW	Fluoranthene	mg/kg	0.006	Y	80	8E-05					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0029	Y	710	4E-06					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-HMW	Pyrene	mg/kg	0.0057	Y	230	2E-05					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0023	Y	--	--	9E-04	0.514	5E-04	<1	<1
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0048	Y	160	3E-05					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-LMW	Acenaphthene	mg/kg	0.00065	Y	1300	5E-07					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-LMW	Acenaphthylene	mg/kg	0.0031	Y	1200	3E-06					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-LMW	Anthracene	mg/kg	0.00091	Y	2100	4E-07					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-LMW	Fluorene	mg/kg	0.0022	Y	19	1E-04					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-LMW	Naphthalene	mg/kg	0.02	Y	27	7E-04					
CA-Copco No. 2 USTs	SO	C2UT-13	PAH-LMW	Phenanthrene	mg/kg	0.0073	Y	145	5E-05					
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0051	Y	155	3E-05	6E-04	0.514	3E-04	<1	<1
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-HMW	Benzo(a)pyrene	mg/kg	0.0054	Y	190	3E-05					
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.012	Y	440	3E-05					
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.0061	Y	250	2E-05					
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.0043	Y	710	6E-06					
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-HMW	Chrysene	mg/kg	0.0093	Y	31	3E-04					
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0044	Y	140	3E-05					
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-HMW	Fluoranthene	mg/kg	0.01	Y	80	1E-04					
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0073	Y	710	1E-05					
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-HMW	Pyrene	mg/kg	0.009	Y	230	4E-05					
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-LMW	Anthracene	mg/kg	0.0018	Y	2100	9E-07	3E-05	0.514	2E-05	<1	<1
CA-Copco No. 2 USTs	SO	C2UT-14	PAH-LMW	Phenanthrene	mg/kg	0.0048	Y	145	3E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0055	Y	155	4E-05	3E-03	0.3271	1E-03	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-HMW	Benzo(a)pyrene	mg/kg	0.012	Y	190	6E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.069	Y	440	2E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.017	Y	250	7E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.021	Y	710	3E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-HMW	Chrysene	mg/kg	0.065	Y	31	2E-03					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0039	Y	140	3E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-HMW	Fluoranthene	mg/kg	0.052	Y	80	7E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.02	Y	710	3E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-HMW	Pyrene	mg/kg	0.049	Y	230	2E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-LMW	1-Methylnaphthalene	mg/kg	0.00066	Y	--	--	2E-04	0.3271	5E-05	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-LMW	Acenaphthylene	mg/kg	0.0011	Y	1200	9E-07					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-LMW	Anthracene	mg/kg	0.0033	Y	2100	2E-06					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-LMW	Fluorene	mg/kg	0.00084	Y	19	4E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-LMW	Naphthalene	mg/kg	0.00098	Y	27	4E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-01	PAH-LMW	Phenanthrene	mg/kg	0.01	Y	145	7E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-HMW	Benzo(a)pyrene	mg/kg	0.018	Y	190	9E-05	7E-03	0.3271	2E-03	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.17	Y	440	4E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.026	Y	250	1E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.042	Y	710	6E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-HMW	Chrysene	mg/kg	0.12	Y	31	4E-03					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0052	Y	140	4E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-HMW	Fluoranthene	mg/kg	0.13	Y	80	2E-03					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.038	Y	710	5E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-HMW	Pyrene	mg/kg	0.1	Y	230	4E-04					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location		Detect	Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted	Summary HI	
						Result	ESL ^a		Low Effect HO	Location-Specific HI				AUF Adjusted	
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0014	--	Y	--	--	3E-04	0.3271	9E-05	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0014	160	Y	9E-06	1E-06					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-LMW	Acenaphthylene	mg/kg	0.0013	1200	Y	1E-06	1E-06					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-LMW	Anthracene	mg/kg	0.0055	2100	Y	3E-06	3E-06					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-LMW	Naphthalene	mg/kg	0.0016	27	Y	6E-05	6E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-02	PAH-LMW	Phenanthrene	mg/kg	0.031	145	Y	2E-04	2E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-03	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0039	440	Y	9E-06	9E-06	3E-04	0.3271	9E-05	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-03	PAH-HMW	Chrysene	mg/kg	0.0062	31	Y	2E-04	2E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-03	PAH-HMW	Fluoranthene	mg/kg	0.004	80	Y	5E-05	5E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-03	PAH-HMW	Pyrene	mg/kg	0.005	230	Y	2E-05	2E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-03	PAH-LMW	1-Methylnaphthalene	mg/kg	0.00061	--	Y	--	--	2E-04	0.3271	5E-05	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-03	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0013	160	Y	8E-06	8E-06					
CA-Copco No. 2 Wood Pile	SO	C2WP-03	PAH-LMW	Naphthalene	mg/kg	0.0031	27	Y	1E-04	1E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-03	PAH-LMW	Phenanthrene	mg/kg	0.0051	145	Y	4E-05	4E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-HMW	Benzo(a)anthracene	mg/kg	0.043	155	Y	3E-04	3E-04	9E-03	0.3271	3E-03	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-HMW	Benzo(a)pyrene	mg/kg	0.0085	190	Y	4E-05	4E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.04	440	Y	9E-05	9E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-HMW	Chrysene	mg/kg	0.18	31	Y	6E-03	6E-03					
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-HMW	Fluoranthene	mg/kg	0.16	80	Y	2E-03	2E-03					
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-HMW	Pyrene	mg/kg	0.15	230	Y	7E-04	7E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-LMW	1-Methylnaphthalene	mg/kg	0.011	--	Y	--	--	3E-03	0.3271	9E-04	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-LMW	2-Methylnaphthalene	mg/kg	0.027	160	Y	2E-04	2E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-LMW	Fluorene	mg/kg	0.021	19	Y	1E-03	1E-03					
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-LMW	Naphthalene	mg/kg	0.012	27	Y	4E-04	4E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-04	PAH-LMW	Phenanthrene	mg/kg	0.17	145	Y	1E-03	1E-03					
CA-Copco No. 2 Wood Pile	SO	C2WP-05	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0053	440	Y	1E-05	1E-05	4E-04	0.3271	1E-04	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-05	PAH-HMW	Chrysene	mg/kg	0.0082	31	Y	3E-04	3E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-05	PAH-HMW	Fluoranthene	mg/kg	0.0065	80	Y	8E-05	8E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-05	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0024	710	Y	3E-06	3E-06					
CA-Copco No. 2 Wood Pile	SO	C2WP-05	PAH-HMW	Pyrene	mg/kg	0.012	230	Y	5E-05	5E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-05	PAH-LMW	1-Methylnaphthalene	mg/kg	0.00078	--	Y	--	--	2E-04	0.3271	7E-05	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-05	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0013	160	Y	8E-06	8E-06					
CA-Copco No. 2 Wood Pile	SO	C2WP-05	PAH-LMW	Fluorene	mg/kg	0.0013	19	Y	7E-05	7E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-05	PAH-LMW	Naphthalene	mg/kg	0.0022	27	Y	8E-05	8E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-05	PAH-LMW	Phenanthrene	mg/kg	0.0065	145	Y	4E-05	4E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-06	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0016	155	Y	1E-05	1E-05	3E-04	0.3271	9E-05	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-06	PAH-HMW	Chrysene	mg/kg	0.0064	31	Y	2E-04	2E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-06	PAH-HMW	Fluoranthene	mg/kg	0.0025	80	Y	3E-05	3E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-06	PAH-HMW	Pyrene	mg/kg	0.0045	230	Y	2E-05	2E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-06	PAH-LMW	Naphthalene	mg/kg	0.0022	27	Y	8E-05	8E-05	1E-04	0.3271	3E-05	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-06	PAH-LMW	Phenanthrene	mg/kg	0.0032	145	Y	2E-05	2E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-07	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0019	155	Y	1E-05	1E-05	1E-04	0.3271	4E-05	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-07	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0029	440	Y	7E-06	7E-06					
CA-Copco No. 2 Wood Pile	SO	C2WP-07	PAH-HMW	Chrysene	mg/kg	0.0017	31	Y	5E-05	5E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-07	PAH-HMW	Fluoranthene	mg/kg	0.003	80	Y	4E-05	4E-05					
CA-Copco No. 2 Wood Pile	SO	C2WP-07	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0016	160	Y	1E-05	1E-05	2E-04	0.3271	5E-05	<1	<1
CA-Copco No. 2 Wood Pile	SO	C2WP-07	PAH-LMW	Naphthalene	mg/kg	0.0035	27	Y	1E-04	1E-04					
CA-Copco No. 2 Wood Pile	SO	C2WP-07	PAH-LMW	Phenanthrene	mg/kg	0.0034	145	Y	2E-05	2E-05					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location Result	Detect	Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted	Summary HI	
								ESL ^a	Low Effect HI				Location-Specific HI	AUF Adjusted
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-HMW	Benzo(a)anthracene	mg/kg	0.35	Y	155	2E-03	9E-02	1	9E-02	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-HMW	Benzo(a)pyrene	mg/kg	0.15	Y	190	8E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.65	Y	440	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.092	Y	250	4E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-HMW	Chrysene	mg/kg	1.1	Y	31	4E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.037	Y	140	3E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-HMW	Fluoranthene	mg/kg	3.3	Y	80	4E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.14	Y	710	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-HMW	Pyrene	mg/kg	2.1	Y	230	9E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0042	Y	--	--	4E-03	1	4E-03	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-LMW	Acenaphthene	mg/kg	0.0097	Y	1300	7E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-LMW	Acenaphthylene	mg/kg	0.088	Y	1200	7E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-LMW	Anthracene	mg/kg	0.1	Y	2100	5E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-LMW	Naphthalene	mg/kg	0.011	Y	27	4E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-02	PAH-LMW	Phenanthrene	mg/kg	0.48	Y	145	3E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0027	Y	155	2E-05	1E+00	1	1E+00	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-HMW	Benzo(a)pyrene	mg/kg	1.1	Y	190	6E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-HMW	Benzo(b)fluoranthene	mg/kg	4.9	Y	440	1E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.46	Y	250	2E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-HMW	Chrysene	mg/kg	8.9	Y	31	3E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.2	Y	140	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-HMW	Fluoranthene	mg/kg	46	Y	80	6E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.79	Y	710	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-HMW	Pyrene	mg/kg	20	Y	230	9E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-LMW	1-Methylnaphthalene	mg/kg	0.21	Y	--	--	2E-01	1	2E-01	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-LMW	2-Methylnaphthalene	mg/kg	0.18	Y	160	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-LMW	Acenaphthene	mg/kg	0.29	Y	1300	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-LMW	Acenaphthylene	mg/kg	0.86	Y	1200	7E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-LMW	Anthracene	mg/kg	1.8	Y	2100	9E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-LMW	Fluorene	mg/kg	0.43	Y	19	2E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-LMW	Naphthalene	mg/kg	0.34	Y	27	1E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-04	PAH-LMW	Phenanthrene	mg/kg	21	Y	145	1E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-HMW	Benzo(a)anthracene	mg/kg	0.015	Y	155	1E-04	6E-01	1	6E-01	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-HMW	Benzo(a)pyrene	mg/kg	0.53	Y	190	3E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-HMW	Benzo(b)fluoranthene	mg/kg	2.8	Y	440	6E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.28	Y	250	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-HMW	Chrysene	mg/kg	4.8	Y	31	2E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.075	Y	140	5E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-HMW	Fluoranthene	mg/kg	28	Y	80	4E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.48	Y	710	7E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-HMW	Pyrene	mg/kg	10	Y	230	4E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-LMW	1-Methylnaphthalene	mg/kg	0.068	Y	--	--	7E-02	1	7E-02	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-LMW	2-Methylnaphthalene	mg/kg	0.049	Y	160	3E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-LMW	Acenaphthene	mg/kg	0.15	Y	1300	1E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-LMW	Acenaphthylene	mg/kg	0.47	Y	1200	4E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-LMW	Anthracene	mg/kg	0.86	Y	2100	4E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-LMW	Fluorene	mg/kg	0.17	Y	19	9E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-LMW	Naphthalene	mg/kg	0.076	Y	27	3E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-05	PAH-LMW	Phenanthrene	mg/kg	8.9	Y	145	6E-02					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location		Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted	Summary HI	
						Result	Detect	ESL ^a	Low Effect HI				Location-Specific HI	AUF Adjusted
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-HMW	Benzo(a)anthracene	mg/kg	1.1	Y	155	7E-03	3E-01	1	3E-01	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-HMW	Benzo(a)pyrene	mg/kg	0.37	Y	190	2E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-HMW	Benzo(b)fluoranthene	mg/kg	1.3	Y	440	3E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.15	Y	250	6E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-HMW	Chrysene	mg/kg	3.2	Y	31	1E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.073	Y	140	5E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-HMW	Fluoranthene	mg/kg	11	Y	80	1E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.25	Y	710	4E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-HMW	Pyrene	mg/kg	6.7	Y	230	3E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-LMW	1-Methylnaphthalene	mg/kg	0.025	Y	--	--	5E-02	1	5E-02	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-LMW	2-Methylnaphthalene	mg/kg	0.016	Y	160	1E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-LMW	Acenaphthene	mg/kg	0.061	Y	1300	5E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-LMW	Acenaphthylene	mg/kg	0.22	Y	1200	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-LMW	Anthracene	mg/kg	0.69	Y	2100	3E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-LMW	Fluorene	mg/kg	0.16	Y	19	8E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-LMW	Naphthalene	mg/kg	0.024	Y	27	9E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-06	PAH-LMW	Phenanthrene	mg/kg	5.4	Y	145	4E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-HMW	Benzo(a)anthracene	mg/kg	0.33	Y	155	2E-03	3E-02	1	3E-02	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-HMW	Benzo(a)pyrene	mg/kg	0.34	Y	190	2E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.4	Y	440	9E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.16	Y	250	6E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-HMW	Chrysene	mg/kg	0.36	Y	31	1E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.027	Y	140	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-HMW	Fluoranthene	mg/kg	0.81	Y	80	1E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.22	Y	710	3E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-HMW	Pyrene	mg/kg	0.64	Y	230	3E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-LMW	Acenaphthene	mg/kg	0.012	Y	1300	9E-06	2E-03	1	2E-03	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-LMW	Acenaphthylene	mg/kg	0.018	Y	1200	2E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-LMW	Anthracene	mg/kg	0.044	Y	2100	2E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-LMW	Fluorene	mg/kg	0.013	Y	19	7E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-LMW	Naphthalene	mg/kg	0.0084	Y	27	3E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-07	PAH-LMW	Phenanthrene	mg/kg	0.21	Y	145	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-HMW	Benzo(a)anthracene	mg/kg	0.1	Y	155	6E-04	2E-02	1	2E-02	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-HMW	Benzo(a)pyrene	mg/kg	0.027	Y	190	1E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.13	Y	440	3E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.01	Y	250	4E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-HMW	Chrysene	mg/kg	0.23	Y	31	7E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0061	Y	140	4E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-HMW	Fluoranthene	mg/kg	0.89	Y	80	1E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.018	Y	710	3E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-HMW	Pyrene	mg/kg	0.59	Y	230	3E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0016	Y	--	--	2E-03	1	2E-03	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0016	Y	160	1E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-LMW	Acenaphthene	mg/kg	0.005	Y	1300	4E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-LMW	Acenaphthylene	mg/kg	0.0079	Y	1200	7E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-LMW	Anthracene	mg/kg	0.039	Y	2100	2E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-LMW	Fluorene	mg/kg	0.01	Y	19	5E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-LMW	Naphthalene	mg/kg	0.0025	Y	27	9E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-08	PAH-LMW	Phenanthrene	mg/kg	0.21	Y	145	1E-03					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location Result	Detect	Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted HI	Summary HI	
								ESL ^a	Low Effect HO				Location-Specific HI	AUF Adjusted HI
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-HMW	Benzo(a)anthracene	mg/kg	0.015	Y	155	1E-04	3E-03	1	3E-03	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-HMW	Benzo(a)pyrene	mg/kg	0.0067	Y	190	4E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.025	Y	440	6E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.0037	Y	250	1E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.0098	Y	710	1E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-HMW	Chrysene	mg/kg	0.041	Y	31	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0035	Y	140	3E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-HMW	Fluoranthene	mg/kg	0.09	Y	80	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0066	Y	710	9E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-HMW	Pyrene	mg/kg	0.061	Y	230	3E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-LMW	Acenaphthylene	mg/kg	0.0027	Y	1200	2E-06	1E-04	1	1E-04	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-LMW	Anthracene	mg/kg	0.0063	Y	2100	3E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-LMW	Naphthalene	mg/kg	0.00086	Y	27	3E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-09	PAH-LMW	Phenanthrene	mg/kg	0.013	Y	145	9E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-HMW	Benzo(a)anthracene	mg/kg	0.011	Y	155	7E-05	4E-03	1	4E-03	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-HMW	Benzo(a)pyrene	mg/kg	0.0071	Y	190	4E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.031	Y	440	7E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.0027	Y	250	1E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.0098	Y	710	1E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-HMW	Chrysene	mg/kg	0.047	Y	31	2E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0025	Y	140	2E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-HMW	Fluoranthene	mg/kg	0.17	Y	80	2E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0056	Y	710	8E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-HMW	Pyrene	mg/kg	0.1	Y	230	4E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-LMW	Acenaphthylene	mg/kg	0.003	Y	1200	3E-06	4E-04	1	4E-04	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-LMW	Anthracene	mg/kg	0.0061	Y	2100	3E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-LMW	Fluorene	mg/kg	0.00074	Y	19	4E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-LMW	Naphthalene	mg/kg	0.00067	Y	27	2E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-10	PAH-LMW	Phenanthrene	mg/kg	0.05	Y	145	3E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-11	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0043	Y	155	3E-05	8E-04	1	8E-04	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-11	PAH-HMW	Benzo(a)pyrene	mg/kg	0.0026	Y	190	1E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-11	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0074	Y	440	2E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-11	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.0035	Y	710	5E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-11	PAH-HMW	Chrysene	mg/kg	0.011	Y	31	4E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-11	PAH-HMW	Fluoranthene	mg/kg	0.024	Y	80	3E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-11	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0022	Y	710	3E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-11	PAH-HMW	Pyrene	mg/kg	0.017	Y	230	7E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-11	PAH-LMW	Naphthalene	mg/kg	0.00095	Y	27	4E-05	6E-05	1	6E-05	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-11	PAH-LMW	Phenanthrene	mg/kg	0.0042	Y	145	3E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-12	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0042	Y	440	1E-05	4E-04	1	4E-04	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-12	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.0018	Y	710	3E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-12	PAH-HMW	Chrysene	mg/kg	0.0059	Y	31	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-12	PAH-HMW	Fluoranthene	mg/kg	0.014	Y	80	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-12	PAH-HMW	Pyrene	mg/kg	0.0087	Y	230	4E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-12	PAH-LMW	Naphthalene	mg/kg	0.0011	Y	27	4E-05	6E-05	1	6E-05	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-12	PAH-LMW	Phenanthrene	mg/kg	0.003	Y	145	2E-05					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location Result	Detect	Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted HI	Summary HI	
								ESL ^a	Low Effect HO				Location-Specific HI	AUF Adjusted HI
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-HMW	Benzo(a)anthracene	mg/kg	0.79	Y	155	5E-03	2E-01	1	2E-01	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-HMW	Benzo(a)pyrene	mg/kg	0.21	Y	190	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-HMW	Benzo(b)fluoranthene	mg/kg	1.1	Y	440	3E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.058	Y	250	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.31	Y	710	4E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-HMW	Chrysene	mg/kg	2	Y	31	6E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.024	Y	140	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-HMW	Fluoranthene	mg/kg	6.2	Y	80	8E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.11	Y	710	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-HMW	Pyrene	mg/kg	3.8	Y	230	2E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0067	Y	--	--	1E-02	1	1E-02	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0042	Y	160	3E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-LMW	Acenaphthene	mg/kg	0.018	Y	1300	1E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-LMW	Acenaphthylene	mg/kg	0.095	Y	1200	8E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-LMW	Anthracene	mg/kg	0.22	Y	2100	1E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-LMW	Fluorene	mg/kg	0.023	Y	19	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-LMW	Naphthalene	mg/kg	0.0051	Y	27	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-13	PAH-LMW	Phenanthrene	mg/kg	1.5	Y	145	1E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-HMW	Benzo(a)anthracene	mg/kg	2.4	Y	155	2E-02	7E-01	1	7E-01	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-HMW	Benzo(a)pyrene	mg/kg	1	Y	190	5E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-HMW	Benzo(b)fluoranthene	mg/kg	6.5	Y	440	1E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.39	Y	250	2E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-HMW	Benzo(k)fluoranthene	mg/kg	2	Y	710	3E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-HMW	Chrysene	mg/kg	9.9	Y	31	3E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.16	Y	140	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-HMW	Fluoranthene	mg/kg	19	Y	80	2E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.75	Y	710	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-HMW	Pyrene	mg/kg	22	Y	230	1E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-LMW	1-Methylnaphthalene	mg/kg	0.16	Y	--	--	1E-01	1	1E-01	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-LMW	2-Methylnaphthalene	mg/kg	0.091	Y	160	6E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-LMW	Acenaphthene	mg/kg	0.28	Y	1300	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-LMW	Acenaphthylene	mg/kg	0.74	Y	1200	6E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-LMW	Anthracene	mg/kg	1.7	Y	2100	8E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-LMW	Fluorene	mg/kg	0.35	Y	19	2E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-LMW	Naphthalene	mg/kg	0.17	Y	27	6E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-14	PAH-LMW	Phenanthrene	mg/kg	16	Y	145	1E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-HMW	Benzo(a)anthracene	mg/kg	2	Y	155	1E-02	9E-01	1	9E-01	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-HMW	Benzo(a)pyrene	mg/kg	0.96	Y	190	5E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-HMW	Benzo(b)fluoranthene	mg/kg	5.9	Y	440	1E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.37	Y	250	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-HMW	Benzo(k)fluoranthene	mg/kg	1.5	Y	710	2E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-HMW	Chrysene	mg/kg	8.9	Y	31	3E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.17	Y	140	1E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-HMW	Fluoranthene	mg/kg	44	Y	80	6E-01					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.63	Y	710	9E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-HMW	Pyrene	mg/kg	16	Y	230	7E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-LMW	1-Methylnaphthalene	mg/kg	0.077	Y	--	--	9E-02	1	9E-02	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-LMW	2-Methylnaphthalene	mg/kg	0.045	Y	160	3E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-LMW	Acenaphthene	mg/kg	0.16	Y	1300	1E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-LMW	Acenaphthylene	mg/kg	0.67	Y	1200	6E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-LMW	Anthracene	mg/kg	1.2	Y	2100	6E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-LMW	Fluorene	mg/kg	0.21	Y	19	1E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-LMW	Naphthalene	mg/kg	0.042	Y	27	2E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-15	PAH-LMW	Phenanthrene	mg/kg	11	Y	145	8E-02					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location Result	Detect	Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted HI	Summary HI	
								ESL ^a	Low Effect HI				Location-Specific HI	AUF Adjusted HI
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-HMW	Benzo(a)anthracene	mg/kg	0.078	Y	155	5E-04	2E-02	1	2E-02	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-HMW	Benzo(a)pyrene	mg/kg	0.038	Y	190	2E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.18	Y	440	4E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.016	Y	250	6E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.054	Y	710	8E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-HMW	Chrysene	mg/kg	0.27	Y	31	9E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0055	Y	140	4E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-HMW	Fluoranthene	mg/kg	0.84	Y	80	1E-02					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.028	Y	710	4E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-HMW	Pyrene	mg/kg	0.51	Y	230	2E-03					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0081	Y	--	--	4E-03	1	4E-03	<1	<1
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0074	Y	160	5E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-LMW	Acenaphthene	mg/kg	0.01	Y	1300	8E-06					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-LMW	Acenaphthylene	mg/kg	0.017	Y	1200	1E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-LMW	Anthracene	mg/kg	0.043	Y	2100	2E-05					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-LMW	Fluorene	mg/kg	0.012	Y	19	6E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-LMW	Naphthalene	mg/kg	0.015	Y	27	6E-04					
CA-Copco No. 2 Wood Stave Penstock	SO	C2WS-16	PAH-LMW	Phenanthrene	mg/kg	0.43	Y	145	3E-03					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-01	PAH-HMW	Fluoranthene	mg/kg	0.00016	Y	80	2E-06	9E-05	0.0374	3E-06	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-01	PAH-HMW	Pyrene	mg/kg	0.02	Y	230	9E-05					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-01	PAH-LMW	1-Methylnaphthalene	mg/kg	0.015	Y	--	--	9E-04	0.0374	3E-05	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-01	PAH-LMW	2-Methylnaphthalene	mg/kg	0.03	Y	160	2E-04					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-01	PAH-LMW	Naphthalene	mg/kg	0.018	Y	27	7E-04					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-01	PAH-LMW	Phenanthrene	mg/kg	0.0065	Y	145	4E-05					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0031	Y	440	7E-06	4E-04	0.0374	2E-05	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-HMW	Chrysene	mg/kg	0.0095	Y	31	3E-04					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-HMW	Fluoranthene	mg/kg	0.0073	Y	80	9E-05					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0019	Y	710	3E-06					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-HMW	Pyrene	mg/kg	0.0054	Y	230	2E-05					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-LMW	1-Methylnaphthalene	mg/kg	0.016	Y	--	--	4E-03	0.0374	1E-04	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-LMW	2-Methylnaphthalene	mg/kg	0.016	Y	160	1E-04					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-LMW	Acenaphthylene	mg/kg	0.0011	Y	1200	9E-07					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-LMW	Anthracene	mg/kg	0.0025	Y	2100	1E-06					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-LMW	Fluorene	mg/kg	0.012	Y	19	6E-04					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-LMW	Naphthalene	mg/kg	0.078	Y	27	3E-03					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-02	PAH-LMW	Phenanthrene	mg/kg	0.028	Y	145	2E-04					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C1	PAH-HMW	Pyrene	mg/kg	0.0023	Y	230	1E-05	1E-05	0.0374	4E-07	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C1	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0027	Y	--	--	8E-04	0.0374	3E-05	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C1	PAH-LMW	2-Methylnaphthalene	mg/kg	0.0065	Y	160	4E-05					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C1	PAH-LMW	Naphthalene	mg/kg	0.019	Y	27	7E-04					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C1	PAH-LMW	Phenanthrene	mg/kg	0.0035	Y	145	2E-05					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C2	PAH-HMW	Fluoranthene	mg/kg	0.0035	Y	80	4E-05	6E-05	0.0374	2E-06	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C2	PAH-HMW	Pyrene	mg/kg	0.0043	Y	230	2E-05					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C2	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0091	Y	--	--	2E-03	0.0374	7E-05	<1	<1
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C2	PAH-LMW	2-Methylnaphthalene	mg/kg	0.014	Y	160	9E-05					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C2	PAH-LMW	Acenaphthylene	mg/kg	0.0029	Y	1200	2E-06					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C2	PAH-LMW	Fluorene	mg/kg	0.002	Y	19	1E-04					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C2	PAH-LMW	Naphthalene	mg/kg	0.043	Y	27	2E-03					
CA-Iron Gate Fish Hatchery Burn Pit	SO	IGBP-C2	PAH-LMW	Phenanthrene	mg/kg	0.017	Y	145	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-01	PAH-HMW	Fluoranthene	mg/kg	0.0021	Y	80	3E-05	4E-05	1	4E-05	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-01	PAH-HMW	Pyrene	mg/kg	0.0023	Y	230	1E-05					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location Result	Detect	Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted HI	Summary HI	
								ESL ^a	Low Effect HI				Location-Specific HI	AUF Adjusted HI
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-HMW	Benzo(a)anthracene	mg/kg	0.034	Y	155	2E-04	3E-03	1	3E-03	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-HMW	Benzo(a)pyrene	mg/kg	0.047	Y	190	2E-04					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.046	Y	440	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.038	Y	250	2E-04					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.016	Y	710	2E-05					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-HMW	Chrysene	mg/kg	0.045	Y	31	1E-03					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0085	Y	140	6E-05					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-HMW	Fluoranthene	mg/kg	0.047	Y	80	6E-04					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.033	Y	710	5E-05					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-HMW	Pyrene	mg/kg	0.065	Y	230	3E-04					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-LMW	1-Methylnaphthalene	mg/kg	0.00089	Y	--	--	3E-04	1	3E-04	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-LMW	Acenaphthene	mg/kg	0.0016	Y	1300	1E-06					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-LMW	Anthracene	mg/kg	0.0035	Y	2100	2E-06					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-LMW	Fluorene	mg/kg	0.00081	Y	19	4E-05					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-LMW	Naphthalene	mg/kg	0.003	Y	27	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-03	PAH-LMW	Phenanthrene	mg/kg	0.019	Y	145	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-04	PAH-HMW	Fluoranthene	mg/kg	0.0016	Y	80	2E-05	3E-05	1	3E-05	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-04	PAH-HMW	Pyrene	mg/kg	0.0014	Y	230	6E-06					
CA-Iron Gate Shooting Range	SO	IGSR-04	PAH-LMW	Naphthalene	mg/kg	0.0025	Y	27	9E-05	9E-05	1	9E-05	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-05	PAH-HMW	Pyrene	mg/kg	0.0012	Y	230	5E-06	5E-06	1	5E-06	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-05	PAH-LMW	Naphthalene	mg/kg	0.002	Y	27	7E-05	7E-05	1	7E-05	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-07	PAH-HMW	Fluoranthene	mg/kg	0.0017	Y	80	2E-05	2E-05	1	2E-05	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-07	PAH-LMW	Fluorene	mg/kg	0.00076	Y	19	4E-05	1E-04	1	1E-04	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-07	PAH-LMW	Naphthalene	mg/kg	0.0019	Y	27	7E-05					
CA-Iron Gate Shooting Range	SO	IGSR-08	PAH-LMW	Anthracene	mg/kg	0.0011	Y	2100	5E-07	9E-05	1	9E-05	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-08	PAH-LMW	Naphthalene	mg/kg	0.0024	Y	27	9E-05					
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-HMW	Benzo(a)anthracene	mg/kg	0.002	Y	155	1E-05	2E-04	1	2E-04	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-HMW	Benzo(a)pyrene	mg/kg	0.0024	Y	190	1E-05					
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0024	Y	440	5E-06					
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.0019	Y	250	8E-06					
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.0011	Y	710	2E-06					
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-HMW	Chrysene	mg/kg	0.0032	Y	31	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0029	Y	140	2E-05					
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-HMW	Fluoranthene	mg/kg	0.0023	Y	80	3E-05					
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.0015	Y	710	2E-06					
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-HMW	Pyrene	mg/kg	0.0031	Y	230	1E-05					
CA-Iron Gate Shooting Range	SO	IGSR-09	PAH-LMW	Anthracene	mg/kg	0.0011	Y	2100	5E-07	5E-07	1	5E-07	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-10	PAH-HMW	Fluoranthene	mg/kg	0.0062	Y	80	8E-05	9E-05	1	9E-05	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-10	PAH-HMW	Pyrene	mg/kg	0.0032	Y	230	1E-05					
CA-Iron Gate Shooting Range	SO	IGSR-10	PAH-LMW	1-Methylnaphthalene	mg/kg	0.00089	Y	--	--	3E-04	1	3E-04	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-10	PAH-LMW	Naphthalene	mg/kg	0.0077	Y	27	3E-04					
CA-Iron Gate Shooting Range	SO	IGSR-10	PAH-LMW	Phenanthrene	mg/kg	0.002	Y	145	1E-05					
CA-Iron Gate Shooting Range	SO	IGSR-11	PAH-LMW	Anthracene	mg/kg	0.0011	Y	2100	5E-07	5E-07	1	5E-07	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-12	PAH-LMW	Anthracene	mg/kg	0.00085	Y	2100	4E-07	4E-07	1	4E-07	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-13	PAH-LMW	Anthracene	mg/kg	0.0009	Y	2100	4E-07	1E-04	1	1E-04	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-13	PAH-LMW	Naphthalene	mg/kg	0.0031	Y	27	1E-04					

Table G-18. Sample-Specific Chemical Group Hazard Indices

REC Name	Matrix	Location ID	Class	Analyte	Units	Maximum Location Result	Detect	Minimum EcoPRG or Low Effect		Location-Specific HI	AUF ^b	AUF Adjusted HI	Summary HI	
								ESL ^a	Low Effect HQ				Location-Specific HI	AUF Adjusted HI
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-HMW	Benzo(a)anthracene	mg/kg	0.079	Y	155	5E-04	8E-03	1	8E-03	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-HMW	Benzo(a)pyrene	mg/kg	0.12	Y	190	6E-04					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.16	Y	440	4E-04					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.11	Y	250	4E-04					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.056	Y	710	8E-05					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-HMW	Chrysene	mg/kg	0.11	Y	31	4E-03					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.024	Y	140	2E-04					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-HMW	Fluoranthene	mg/kg	0.12	Y	80	2E-03					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.13	Y	710	2E-04					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-HMW	Pyrene	mg/kg	0.12	Y	230	5E-04					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-LMW	Acenaphthene	mg/kg	0.0049	Y	1300	4E-06	3E-04	1	3E-04	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-LMW	Anthracene	mg/kg	0.0044	Y	2100	2E-06					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-LMW	Fluorene	mg/kg	0.0021	Y	19	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-19	PAH-LMW	Phenanthrene	mg/kg	0.025	Y	145	2E-04					
CA-Iron Gate Shooting Range	SO	IGSR-20	PAH-LMW	Anthracene	mg/kg	0.0011	Y	2100	5E-07					
CA-Iron Gate Shooting Range	SO	IGSR-20	PAH-LMW	Naphthalene	mg/kg	0.0044	Y	27	2E-04					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-HMW	Benzo(a)anthracene	mg/kg	0.017	Y	155	1E-04	2E-03	1	2E-03	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-HMW	Benzo(a)pyrene	mg/kg	0.023	Y	190	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.033	Y	440	8E-05					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.027	Y	250	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.017	Y	710	2E-05					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-HMW	Chrysene	mg/kg	0.022	Y	31	7E-04					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-HMW	Dibenzo(a,h)anthracene	mg/kg	0.0041	Y	140	3E-05					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-HMW	Fluoranthene	mg/kg	0.023	Y	80	3E-04					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-HMW	Indeno(1,2,3-cd)pyrene	mg/kg	0.028	Y	710	4E-05					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-HMW	Pyrene	mg/kg	0.025	Y	230	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-LMW	1-Methylnaphthalene	mg/kg	0.0018	Y	--	--	2E-04	1	2E-04	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-LMW	Acenaphthene	mg/kg	0.0017	Y	1300	1E-06					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-LMW	Naphthalene	mg/kg	0.0054	Y	27	2E-04					
CA-Iron Gate Shooting Range	SO	IGSR-21	PAH-LMW	Phenanthrene	mg/kg	0.0035	Y	145	2E-05					
CA-Iron Gate Shooting Range	SO	IGSR-23	PAH-HMW	Chrysene	mg/kg	0.0019	Y	31	6E-05	7E-05	1	7E-05	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-23	PAH-HMW	Pyrene	mg/kg	0.0012	Y	230	5E-06					
CA-Iron Gate Shooting Range	SO	IGSR-25	PAH-HMW	Benzo(a)anthracene	mg/kg	0.0019	Y	155	1E-05	3E-04	1	3E-04	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-25	PAH-HMW	Benzo(a)pyrene	mg/kg	0.0022	Y	190	1E-05					
CA-Iron Gate Shooting Range	SO	IGSR-25	PAH-HMW	Benzo(b)fluoranthene	mg/kg	0.0041	Y	440	9E-06					
CA-Iron Gate Shooting Range	SO	IGSR-25	PAH-HMW	Benzo(g,h,i)perylene	mg/kg	0.0024	Y	250	1E-05					
CA-Iron Gate Shooting Range	SO	IGSR-25	PAH-HMW	Benzo(k)fluoranthene	mg/kg	0.0016	Y	710	2E-06					
CA-Iron Gate Shooting Range	SO	IGSR-25	PAH-HMW	Chrysene	mg/kg	0.0046	Y	31	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-25	PAH-HMW	Fluoranthene	mg/kg	0.0097	Y	80	1E-04					
CA-Iron Gate Shooting Range	SO	IGSR-25	PAH-HMW	Pyrene	mg/kg	0.007	Y	230	3E-05					
CA-Iron Gate Shooting Range	SO	IGSR-25	PAH-LMW	Phenanthrene	mg/kg	0.0018	Y	145	1E-05	1E-05	1	1E-05	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-27	PAH-LMW	Naphthalene	mg/kg	0.0032	Y	27	1E-04	1E-04	1	1E-04	<1	<1
CA-Iron Gate Shooting Range	SO	IGSR-28	PAH-LMW	Naphthalene	mg/kg	0.0025	Y	27	9E-05	9E-05	1	9E-05	<1	<1

Notes:

^a The most conservative EcoPRG between birds and mammals if available, otherwise the Low Effect ESL.

^b The most conservative area use factors between the hermit thrush and vagrant shrew.

-- = not available or not applicable

<1 = less than 1

AUF = area use factor

EcoPRG = ecological preliminary remedial goal

ESL = ecological screening level

HI = hazard index

HQ = hazard quotient - all values presented to 1 significant figure

mg/kg = milligrams per kilogram

REC = recognized environmental condition

References

- ATSDR. 2021. *Toxicological Profile for Hexachlorobutadiene*. Agency for Toxic Substances and Disease Registry. March. Available at: <https://www.atsdr.cdc.gov/toxprofiles/tp42.pdf>.
- Baes, C.F., III, R.C. Sharp, A.L. Sjoren, and R.W. Shor. 1994. *A Review and Analysis of Parameters for Assessing Transport of Environmentally Released Radionuclides through Agriculture*. ORNL-5786. Oak Ridge, TN: Oak Ridge National Laboratory.
- Bechtel-Jacobs Company, LLC. 1998. *Empirical Models for the Uptake of Inorganic Chemicals from Soil by Plants*. BJC/OR-133. Oak Ridge, TN: Bechtel Jacobs Company LLC.
- Beyer, W. N., E. Conner, and S. Gerould. 1994. Survey of soil ingestion by wildlife. *J. Wildl. Mgmt.*, 58:375-382.
- Heindel, J. J., C. J. Price, B. A. Schwetz. 1994. "The Developmental Toxicity of Boric Acid in Mice, Rats, and Rabbits." *Environ Health Perspect* 102: 107.112.
- Los Alamos National Laboratory (LANL). 2020. EcoRisk Database release 4.2. Available online at <https://www.intellusnm.com/documents/documents.cfm>
- Nagy, K.A. 2001. Food requirements of wild animals: predictive equations for free-living mammals, reptiles, and birds. *Nutrition Abstracts and Reviews, Series B: Livestock Feeds and Feeding* 71:1R-12R.
- Rigdon, R.H. and J. Neal. 1963. Fluorescence of Chickens and Eggs Following the Feeding of Benzpyrene Crystals. *Texas Reports on Biology and Medicine*. Vol. 21, No. 4, p 558-566.
- Sample, B. E., and G. W. Suter II. 1994. *Estimating Exposure of Terrestrial Wildlife to Contaminants*. ES/ER/TM-125, Oak Ridge National Laboratory.
- Sample, B. E., C. M., Opresko, and G. W. Suter II. 1996. *Toxicological Benchmarks for Wildlife: 1996 Revision*. Oak Ridge National Laboratory, Oak Ridge, TN. 227 pp., ES/ER/TM-86/R3.
- Sample, B., J.J. Beauchamp, R.A. Efroymson, and G.W. Suter. 1998b. *Development and Validation of Bioaccumulation Models for Small Mammals*. February.
- Sample, B., J.J. Beauchamp, R.A. Efroymson, G.W. Suter, and T.L. Ashwood. 1998a. *Development and Validation of Bioaccumulation Models for Earthworms*. February.
- Schwetz, B.A., J.M. Norris, R.J. Kociba, P.A. Keeler, R.F. Cornier, and P.J. Gehring. 1974. Reproduction Study in Japanese Quail Fed Hexachlorobutadiene for 90 Days. *Toxicology and Applied Pharmacology*. Volume 30. Pages 255-265.
- Stickel, Lucille F. 1968. Home range and travels. In: King, John Arthur, ed. *Biology of Peromyscus (Rodentia)*. Special Publication No. 2. Stillwater, OK: The American Society of Mammalogists: 373-411. [25453]
- Sullivan, Janet. 1995. *Peromyscus maniculatus*. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available: <https://www.fs.fed.us/database/feis/animals/mammal/pema/all.html> [2022, July 28].
- USEPA. 2005a. *Ecological Soil Screening Levels for Antimony. Interim Final*. OSWER Directive 9285.7. Office of Solid Waste and Emergency Response. November.
- USEPA. 2005b. *Ecological Soil Screening Levels for Arsenic*. Interim Final. OSWER Directive 9285.7-62, Revised. Office of Solid Waste and Emergency Response. March.
- USEPA. 2005c. *Ecological Soil Screening Levels for Cadmium*. Interim Final. OSWER Directive 92857-65, Revised. Office of Solid Waste and Emergency Response. March.
- USEPA. 2005d. *Ecological Soil Screening Levels for Lead*. Interim Final. OSWER Directive 92857-70, Revised. Office of Solid Waste and Emergency Response. March.
- USEPA. 2005e. *Ecological Soil Screening Levels for Vanadium*. Interim Final. OSWER Directive 9285.7-75, Revised. Office of Solid Waste and Emergency Response. April.
- USEPA. 2007a. *Guidance for Developing Ecological Soil Screening Levels (Eco-SSLs)*, OSWER Directive 9285.7-55, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Washington, D.C. Issued November 2003, Revised April.
- USEPA. 2007b. *Ecological Soil Screening Levels for Copper*. Interim Final. OSWER Directive 9285.7-68, Revised. Office of Solid Waste and Emergency Response. February.
- USEPA. 2007c. *Ecological Soil Screening Levels for Manganese. Interim Final*. OSWER Directive 9285.7-71, Revised. Office of Solid Waste and Emergency Response. April.
- USEPA. 2007d. *Ecological Soil Screening Levels for Selenium*. Interim Final. OSWER Directive 9285.7-72, Revised. Office of Solid Waste and Emergency Response. March.
- USEPA. 2007e. *Ecological Soil Screening Levels for Zinc. Interim Final*. OSWER Directive 9285.7-73, Revised. Office of Solid Waste and Emergency Response. June.
- USEPA. 2007f. *Ecological Soil Screening Levels for Polycyclic Aromatic Hydrocarbons*. Interim Final. OSWER Directive 9285.7-78, Revised. Office of Solid Waste and Emergency Response. June.
- USEPA. 2007g. *Ecological Soil Screening Levels for Pentachlorophenol. Interim Final*. OSWER Directive 9285.7-58, Revised. Office of Solid Waste and Emergency Response. March.
- USEPA. 2008b. *Ecological Soil Screening Levels for Chromium. Interim Final*. OSWER Directive 9285.7-66, Revised. Office of Solid Waste and Emergency Response. April.
- USEPA. 2018. *EPA Region 4 Ecological Risk Assessment Supplemental Guidance (ERAGS)*. Originally published November 1995 and updated March 2018. Scientific Support Section, Superfund Division. <https://www.epa.gov/risk/region-4-ecological-risk-assessment-supplemental-guidance>.
- USEPA. 2021. U.S. Environmental Protection Agency Integrated Risk Information System (IRIS) database.https://iris.epa.gov/AtoZ/?list_type=alpha

Appendix H
Dynamite Cave Technical Memorandum

2020 SW Fourth Avenue, Suite 300
Portland, Oregon 97201
United States
T +1.503.235.5000

www.jacobs.com

Subject Copco No. 1 Dynamite Cave Inspection Report

Project Name Lower Klamath Hydroelectric Project (FERC No. P-14803)

Attention Demian Ebert, PacifiCorp

From David Poley, Jacobs

Date May 5, 2022

Copies to Emilio Candanoza, Jacobs

1. Introduction

This technical memorandum documents the field observations and activities performed within the Copco No. 1 Dynamite Cave (cave) (Figure 1 in Attachment 1) by Jacobs on behalf of PacifiCorp for the Lower Klamath Hydroelectric Project (FERC No. P-14803). All fieldwork was performed according to Section 3.4 ("Copco No. 1 Dynamite Cave") of the *California Site Investigation Work Plan* (Jacobs 2021).

Until March 2, 2022, the cave had not been accessed for many years. During a Phase I Environmental Site Assessment of the cave (AECOM 2018), PacifiCorp noted that any dynamite had likely been removed from the cave. However, because AECOM could not confirm an absence of explosives or explosive residue within the cave, the cave was included as a recognized environmental condition to be addressed under Exhibit C of a Property Transfer Agreement between PacifiCorp and the Klamath River Renewal Corporation.

2. Field Observations and Activities

On March 2, 2022, a scaffold was erected to allow for safe entry to the cave and removal of the wooden panels blocking the cave entrance. The cave was allowed to vent overnight and was accessed and inspected the following day by a qualified unexploded ordinance (UXO) technician. The following was determined:

- Air monitoring of the cave was performed using a calibrated MultiRae air quality monitor prior to entry and while inside the cave (Photographs 1 and 2 in Attachment 2). Air monitoring indicated no safety hazards within the breathing zone (20.9 percent oxygen, 0 percent lower explosive limit, and 0 parts per million carbon monoxide).
- The cave entryway is 4 feet wide (Photographs 3 and 4 in Attachment 2). The inside of the cave is 4 to 4.5 feet wide from front to back, but a portion of the cave is 3.5 feet wide near the center. The maximum height of the cave is 5 feet above a plywood floor (Figure 2 in Attachment 1; Photographs 5 and 6 in Attachment 2) that lies 8 to 9 inches above the cave's floor and extends from the entryway to the back of the cave. The plywood floor is approximately 9 feet long by 4 feet wide and is cantilevered over the cave shaft in the rear of the cave. The plywood floor is supported by 4-inch by 4-foot wood posts and 2- by 4-inch wood beams (Photograph 7 in Attachment 2).

- The depth of the cave from front to back is approximately 9 feet. The floor of the cave ends 6 feet from the cave's entryway and becomes a shaft. The bottom of the 3- by 4- by 22.5-foot-deep shaft at the back of the cave contains wood and debris.
- A qualified, Jacobs UXO technician performed a survey of the cave for dynamite and explosives residue, and neither was observed in the cave or at the bottom of the shaft. The cave's walls showed evidence of former blasting with dynamite (Photograph 8 in Attachment 2).
- The presence or absence of residual explosives was determined by collecting swipe samples from representative locations on the floor, ceiling, and sidewalls of the cave and spraying each with Expray #1 for Group A explosives, Expray #2 for Group B explosives, and Expray #3 for improvised explosives with nitrate (<https://idealblasting.com/expray-explosives-detection-field-test-kit/>). Swipe samples were collected from six locations on the cave's floor, three locations on the cave's ceiling, and three locations on each sidewall. All swipe sample locations tested negative for the presence of residual explosives. Figure 2 (Attachment 1) depicts the general sample locations.

On March 9, 2022, the scaffold was inspected, and air monitoring was performed prior to entering the cave to perform a video survey of the shaft. The video survey confirmed an absence of explosives and the presence of charred lumber, detritus, a metal rod, and some painted wood at the base of the shaft (Photographs 9 and 10 in Attachment 2). The cave entryway was subsequently secured by PacifiCorp, and the scaffold was dismantled and removed.

3. Conclusions

Based on visual observations and Expray testing completed within the cave, explosives and explosive residuals were confirmed to be absent from the cave.

4. References




AECOM Technical Services, Inc. (AECOM). 2018. J.C. Boyle Dam, Copco No. 1 Dam, Copco No. 2 Dam, Iron Gate Dam, and Iron Gate Fish Hatchery Phase I Environmental Site Assessments. Prepared for Klamath River Renewal Corporation. November.

Jacobs. 2021. *California Site Investigation Work Plan*. Final. Prepared for PacifiCorp. November.

Attachment 1
Figures



LEGEND

-  SIWP REC Boundary
-  Dam to be Removed
-  Powerhouse

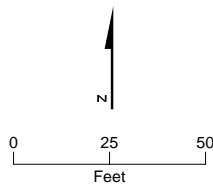


FIGURE 1
Copco No. 1 Dynamite Cave
 Lower Klamath Hydroelectric Project

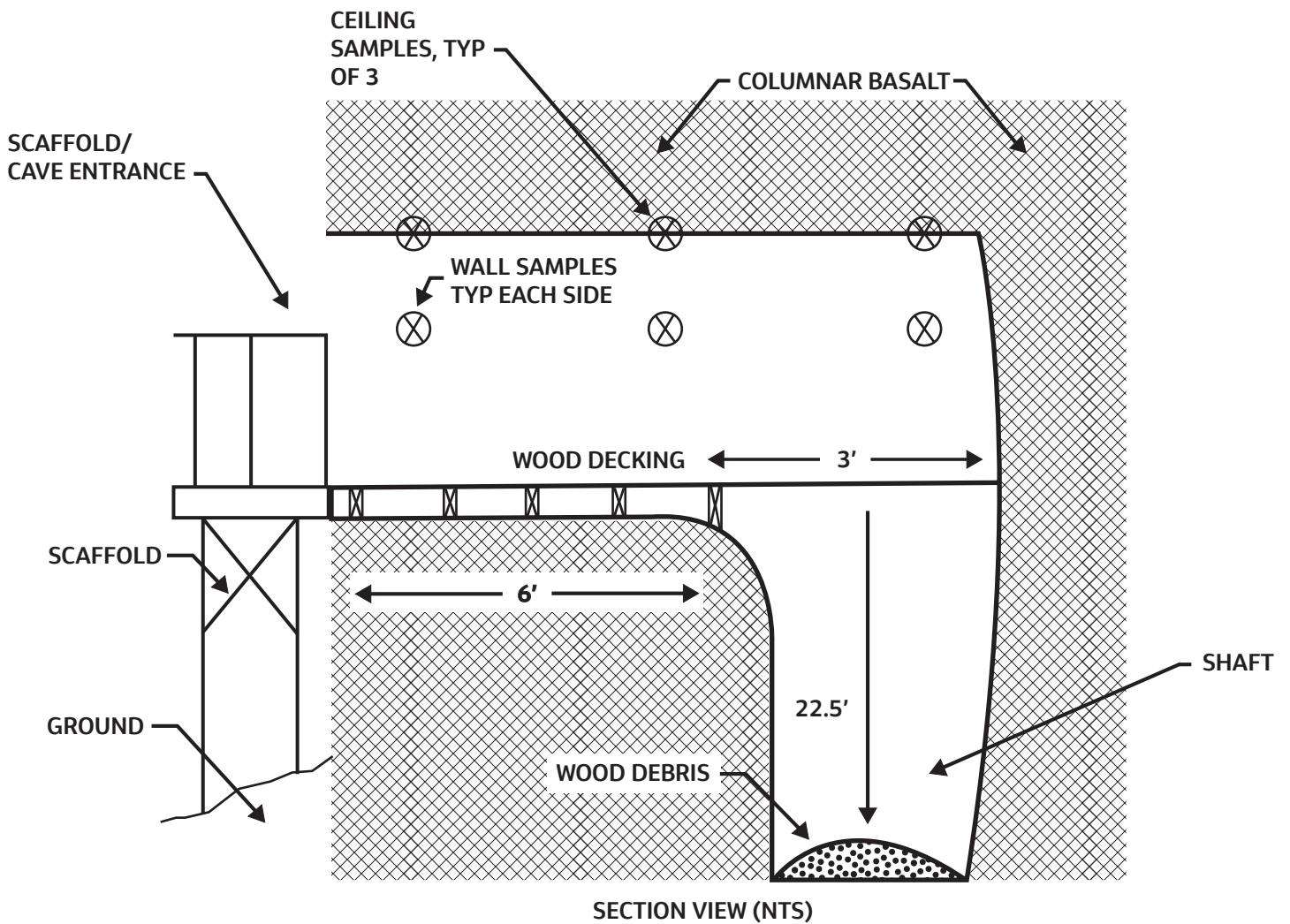
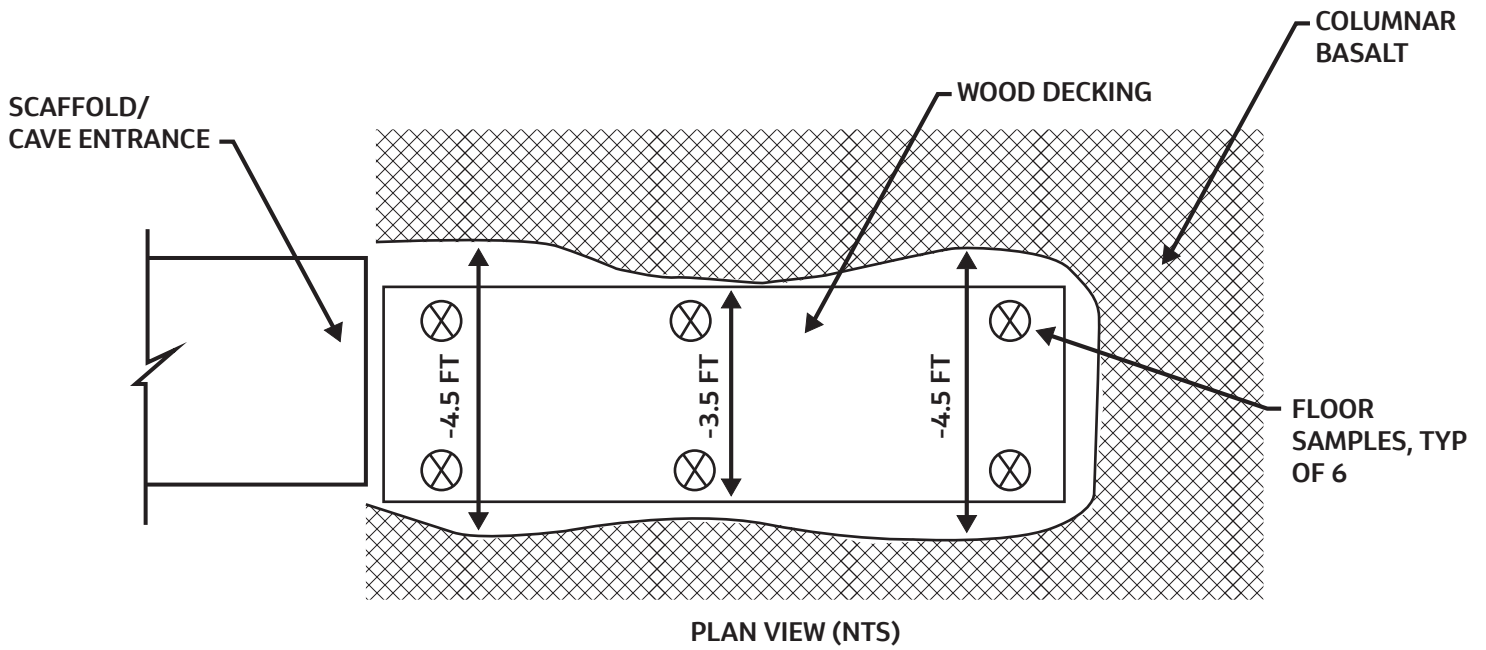


Figure 2
Copco No. 1 Dynamite Cave Plan View,
Section View, and Sample Locations
Lower Klamath Hydroelectric Project

Attachment 2
Photographs

Project Title: Lower Klamath Hydroelectric Project (FERC No. P-14803) - Copco No. 1 Dynamite Cave Inspection Report

Location: Copco No. 1 Dynamite Cave

Dates: March 2 and 9, 2022



Photograph 1: Cave Venting and Air Monitoring, View 1

Taken by: Jacobs

Date taken: March 2, 2022



Photograph 2: Cave Venting and Air Monitoring, View 2

Taken by: Jacobs

Date taken: March 2, 2022



Photograph 3: 4-foot-wide Cave Entrance

Taken by: Jacobs

Date taken: March 2, 2022



Photograph 4: 4-foot-wide Cave

Taken by: Jacobs

Date taken: March 2, 2022



Photograph 5: 5-foot-tall Cave at Entrance

Taken by: Jacobs

Date taken: March 2, 2022



Photograph 6: 5-foot-tall Cave with Plywood Floor

Taken by: Jacobs

Date taken: March 2, 2022



Photograph 7: Plywood Floor with Support Beams

Taken by: Jacobs

Date taken: March 9, 2022



Photograph 8: Evidence of Former Dynamite Usage

Taken by: Jacobs

Date taken: March 2, 2022



Photograph 9: Shaft Debris View 1

Taken by: Jacobs

Date taken: March 9, 2022



Photograph 10: Shaft Debris View 2

Taken by: Jacobs

Date taken: March 9, 2022

Appendix I
Consolidated Comment Matrix

COMMENT MATRIX for the Stakeholder Review Draft Dated October 2022
Lower Klamath Hydroelectric Project Site Investigation Reports for California and Oregon
FERC No. P-14803
March 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>California Department of Fish and Wildlife - Office of Spill Prevention and Response/California Department of Water Resources (Comments on the California Site Investigation Report)</i>					
CA-General-1	KT	General Comment		[This comment #1 may be withdrawn. CDFW is double checking and will be in touch] CDFW-OSPR is concerned that the lack of screening data for lead shot and target fragments (a potential source of PAHs) is a data gap that PacifiCorp needs to address. The deleterious effects of wildlife ingestion of lead shot or bullet fragments have been well documented over many years and in numerous scientific studies (Rattner et al. 2008). CDFW-OSPR considers lead shot as a poison under California Fish and Game Code section 3005. Additional clarification emailed by Kevin Takei (California) to Demian Ebert (PacifiCorp) on January 11, 2023, at 9:01 AM: "CDFW is fine withdrawing the comment because we understand KRRC will be disposing dam debris on top of the shooting range. As a result the likelihood of wildlife ingesting lead shot/bullet fragments will be low. If KRRC changes its plans and ends up not disposing debris on the shooting range, CDFW would like to reopen this comment."	Acknowledged. No changes necessary.
CA-General-2	KT	General Comment		For sites recommended for removal actions, CDFW is not commenting on the recommendations. CDFW anticipates providing input on specific actions during preparation of the removal action plans.	Acknowledged. No changes necessary.
CA-1	KT		Page 3-11, Section 3.3.4.1 Derivation of Site-Specific EcoPRGs	The method used to calculate ecological preliminary remedial goal in soil is acceptable, as are the bioaccumulation factors used (Appendix G, Tables G-5).	Acknowledged. No changes necessary.
CA-2	KT		Page 5-1, Section 5.1	Was trash and other debris removed or does it remain?	Debris and trash have not been removed, but will be before PacifiCorp stops operating the Lower Klamath Project. No changes necessary.
CA-3	KT		Page 6-9, Section 6.7 Recommended Actions	May need to coordinate implementation of the remedial action plan with any restoration activity by RES.	PacifiCorp expects that the removal action plan would be coordinated with the KRRC's team to identify waste staging areas, stockpile management, soil reuse, backfill and compaction, and offsite disposal requirements all with an eye toward reducing potential conflicts and schedule impacts on dam removal and restoration activities. No changes necessary.
CA-4	KT		Appendix D: Analytical Laboratory Results	CDFW-OSPR requests PacifiCorp ensure that the laboratory, Eurofins/TA is a California state-certified analytical laboratory. CDFW-OSPR requests the PacifiCorp include a current certification document as an appendix to the Draft Final document.	Eurofins/TA has provided their certification in the California Environmental Laboratory Accreditation Program and that document has been added to Appendix D. Note that the certificate expired on 7/7/2022. Eurofins/TA has applied for a renewal, which is in progress, and all samples were analyzed prior to that date.

COMMENT MATRIX for the Stakeholder Review Draft Dated October 2022
Lower Klamath Hydroelectric Project Site Investigation Reports for California and Oregon
FERC No. P-14803
March 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
CA-5	KT		Appendix E, Data Quality Evaluation Report	<p>CDFW-OSPR has concerns regarding the substituted phenol data. The surrogate QC indicates that samples may have been mishandled during extraction yielding results that are biased low. Please to include a current certification document as an appendix to the Draft Final document to estimate the impact.</p> <p><i>Additional clarification emailed by Kevin Takei (California) to Demian Ebert (PacifiCorp) on January 23, 2023, at 3:36 PM: "This was an observation of a trend in one batch of semi-volatiles that the substituted-phenol surrogates were reported with low recoveries; the corresponding quality control samples also were reported with low substituted-phenol recoveries. Aggressive extract concentration is suspected to affect substituted-phenol surrogate recoveries and by association, substituted phenol compounds in samples. The data was appropriately flagged by the validators. No certification is needed."</i></p>	<p>Acknowledged. No changes necessary.</p>
CA-6	KT		Appendix E, Data Quality Evaluation Report	<p>Please clarify how the validators used data flagged as "J" or "UJ" to identify the maximum concentration detected or if the data was ignored.</p> <p><i>Additional clarification emailed by Kevin Takei (California) to Demian Ebert (PacifiCorp) on January 23, 2023, at 3:36 PM: "My question is regarding how the validators calculated the maximum possible concentrated for compounds where the compound is flagged "UJ." If recoveries for a compound was low, was the maximum possible concentration calculated based on the reporting limit, or a recovery-corrected result?"</i></p>	<p>For Section 3.11, the laboratory originally reported the analytical data for various dioxin/furan congeners as "estimated maximum possible concentrations" that were considered detectable by the laboratory and flagged with a "J" (estimated). However, during data validation by Jacobs, it was determined that the ion ratio criteria were exceeded for these congeners. Consequently, the data validator changed the final flag to "UJ" (estimated non-detect). The original estimated result values were not changed and no additional calculations or adjustments were made.</p> <p>No changes necessary.</p>
CA-7	KT		Appendix E, Data Quality Evaluation Report	<p>The Data Quality Evaluation Report is missing the required signatures of the Project Manager/Senior Chemist, who validated the data.</p>	<p>Signature of Mark Fessler/Senior Chemist has been provided in the final report.</p>
CA-8	KT			<p>Appendix G, Table G-6. It is not clear how the HQ was calculated when the incidental soil ingestion rate for the Red-tailed Hawk of 2.4% was used. Based on the 90th percentile from a Monte Carlo simulation, a 5.2% soil ingestion rate (as proportion of diet) is used for the Red-tailed Hawk in the USEPA Eco-SSLs (https://www.epa.gov/risk/ecological-soil-screening-level-eco-ssl-guidance-and-documents).</p>	<p>The percentage of soil ingestion for the red-tailed hawk used in the analysis is the 50th percentile as shown on Table 3 of the EcoSSL guidance. The 90th percentile is applicable for the calculation of the EcoSSLs, which are the most conservative values used for screening purposes.</p> <p>Remedial actions and calculation of preliminary remedial goals (EcoPRGs) are typically based on more realistic exposure and toxicity assumptions, i.e., lowest observed adverse effect levels and median (i.e., 50th percentile) uptake rates.</p> <p>It should be noted that the EcoPRGs remain conservative in that the fraction of soil ingestion is added onto the food ingestion rate rather than considered part of the total food ingestion rate (i.e., 100% food plus additional 2.4% soil = 102.4% total intake).</p> <p>No changes necessary.</p>

COMMENT MATRIX for the Stakeholder Review Draft Dated October 2022
Lower Klamath Hydroelectric Project Site Investigation Reports for California and Oregon
FERC No. P-14803
March 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
CA-9	KT			<p><i>Appendix G, Table G-9 through Table-18.</i> There is no mention of the calculation of hazard indices for chemicals with a similar mechanism of action. Please address the cumulative risk potential for all receptors based on co-exposure to COPECs with similar chemical structures or modes of toxicity. CDFW OSPR recommends the following:</p> <ul style="list-style-type: none"> i. Hazard indices (HIs) be calculated for chemicals with a common mechanism of action or common target organs [examples of chemical groups would be: polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds, semivolatile organic compounds, total petroleum hydrocarbons]. ii. Chemicals do not exit the screening-level ERA even if the HQ for that particular chemical is less than one unless the HI for that group of chemicals is less than one. Following DTSC guidance (DTSC HERO 1996) will ensure that chemicals are not eliminated inadvertently when the incremental summing of effects adds up to HI greater than 1. 	<p>As the comment notes, hazard indices (HIs) are typically computed for chemicals within groups with similar toxic action; however, these are generally limited to PAHs, PCBs, and organochlorine pesticides. Summing of volatiles and petroleum products has not been conducted for this project because it is not recommended by DTSC guidance and is not standard practice. It should be noted that DTSC guidance (1996) provides a general framework and set of approaches to use when evaluating potential risks. It does not constitute a rigid system of points of departure.</p> <p>Sample-specific HIs for low molecular weight PAHs, high molecular weight PAHs, and aroclors have been added to Appendix G for all sites with detected analytes in these groups. Since EcoPRGs were not derived for all PAHs or aroclors, the HIs are computed using the EcoPRG (if available) or the Low Effect ESL. HIs were computed both with and without application of AUFs. This information has been included in the ecological risk assessment section for each site and the weight of evidence discussion where applicable.</p>
CA-10	JD	General Comment		I do not have any comments or questions regarding this report. Thank you for conducting a very thorough assessment.	Acknowledged. No changes necessary.
CA-11	KG	General Comment		I also did not have any comments or questions. Thanks!	Acknowledged. No changes necessary.

* KT = Kevin Takei/California Department of Fish and Wildlife; JD = Jason Duda/California Department of Water Resources; KG = Kimberly Gazzaniga/California Department of Water Resources

COMMENT MATRIX for the Stakeholder Review Draft Dated October 2022
Lower Klamath Hydroelectric Project Site Investigation Reports for California and Oregon
FERC No. P-14803
March 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>Klamath River Renewal Corporation (Comments on the California and Oregon Site Investigation Reports)</i>					
KRRC-1	LL	General Comment on Both Reports		KRRC endorses the comments submitted by California and Oregon, including but not limited to CDFW General Comment No. 2: "For sites recommended for removal actions, CDFW is not commenting on the recommendations. CDFW anticipates providing input on specific actions during preparation of the removal action plans."	Acknowledged. No changes necessary.
KRRC-2	LL	Both Reports	Section 1.2 last paragraph	We note that the characterization of the Memorandum of Resolution in the last paragraph of Section 1.2 of each report is not quite accurate – the MOR doesn't establish a process; it marks the completion of the process. I suggest rewording it as follows: "Site closure refers to a site closure agreed upon by PacifiCorp, KRRC, and the State of [California/Oregon] in a Memorandum of Resolution."	The final paragraph in Section 1.2 has been edited: "Recommended next steps will be provided for each REC based on the results of the risk evaluation. Next steps may consist of a request for REC closure, collection of additional environmental samples, or site remediation (Figure 1-5). If risk evaluation of the analytical results indicates acceptable risk, PacifiCorp will request closure of the REC. <u>As used in this report, site closure refers to a closure action agreed upon by PacifiCorp, KRRC, and California and documented in a Memorandum of Resolution.</u> If analytical results of COPCs indicate the risk is unacceptable, PacifiCorp will either propose advancement of step-out borings to collect additional samples according to the sampling plan established for the REC or develop a remediation plan based on the field and analytical data already collected." The corresponding edit is made in the Oregon Site Investigation Report.

* LL = Lloyd Lowy

COMMENT MATRIX for the Stakeholder Review Draft Dated October 2022
Lower Klamath Hydroelectric Project Site Investigation Reports for California and Oregon
FERC No. P-14803
March 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>Oregon Department of Justice (Comment on the Oregon Site Investigation Report)</i>					
OR-1	CM	General Comment		Oregon does not have any specific comment, but we do want to make a general inquiry about upcoming site work and PAC/Jacobs awareness and protocols around cultural resources. Work on the Oregon site may need to be cognizant of such matters and a plan needs to be in place. Please advise.	PacifiCorp is fully aware of the cultural resources potentially present at the various sites. All the sites have been reviewed by specialists and some have been cleared for work because there are no resources present. Others are in proximity to known sites and will require a monitor to be present during work. None of the sites are within known cultural resource sites. Cultural monitors were present during sampling as necessary and will be present during any clean-up work. All contractors also operate in compliance with PacifiCorp's inadvertent discovery plan. No change necessary.

* CM = Chris Mathews

REFERENCES

- California Department of Toxic Substances Control Human and Ecological Risk Office (DTSC HERO). 1996. *Guidance for Ecological Risk Assessments at Hazardous Waste Sites and Permitted Facilities*. Part A: Overview. July 4. <https://dtsc.ca.gov/ecological-risk-assessment-hero/>.
- Huang, C. 2021. Memorandum to: Anthony Meyers, Project Manager, Department of Water Resources. Re: *Lower Klamath Hydroelectric Project, Draft Site Investigation Work Plan*. July 20, 2021. Sacramento, CA.
- Rattner, B. A., J. C. Franson, and S. R. Sheffield. 2008. *Sources and Implications of Lead Ammunition and Fishing Tackle on Natural Resources*. Technical Review 08 – 01. American Fisheries Society/The Wildlife Society: Technical Review Committee on Lead in the Environment. Bethesda, MD.
- State Water Resources Control Board (SWRCB). 2018. *Environmental Impact Report for the Lower Klamath Project License Surrender Volume I*. December. https://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/lower_klamath_ferc14803_deir.html.

Attachment C

Removal Action Plan for Oregon and California (September 2023)



**Lower Klamath Hydroelectric Project
(FERC No. P-14803)**

Soil Removal Action Plan for Oregon

Final

September 2023



Lower Klamath Hydroelectric Project (FERC No. P-14803)

Project No: D3737600
Document Title: Soil Removal Action Plan for Oregon
Document No.: 230426190738_f146411b
Revision: Final
Date: September 2023
Client Name: PacifiCorp, Demian Ebert, Klamath Program Manager, 503-813-6625
Project Manager: Emilio Candanoza, Jacobs, 541-768-3509

Jacobs Engineering Group Inc.

2020 SW Fourth Avenue
Suite 300
Portland, Oregon 97201
United States
T +1.503.235.5000
www.jacobs.com

© Copyright 2023 Jacobs Engineering Group Inc. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.

Limitation: This document has been prepared on behalf of, and for the exclusive use of Jacobs' client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Contents

Acronyms and Abbreviations.....	iii
1. Introduction	1-1
1.1 Background	1-1
1.2 Removal Action Plan Objectives	1-1
1.3 Investigative Standard and Future Site Uses.....	1-2
1.4 Report Organization.....	1-2
2. Risk Assessment Summary and Cleanup Goals	2-1
2.1 Risk Assessment Summary.....	2-1
2.1.1 Human Health Risk Assessment.....	2-1
2.1.2 Ecological Risk Assessment.....	2-1
2.2 Cleanup Goals	2-3
3. Implementation Plan.....	3-1
3.1 Removal Action Work Plan.....	3-1
3.1.1 Site Security and Access	3-1
3.1.2 Traffic Control.....	3-1
3.1.3 Cultural Resources	3-1
3.1.4 Biological Resources	3-1
3.1.5 Permit Requirements.....	3-2
3.1.6 Mobilization and Site Preparation	3-2
3.1.7 Equipment.....	3-3
3.1.8 General Excavation Procedure	3-3
3.1.9 Excavation Sloping.....	3-4
3.1.10 Waste Handling and Disposal.....	3-4
3.1.11 Transportation Plan.....	3-4
3.1.12 Spill Prevention and Response Plan	3-5
3.1.13 Fugitive Dust Management	3-5
3.1.14 Decontamination Procedures.....	3-5
3.1.15 Stormwater Management Plan.....	3-5
3.1.16 Supplemental Environmental Controls	3-5
3.1.17 Health and Safety Plan.....	3-6
3.1.18 Contingency Planning	3-6
3.1.19 Site Coordination Plan.....	3-8
3.1.20 Confirmation Soil Sampling	3-8
3.1.21 Backfilling and Site Restoration	3-10
3.2 Removal Action Completion Report.....	3-11
4. J.C. Boyle Dispersed Recreation Area – 2.....	4-1
4.1 Background	4-1
4.2 Site-Specific Removal Actions.....	4-1
5. References.....	5-1

Appendix

Consolidated Comment Matrix

Tables

3-1 Contingency Planning for Work Associated with Cleanup of Project Sites..... 3-6
4-1 Confirmation Sample and Analysis Plan for Soil at J.C. Boyle Dispersed Recreation Area – 2..... 4-2

Figures

1-1 J.C. Boyle Dam Recognized Environmental Condition..... 1-3
2-1 Flowchart of Possible Next Steps 2-3
3-1 Confirmation Sampling Evaluation..... 3-9
4-1 J.C. Boyle Dispersed Recreation Area – 2 Excavation Area 4-3

Acronyms and Abbreviations

AECOM	AECOM Technical Services, Inc.
Agreement	Property Transfer Agreement entered into by PacifiCorp, Klamath River Renewal Corporation, and the States of California and Oregon
bgs	below ground surface
BMP	best management practice
California SIWP	<i>California Site Investigation Work Plan</i>
COC	constituent(s) of concern
COPC	constituent(s) of potential concern
EcoPRG	ecological preliminary remedial goal
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
ERA	ecological risk assessment
ESL	ecological screening level
FERC	Federal Energy Regulatory Commission
Jacobs	Jacobs Engineering Group Inc.
KRRC	Klamath River Renewal Corporation
mg/kg	milligram(s) per kilogram(s)
ODEQ	Oregon Department of Environmental Quality
ODFW	Oregon Department of Fish and Wildlife
Oregon SI Report	<i>Oregon Site Investigation Report</i>
Oregon SIWP	<i>Oregon Site Investigation Work Plan</i>
Project	Lower Klamath Hydroelectric Project
REC	recognized environmental condition
SAP	Sampling and Analysis Plan
site	J.C. Boyle Dispersed Recreation Area – 2

1. Introduction

PacifiCorp retained Jacobs Engineering Group Inc. (Jacobs) to prepare this *Soil Removal Action Plan for Oregon* (Oregon RAP) for the Lower Klamath Hydroelectric Project (Project). The purpose of the Oregon RAP is to document how soil removal activities will be performed at the one recognized environmental condition (REC) located in Oregon – the J.C. Boyle Dispersed Recreation Area – 2.

The J.C. Boyle Dispersed Recreation Area – 2 REC (the term “site” is used interchangeably with REC in this plan) was originally identified during Phase I environmental site assessments conducted by AECOM Technical Services, Inc. (AECOM) on behalf of the Klamath River Renewal Corporation (KRRC) and was subsequently identified in Exhibit C of a Property Transfer Agreement (Agreement) between PacifiCorp, KRRC, and the States of California and Oregon. PacifiCorp assessed the site under the *Oregon Site Investigation Work Plan* (Oregon SIWP) (Jacobs 2021a) to confirm the presence or absence of constituents of potential concern (COPCs).

This Oregon RAP will additionally be utilized should any sites addressed under the *Oregon Site Investigation Work Plan Supplement No. 1* (Jacobs 2023a) require a soil removal action.

PacifiCorp intends that approval of this Oregon RAP will constitute endorsement of the plan from KRRC and the State of Oregon. Following implementation of the RAP and completion of documentation affirming that the cleanup goals defined in this RAP have been met, the RECs will be ready for closure. As used in this Oregon RAP, site closure refers to a closure action agreed upon by PacifiCorp, KRRC, and California and documented in a Memorandum of Resolution.

1.1 Background

The Oregon SIWP provides detailed background information on the J.C. Boyle Development, further defines the Exhibit C RECs, and contains a discussion of the surrounding lands, local geology, and historical practices (Jacobs 2021a). The Oregon SIWP was approved by KRRC (Lowy, pers. comm. 2021) and the State of Oregon (Matthews, pers. comm. 2021). A separate *California Site Investigation Work Plan* (California SIWP) was developed for the Copco No. 1, Copco No. 2, and Iron Gate Dam developments and their associated RECs (Jacobs 2021b). The California SIWP was approved by KRRC (Lowy, pers. comm. 2021) and the State of California.

The findings of the various site assessments were documented in the *Oregon Site Investigation Report* (Oregon SI Report) (Jacobs 2023b), in the *California Site Investigation Report* (Jacobs 2023c), and in accordance with Section 4 of each SIWP. A separate *Soil Removal Action Plan for California* was prepared for the various California RECs (Jacobs 2023d). The Oregon SI Report recommended soil removal actions for the J.C. Boyle Dispersed Recreation Area – 2. The *California Site Investigation Report* recommended either soil removal actions or closure for the Exhibit C RECs in California. The recommendations for the California RECs were based on the results of the site investigations and subsequent evaluation of the analytical data.

1.2 Removal Action Plan Objectives

The primary objectives of this Oregon RAP are as follows:

- Identify the general field activities that will be performed in support of the soil removal action.
- Identify the site-specific field activities that will be performed in support of the soil removal action.

- Identify the confirmation soil sampling requirements upon removal of the initial soil volume recommended in the Oregon SI Report.
- Identify the remedial action objectives and define the process that will be used to demonstrate the remedial action objectives have been met.

1.3 Investigative Standard and Future Site Uses

The initial contaminants of potential concern (COPCs) for the site were determined based on the Investigative Standard, as defined in Section 1.5 of the Oregon SIWP (Jacobs 2021a), on expectations of COPCs for a burn pit. All fieldwork and data evaluations were additionally carried out in accordance with the Investigative Standard. The COPCs, intended future site uses, and exposure pathways for the site were approved by KRRRC and the State of Oregon. The exposure pathways were used to determine the screening levels developed in Section 3.3 of the Oregon SIWP and to evaluate the analytical results in Section 4 of the Oregon SI Report (Jacobs 2023b). The associated information in these documents is incorporated into this Oregon RAP by reference.

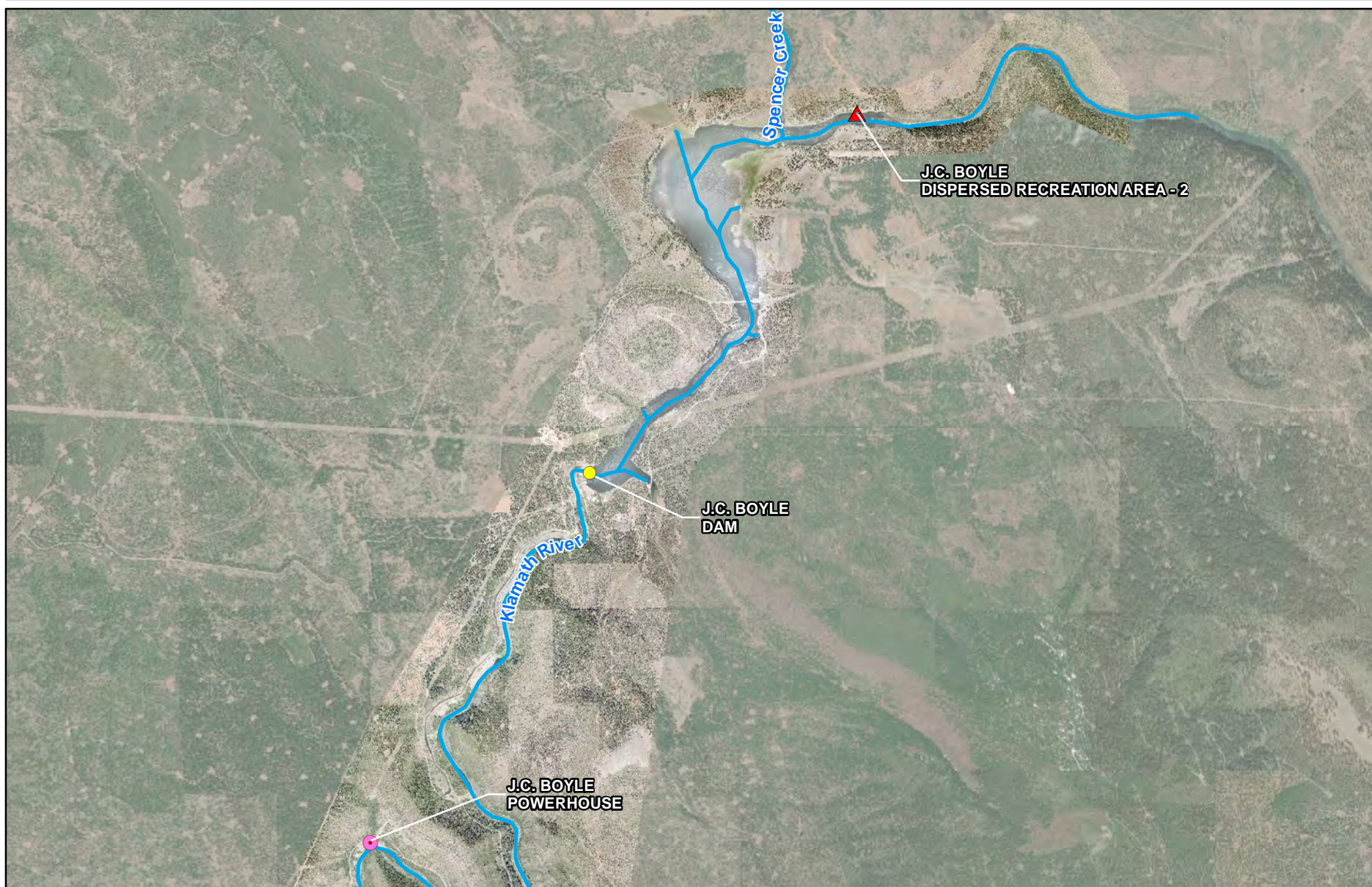
The constituent of concern (COC) for the site is lead. The COC was established in the Oregon SI Report and is the basis for the soil removal action and confirmation sampling described under this Oregon RAP. The COC was determined based on 1) the future site use (passive recreation/natural habitat); 2) utilization of the Investigative Standard when investigating the site under the Oregon SIWP and evaluating the analytical data under the Oregon SI Report, and 3) the results of the risk assessments (human health, leaching to groundwater, and ecological) that were performed in the Oregon SI Report (summarized in Section 2 of this Oregon RAP).

When working under this Oregon RAP, confirmation soil samples will be collected in accordance with the Investigative Standard presented in the Oregon SIWP and SI Report.

1.4 Report Organization

This Oregon RAP contains the following sections and appendix:

- **Section 1 – Introduction:** States the purpose of the Oregon RAP, provides background information on the evolution of the REC and determination of the COC for the site, specifies the Oregon RAP objectives, and describes the investigative standards and future site use.
- **Section 2 – Risk Assessment Summary and Cleanup Goals:** Describes the risk assessment approach and summarizes cleanup goals.
- **Section 3 – Implementation Plan:** Provides a general overview of how the soil removal action will be conducted.
- **Section 4 – J.C. Boyle Dispersed Recreation Area – 2:** Summarizes the background and site-specific removal action for the site.
- **Section 5 – References:** Provides a bibliographic listing of documents cited in this Oregon RAP.
- **Appendix – Consolidated Comment Matrix:** Contains consolidated review comments and responses from KRRRC, California, and Oregon related to this Oregon RAP.



LEGEND

- Dam to be Removed
- ▲ Recognized Environmental Condition
- Powerhouse
- Klamath River

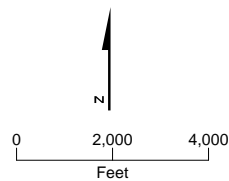


FIGURE 1-1
J.C. Boyle Dam
Recognized Environmental Condition
Lower Klamath Hydroelectric Project

2. Risk Assessment Summary and Cleanup Goals

This section summarizes the risk assessment conducted in 2022 (Jacobs 2023b) and the cleanup goals derived from the risk assessment results.

2.1 Risk Assessment Summary

This section describes the general risk assessment approach used to evaluate human health risk, leaching to groundwater, and ecological risk from COPCs in soil and groundwater at J.C. Boyle Dispersed Recreation Area – 2. Risk managers used the results of this analysis to support risk management decisions at the site. The detailed risk assessment approach and results are described in further detail in the Oregon SI Report (Jacobs 2023b).

2.1.1 Human Health Risk Assessment

A streamlined human health risk assessment (HHRA) was conducted to evaluate human health risk to applicable receptors from exposure to contaminants in soil and groundwater. The HHRA provides information that can support risk-management decision making, including the need for further action.

A screening-level HHRA was conducted for the J.C. Boyle Dispersed Recreation Area – 2 by comparing COPC concentrations in soil and shallow groundwater to the Oregon Department of Environmental Quality (ODEQ) *Risk-Based Concentrations for Individual Chemicals in Soil* (ODEQ 2018).

The risk evaluation approach is based on Oregon environmental cleanup regulations, which require a risk-based approach for assessing and managing environmental contamination from releases of hazardous substances under the state's hazardous substance remedial action rules (Oregon Administrative Rules 340-122-0100 through 340-122-0115). The risk evaluation was conducted in accordance with *Risk-Based Decision Making for the Remediation of Contaminated Sites* (ODEQ 2017). The HHRA framework consists of the following four basic steps (EPA 1989):

- 1) **Data Evaluation:** The first step consists of reviewing and evaluating available data, identifying COPCs in media at each site.
- 2) **Exposure Assessment:** The second step involves evaluating potential exposure pathways for COPCs and the potential human populations that could be exposed to them, either now or in the future. In this step, exposure point concentrations (EPCs) are estimated from measured or modeled concentrations, and pathway-specific exposure parameters and assumptions are evaluated.
- 3) **Toxicity Assessment:** The third step comprises compiling toxicity values that characterize potential adverse health effects from exposure to COPCs and that are used to estimate potential risks to human health.
- 4) **Risk Characterization:** The fourth step combines the results of the previous three steps to quantitatively characterize potential risks to human health associated with exposure to COPCs at J.C. Boyle Dispersed Recreation Area – 2. Potential cancer risk and adverse noncancer health effects are estimated. Uncertainties in risk characterization are discussed.

2.1.2 Ecological Risk Assessment

A streamlined ecological risk assessment (ERA) was completed for each site to evaluate potential risks to ecological receptors from contaminants in soils under current and potential future land use conditions.

Soil Removal Action Plan for Oregon

The results of the streamlined ERA were used in conjunction with the HHRA and leaching to groundwater evaluation to provide risk managers with information needed to support risk management decisions.

The streamlined ERAs were performed in general accordance with U.S. Environmental Protection Agency (EPA) and ODEQ guidance as follows:

- *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments* (EPA 2001)
- *Guidelines for Ecological Risk Assessment* (EPA 1998)
- *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final* (EPA 1997)
- *Conducting Ecological Risk Assessments* (ODEQ 2020)

The streamlined ERAs were conducted in a phased approach as follows:

- **Step 1 – Screening Evaluation:** The screening evaluation consists of a very conservative (i.e., protective of the most sensitive ecological receptors) screen of sample-specific detected results for the site compared to available background threshold values and the No Effect Ecological Screening Level (No Effect ESL). Chemicals with observed concentrations that do not exceed the No Effect ESLs were considered to not pose a potential risk to ecological receptors and are eliminated from further evaluation. Chemicals with detected concentrations exceeding the No Effect ESLs were carried forward to Step 2 (Refined Evaluation).
- **Step 2 – Refined Evaluation:** The refined evaluation consists of a comparison of sample-specific results against a refined screening level that is based on a lowest observed adverse effect level for wildlife. The chemicals with observed concentrations that do not exceed the Low Effect ESL were considered to not pose a significant risk to ecological receptors. Chemicals with detections exceeding the Low Effect ESL for soil were carried forward to Step 3 (Site-Specific Evaluation). Chemical with detections exceeding the Low Effect ESLs for groundwater exposures were carried forward to Step 4 (Weight of Evidence Evaluation).
- **Step 3 – Site-Specific Evaluation:** The site-specific evaluation consists of a comparison of sample-specific detected results against site-specific ecological preliminary remedial goals (EcoPRGs) for soil that were developed for avian and mammalian receptors that may potentially be found at the site. Chemicals with observed concentrations exceeding the EcoPRGs were carried forward to Step 4 (Weight of Evidence Evaluation).
- **Step 4 – Weight of Evidence Evaluation:** The weight of evidence evaluates multiple lines of qualitative and quantitative evidence to place the potential risks into context of site-specific conditions. These lines of evidence include the results from Steps 1 through 3, comparisons to regional background concentrations, potential for ecological receptors to use the site, available habitat, and expected future use of the site. The results of the weight of evidence evaluation are used to inform risk managers of chemicals considered to pose a potential risk to ecological receptors so that remedial decisions can be made for the site.

The streamlined ERA was conducted under the following assumptions and constraints. These are typical for ERAs performed for both public and private entities:

- Evaluation of current exposures is derived from existing conditions.
- The abiotic medium of primary ecological concern is soil. Groundwater is considered a minor medium of potential concern, but it is evaluated as it may be encountered within 4 feet of ground surface.
- Measured chemical concentrations are assumed to be at steady-state levels.

- Chemicals never detected or not analyzed for in soil samples are not evaluated.
- Each chemical measured in collected samples is considered to have similar bioavailability as the chemical form used in the toxicity studies that are used to estimate potential for risk.
- Toxicological information used represents information currently available from literature and database searches.

2.2 Cleanup Goals

As described above and in the Oregon SI Report (Jacobs 2023b), results of the HHRA and environmental site assessments were used to make risk management decisions. Because the risk at J.C. Boyle Dispersed Recreation Area – 2 was determined to be unacceptable, PacifiCorp has chosen to remove the impacted soil (Figure 2-1).

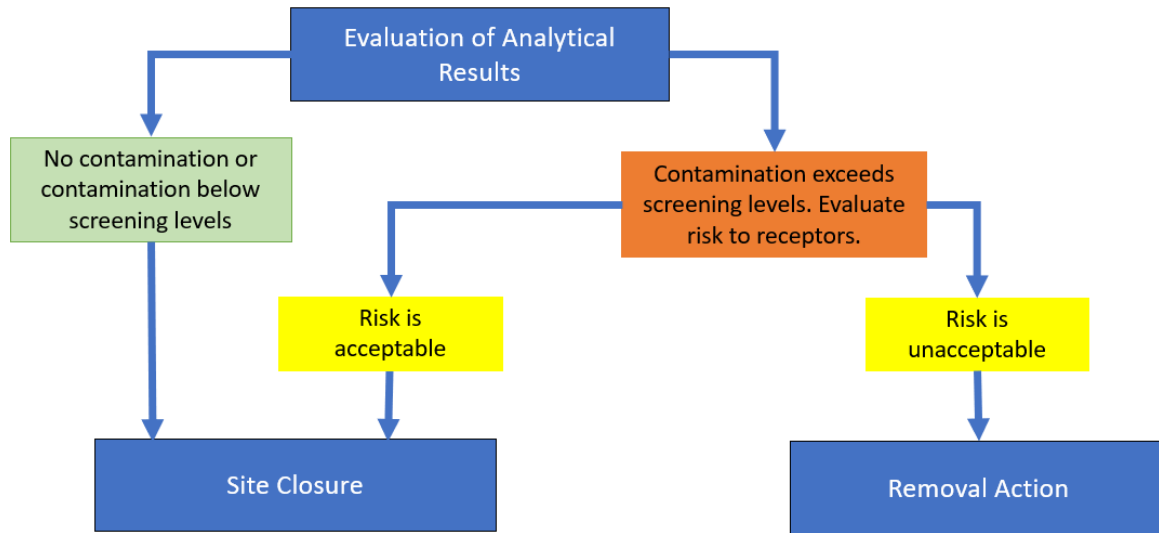


Figure 2-1. Flowchart of Possible Next Steps

Lead is the only COC retained from the risk assessment. The cleanup goal for lead is 34 milligrams per kilogram (mg/kg), based on the protection of groundwater from soil leaching. Subsequent sections of this Oregon RAP describe the approach to ensure the removal action objectives are met for the site.

3. Implementation Plan

This section presents the general plan for addressing impacted shallow soil at the site. Site-specific removal activities are detailed in Section 4.

3.1 Removal Action Work Plan

This subsection outlines the typical administrative controls, permit requirements, and sequence of work for soil removal (i.e., excavation) activities at the site.

3.1.1 Site Security and Access

During all removal activities, access will be restricted to authorized personnel only. Contractors will follow the site access and sign-in procedures established by KRRC or their representative.

3.1.2 Traffic Control

As necessary, traffic management will be implemented to manage the safe entry and exit of vehicles from the site. Equipment and personnel will be confined to the designated access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas. Upland routes covered with pavement, bare ground, or non-native vegetation will be utilized as access routes to and from the excavation sites to the maximum extent practicable.

3.1.3 Cultural Resources

Cultural resources are known to exist in the vicinity of the three dam developments and surrounding lands. As part of the original site investigations and prior to any field activities, AECOM conducted a review of potential effects on historic and archaeological resources at each proposed sampling site (AECOM 2022a, 2022b). The goal was to ensure that soil sampling and cleanup activities do not adversely affect National Register of Historic Places-eligible archaeological or historic resources. The AECOM review recommended that archaeological monitoring be provided during soil sampling at one site in Oregon (J.C. Boyle Dispersed Recreation Area – 2). Archaeological monitoring was performed by Jacobs when implementing the Oregon SIWP at this site. Therefore, archaeological monitoring will again be performed by Jacobs when implementing this Oregon RAP at the J.C. Boyle Dispersed Recreation Area – 2). Should cultural monitoring result in the inadvertent discovery of culturally sensitive resources, the Jacobs team will notify the KRRC's cultural resources team.

3.1.4 Biological Resources

The following biological avoidance, minimization, and mitigation measures will be implemented for the protection of special-status species that may be present on or near the site during field activities:

- A preconstruction biological assessment will be completed by a qualified biologist to review potential effects on biological resources before removing debris and implementing the soil removal actions at each site. This will include removal areas, staging and laydown areas, and undeveloped access routes.
- All field team members, including the removal contractor and lower-tier subcontractors, will complete the online KRRC Biological Resource Training program as part of premobilization activities.
- A preconstruction nesting survey will be completed by a qualified biologist for sites with remedial activities planned to occur during the nesting season (February 1 – August 31). If nesting birds are found during surveys, the Oregon Department of Fish and Wildlife (ODFW) will be notified, and no Project activity will occur within 250 feet for raptors and 100 feet for other nonlisted birds until a site-

specific mitigation and monitoring plan has been developed (including reporting requirements) and agreed upon with ODFW.

3.1.5 Permit Requirements

Necessary permits and notifications for removal activities, transportation, stormwater control, and air quality (including notifications to Klamath County, if needed) will be obtained prior to the start of removal activities. Copies of the permits will be onsite and will be made available for inspection during working hours. The anticipated permits will include, at a minimum:

- Klamath County will review this Oregon RAP and approve, as necessary, for the execution of the work.
- Dust control management measures will be implemented. Section 3.1.13 provides additional information regarding compliance with these rules.

3.1.6 Mobilization and Site Preparation

Mobilization activities will include the delivery and setup of equipment, materials, and tools required to perform the soil removal actions at the various sites. Resources necessary to excavate soil and perform soil removal activities will be mobilized; these resources include personnel and all subcontractors, equipment, materials, supplies, and support facilities. The support facilities will include a secure material and equipment storage area and any other facilities needed to support work activities.

Site preparation activities will include: 1) establishing work zones; 2) implementing stormwater best management practices (BMPs); 3) defining baseline topography and excavation areas by a licensed surveyor; and 4) clearing and grubbing of surface vegetation in the defined excavation area.

Underground Service Alert will be notified at least 48 hours before field activities commence to mark subsurface utilities within and surrounding the planned work areas. A third-party utility locator service provider will also be utilized to identify utilities within and surrounding the planned work area. Field maps showing the results of the utility survey will be completed in the field. If any utilities are identified during the survey, they will be identified on the ground by spray painting along the utility centerline. The field markings will be color-coded to identify the type of utility according to the American Public Works Association uniform color code.

Topographical surveying was not completed at the site. As part of site preparation activities, a topographical base map will be developed for the excavation. The base map will be developed by a surveyor licensed in the State of Oregon. The baseline survey will be used in conjunction with progress and as-built surveys to determine the volume of soil removed from the excavation site.

Jacobs, in consultation with PacifiCorp and KRRC, will also designate an area for establishing a secure central storage and equipment laydown yard. If needed, additional temporary laydown or stockpile areas will be identified for each site. The storage and laydown areas will be secured with temporary fencing.

Project mobilization will additionally include:

- Confirming that all applicable and necessary permits have been secured (Section 3.1.5).
- Setting up temporary facilities and utilities, such as portable toilets and hand and eye washing stations.
- Identifying and clearly demarcating work zones, including the exclusion, decontamination, and support zones, at each site. The exclusion zone will include all areas of excavation, contaminated soil staging areas, and the truck loading area. The decontamination zone will be used for decontaminating

personnel, equipment, and vehicles prior to exiting the site. The support zone will be used to temporarily store equipment, vehicles, and clean soil and to accommodate Project personnel.

- Identifying and clearly marking contaminated soil staging areas, if needed.
- Preparing the decontamination area in a designated area approved by the construction manager.
- Establishing traffic routes from the work zones to the decontamination areas to minimize the spread of potentially impacted soils.
- Positioning all health and safety equipment and supplies for use, if needed.

3.1.7 Equipment

The excavation contractor will determine the equipment needed on a case-by-case basis for each site. The required equipment will depend on actual site conditions and access needs. A list of possible equipment is as follows:

- Front end loaders
- Bulldozers
- Hydraulic excavators (i.e., backhoes)
- Water truck
- Dump trucks
- Temporary fencing
- Other equipment, based on field needs

Equipment and personnel will be confined to the designated access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas.

3.1.8 General Excavation Procedure

The site-specific initial excavation volume (approximately 180 cubic yards) has been estimated based on the data collected in the Oregon SI Report. Excavation will be conducted in the following general sequence:

- 1) Staging and access paths will be developed for equipment to be used during the soil removal process. Roads will be maintained, and tire decontamination will be implemented to prevent offsite tracking.
- 2) Underground utility clearances will be conducted through the use of the local one call service and a private utility location contractor, as necessary.
- 3) The construction manager will identify appropriate locations for fugitive dust monitoring and arrange for monitoring that complies with health and safety requirements.
- 4) Excavation offset stakes will be used to mark the planned limits of excavation.
- 5) Designated areas will be excavated to a predetermined depth.
- 6) Excavated soil will primarily be loaded directly into haul trucks. At the contractor's option, soil may be stockpiled at a designated stockpile location (Section 3.1.6).
- 7) Excavation operations will be managed following the BMPs described in the Project-specific Stormwater Management Plan.
- 8) To prevent unauthorized access, a temporary 6-foot-high fence will be installed around an open excavation until the excavation is backfilled.
- 9) Excavated soil will be loaded into trucks and will be properly manifested, truck tires will be decontaminated, and dirt clods will be removed from exterior surfaces such as frame rails.

- 10) Soil will be transported offsite for disposal at an approved and permitted facility.
- 11) Post-excavation confirmation soil samples will be collected (Section 3.1.20) to determine whether cleanup goals have been achieved (Section 2).

3.1.9 Excavation Sloping

Occupational Safety and Health Administration Regulations, Title 29 *Code of Federal Regulations* 1926, Subpart P, the *Oregon Safe Employment Act*, and *Oregon General Administrative Rules, Chapter 437* that govern safety and health regulations for construction will be adhered to and enforced during the soil removal action.

3.1.10 Waste Handling and Disposal

Waste soil (investigation-derived waste) generated during the site investigation was determined to be nonhazardous and was disposed of accordingly (Jacobs 2023b). It is currently assumed that the excavated soil will be managed under the waste profile generated during the site investigation performed in 2022. Where additional data are needed to characterize soils, the site investigation will be used as a starting point for waste profiling.

When possible, waste soil from the excavation will be direct loaded into haul trucks for offsite disposal. For sequencing reasons, stockpiling of waste soil may be necessary. Waste soil stockpiles will be constructed and managed using BMPs identified in the Project-specific Stormwater Management Plan. It is currently assumed that wastewater will be primarily generated from decontamination of sampling equipment and that such waste will be managed under the waste profiles generated during the site investigations performed in 2022.

Soil to be disposed of offsite will be transported via haul trucks to an approved disposal facility. Prior to transportation of contaminated materials, a soil data and certification sheet will be completed as part of the waste acceptance requirement.

Personal protection equipment (e.g., latex gloves) will be identified in the waste profile for soil and will be disposed of with waste soil. General construction debris and municipal waste will be disposed of as general waste at a municipal landfill.

3.1.11 Transportation Plan

Nonhazardous impacted soil that is disposed of offsite will be transported to an appropriate disposal facility. Appropriate licensed and permitted disposal facilities may include:

- Waste Management, Hillsboro Landfill, 3205 SE Minter Bridge Road, Hillsboro, Oregon
- Oil Re-Refining Company (Orrco) – Portland Facility, 4150 N. Suttle Rd., Portland, Oregon

Hazardous impacted soil identified for offsite disposal will be transported under a hazardous waste manifest with a PacifiCorp EPA Identification Number to an appropriate disposal facility. Appropriate licensed and permitted disposal facilities may include:

- Waste Management, Kettleman Hills Facility, 35251 Old, Skyline Road, Kettleman City, California
- U.S. Ecology Nevada Inc., Highway 95 S, Beatty, Nevada

All transportation activities will be performed in strict compliance with applicable regulations and ordinances. The hauling contractor(s) used to transport contaminated waste will be fully licensed and permitted by EPA and the State of Oregon. Department of Transportation and Oregon Highway Patrol safety regulations will be followed.

Transportation equipment will be chosen to safely transport the expected volumes of soil, taking into consideration the types of roads to be traveled and their loading capacity. Trucks will use only preplanned and authorized routes. A detailed log of the loads hauled from the site will be maintained. The waste will be off-loaded for treatment or disposal in a manner consistent with current federal, state, and local regulations.

To minimize the need to decontaminate the truck tires, the construction manager will direct the haul trucks so that they remain on clean areas to the extent possible. During loading, dust emissions will be monitored by the construction manager and mitigated, if necessary, by the excavation contractor. The transportation and disposal contractor will ensure that the hauling trucks will be equipped to fully cover and contain all soil and debris during transportation, thereby preventing spillage or dust emissions.

3.1.12 Spill Prevention and Response Plan

A Spill Prevention and Response Plan will be prepared for responding to and handling onsite spills. All contractors will adhere to the provisions of the Spill Prevention and Response Plan to ensure continued protection of the public safety and the environment.

3.1.13 Fugitive Dust Management

Dust control management measures, including water spraying, will be implemented during soil removal and excavation activities. Only nonpotable water is expected to be used for dust control. The use of dust suppression amendments (Simple Green, Envirotech Vapor Suppressant, or equivalent) will be evaluated on a case-by-case basis prior to use if water alone is not adequate.

3.1.14 Decontamination Procedures

To prevent the unintentional offsite transfer of impacted soil or the spreading of residual impacted soil onsite by construction equipment and personnel, the following decontamination procedures will be implemented:

- The equipment decontamination area will be located in the designated upland staging area away from drainages.
- All equipment wheels/tires will be cleaned over gravel track out pads by appropriate methods.
- Personal protective equipment, such as disposable coveralls and booties, will be removed and stored in the contamination reduction zone.
- All personal protective equipment will be disposed of as discussed in Section 3.1.10.

3.1.15 Stormwater Management Plan

A Stormwater Pollution Prevention Plan will not be needed because the proposed disturbance area is less than 5 acres, consistent with ODEQ 1200 Series Construction Stormwater requirements. Stormwater best management practices (BMPs) instead will be described in the Project-specific Stormwater Management Plan. BMPs will be installed prior to construction activities and implemented throughout the Project duration.

3.1.16 Supplemental Environmental Controls

Other environmental controls may be required in the event that anticipated conditions at the site change. The soil removal actions will be conducted in a manner that will adapt to changing conditions, with appropriate mitigation measures to be developed as needed.

3.1.17 Health and Safety Plan

A Health and Safety Plan will be prepared by Jacobs to address procedures and potential hazards associated with the proposed soil removal action activities. The Jacobs Health and Safety Plan will be prepared to provide pertinent information concerning COPCs, levels of personnel protection, personal protective equipment upgrade action criteria for air monitoring results, monitoring equipment, and physical hazards and safeguards associated with the anticipated field activities. In the event that unanticipated conditions occur, the Jacobs Health and Safety Plan will be modified appropriately.

3.1.18 Contingency Planning

Contingency planning traditionally addresses elements of an action that could not go as planned during project implementation. Should such an event occur, the contingency plan is implemented to deal with the situations. For this Oregon RAP, PacifiCorp has identified several potential elements that could create complications for the cleanup work (Table 3-1). The relative probability of occurrence for each element has not been evaluated; however, PacifiCorp’s ongoing coordination with the KRRC team in planning the work reduces the likelihood of some of the more controllable elements occurring (Table 3-1). Somewhat controllable elements related directly to the work include, for example, staffing and landfill issues. The relative risk of elements related to the work should be reduced by coordination and communication among the Project team, with the KRRC, and with other stakeholders, as necessary. Other elements are related to climate or emergency situations (for example, weather and wildfire) and are less controllable but can still be planned for with contingency measures.

Table 3-1. Contingency Planning for Work Associated with Cleanup of Project Sites

Element	Contingency Plan
Contractor or subcontractor equipment or staffing availability	PacifiCorp has been working closely with the contractor to ensure they have the resources available to complete the work. Should that become an issue, additional subcontractors may be brought onto the Project to ensure timely completion of the work.
Injuries or accidents	Any personnel injury, accident, or damage to equipment during the execution of the work will be handled in accordance with the Jacobs Project-specific Health and Safety Plan.
Spill containment and response	Should there be an inadvertent spill or release, the Project-specific Spill Prevention and Response Plan will be followed for initial containment, stabilization, and notification of the KRRC and appropriate state and/or federal agencies.
Changes in waste disposal landfill restrictions	Waste characterization has been conducted as part of the Oregon SI Report. PacifiCorp will likely be collecting new or additional waste characterization samples for review and acceptance by the designated landfills. Additionally, samples will be collected from the Iron Gate Shooting Range to complete waste characterization for this site. In a worst-case scenario, spoils may need to be stockpiled while characterization process and acceptance by the landfill is complete.
Confirmation samples exceeding ESLs	If confirmation samples exceed the target ESLs for a given site and contaminant, PacifiCorp will return to the site, excavate additional soil, and repeat the confirmation sampling per the pattern described in the Oregon RAP. This is an iterative process that could require multiple excavations and testing if contamination is more widely distributed than was indicated in the Oregon SI Report.

Table 3-1. Contingency Planning for Work Associated with Cleanup of Project Sites

Element	Contingency Plan
Discovery of COCs different than what has been documented at a site	The discovery of contaminants present at levels not identified in the Oregon SI Report could result in the recharacterization of waste, changes in disposal methods, or the need for other handling requirements. Any shift in observed subsurface conditions during excavation that could be linked to contamination should result in a stoppage of work so additional investigation can occur. This investigation could lead to changes in the extent of excavation, materials handling, personal protective equipment requirements, or disposal locations.
Access to a Project site is restricted by KRRC work	PacifiCorp is coordinating the work described in this Oregon RAP with the KRRC; however, it is possible that the KRRC's schedule of work changes such that access to a specific location is not possible. In such a case, the contractor will have the flexibility to adjust their schedule and work at other locations until access to an area is available. In a worst-case scenario, the contractor may have to remobilize if there is not another available work location and the site will be inaccessible for an extended period of time.
Wildfire forces evacuation of the area or wildfire smoke creates unsafe work conditions	Safety of PacifiCorp's staff and contractors is of paramount importance. Wildfire-forced evacuations or wildfire smoke that prevents the safe continuation of work are scenarios that have recently occurred in the area and could occur at any time during the work. These are situations for which contingency planning is limited to evacuation routes and appropriate personal protective equipment. In both situations, the contractor will remobilize staff to the site when conditions are safe for continued work. In these cases, schedule delays are likely to be unavoidable.
Discovery of previously undiscovered or unknown contaminants	The approach to managing and addressing the discovery of previously unknown areas of contamination or contaminants is addressed in Section 2.5 of the <i>Oregon Site Investigation Work Plan Supplement No. 1</i> (Jacobs 2023a).
Adverse weather (heat/cold)	The work areas for the Project could be subject to extreme temperatures (either hot or cold) that shorten the available amount of time the contractor can work or otherwise create an unsafe working condition. The contractor will comply with all regulations regarding work periods as related to temperature. Adjustments to start times (for example, earlier in the day to avoid heat) could help minimize delays associated with uncontrollable climatic events.
Adverse weather (rainfall)	Precipitation itself is not typically an element that would challenge the Project. However, some of the sites are not easily accessible if the soils become saturated. This could be an issue if the work is delayed into the winter or areas are subject to extreme thunderstorms. In such cases, the contractor will either have to shift work to another accessible area or simply wait for ground conditions to improve. Any stockpiles and work sites would need to be actively managed during this period in accordance with the requirements of the Stormwater Management Plan to ensure they remain stable and do not erode into the surrounding areas.

Table 3-1. Contingency Planning for Work Associated with Cleanup of Project Sites

Element	Contingency Plan
Discovery of cultural resources or human remains	Inadvertent discovery of cultural resources or human remains could result in a delay of excavation while the discovery is evaluated, the appropriate agencies and tribes are consulted, and permission to proceed with work is obtained. This risk has been minimized through prescreening of the work sites. A Jacobs cultural resources monitor will be present at those locations where it is possible to encounter resources or remains and PacifiCorp's Inadvertent Discovery Plan will be followed for all work areas. Coordination with the KRRC's cultural resources team onsite could also help minimize the risk of delay if resources or remains are discovered. If a discovery does occur, the contractor may need to move to a different work area while the significance of a find is addressed and approvals to move forward are obtained.
Potential Claims	Any incident that could lead to a claim affecting KRRC should be promptly reported to KRRC with appropriate reports to follow.

3.1.19 Site Coordination Plan

PacifiCorp recognizes that the areas around Copco, Iron Gate, and J.C. Boyle are active construction sites and as such, careful coordination with the KRRC is required. This coordination has already started and will continue as the contractor mobilization date approaches. The Site Coordination Plan calls for pre-activity meetings between PacifiCorp and the KRRC. The purpose of the meetings is to identify contractor laydown, staging areas, and stockpile locations, set work-hour restrictions, define secured access and badging requirements, and establish scheduling constraints. To date, two pre-activity coordination meetings have been held, the first on June 26, 2023, and the second on July 12, 2023.

During fieldwork execution, the key point of contact between PacifiCorp and the KRRC will be PacifiCorp's Representative (PacifiCorp Rep). At a minimum, the PacifiCorp Rep will communicate the planned work, site location(s), access, and haul routes to the KRRC team during daily meetings. At the daily meetings, any issues raised by the KRRC team will either be addressed directly by the PacifiCorp Rep or will result in a specific follow-up meeting. Specific coordination meetings or site visits for select sites may be required. Those additional coordination meetings or site visits will be scheduled on a case-by-case basis.

In the event of an unforeseen situation that is caused by or creates an emergency situation, the contractor and onsite PacifiCorp Rep would communicate with emergency services, PacifiCorp management, and the KRRC as appropriate. Depending on the situation, a call to 9-1-1 to activate emergency responders would occur first, followed by a call to PacifiCorp's Hydro Control Center, the PacifiCorp Project Manager, and the contractor's own management team. The calls to the Hydro Control Center and PacifiCorp's Project Manager would lead to follow-up calls to others on the PacifiCorp team as appropriate (e.g., compliance, operations, safety, or management staff) and the KRRC.

3.1.20 Confirmation Soil Sampling

In general, confirmation soil samples will be collected from the floor of the excavation and from each excavation sidewall. If bedrock is observed within an excavation floor or sidewall, excavation work will be terminated and a confirmation soil sample will be collected, if appropriate. One confirmation soil sample will be collected from each 750-square-foot section of excavation floor and one confirmation soil sample will be collected from each 25-foot linear section of sidewall. At the sidewall locations, one representative soil sample will be collected from each 2-foot interval (i.e., 0- to 2-foot, 2- to 4-foot, 4- to 6-foot, and 8-

to 10-foot intervals). Additional equally spaced confirmation samples may be collected at the site to ensure an adequate number of samples is available to calculate the site-specific EPC.

Confirmation soil samples will be collected in 4- or 8-ounce glass jars and from the bucket of the excavator/backhoe if the excavation depth exceeds 4 feet below ground surface (bgs). When it is safe to enter excavations shallower than 4 feet bgs, confirmation soil samples will be collected directly into glass jars or by using a decontaminated metal or disposable trowel. Confirmation soil samples for volatile organic compound analysis will be collected as per the existing and approved Sample and Analysis Plan (SAP) (see Appendix A of the SIWP; Jacobs 2021a).

Hand-held soil sampling equipment will be decontaminated prior to the collection of each confirmation soil sample. Prior to sampling, any loose material or soil will be gently brushed off the surface of the excavation, and care will be taken to collect the sample from an undisturbed area.

Confirmation soil samples will be analyzed for the COCs at each site. The laboratory analyses will be performed using the analytical methods and detection limits specified in the SAP (see Appendix A of the SIWP; Jacobs 2021a). The analytical data provided by the analytical laboratory (accredited under the National Environmental Laboratory Accreditation Program) will undergo quality control checks for useability, then uploaded to a database for use in the analysis and reporting process.

The analytical results for the confirmation samples will be compared to the cleanup goals for decision making as follows (Figure 3-1):

- If all samples are below the COC cleanup goals, no further excavation is required.
- If the calculated site wide COC EPCs are below the cleanup goals, no further excavation is required.
- If there are multiple or substantial exceedances, additional excavation may be required.

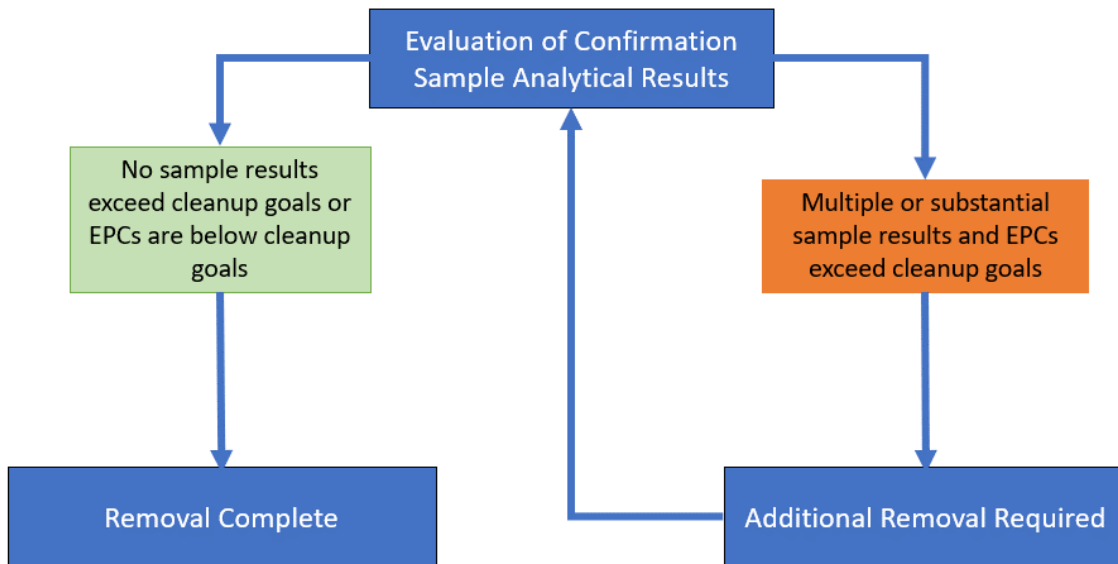


Figure 3-1. Confirmation Sampling Evaluation

Multiple or substantial exceedances will result in deepening and expanding of the excavation. In general, it is anticipated that excavations will be iteratively deepened and expanded in 0.5- to 1-foot increments, or observation of bedrock. Upon expanding the excavation, one step-out confirmation soil sample will be collected for every 750 square feet of newly exposed excavation floor and for every 25 linear feet of newly

exposed sidewall. When multiple COCs are detected at concentrations greater than cleanup goals, cumulative effects will be estimated by summing the ratios of the concentration to cleanup goal for carcinogenic and noncarcinogenic COCs (i.e., the sum of the ratios exceeds 1) to determine if additional soil removal is required.

3.1.21 Backfilling and Site Restoration

PacifiCorp has made initial inquiries to KRRC regarding sourcing of clean backfill soil from onsite construction work associated with dam removal. The intent is to use available soil from ongoing dam-removal work to backfill site excavations resulting from soil removal actions.

Prior to use of this backfill material, these stockpiles will be tested to confirm that constituent concentrations are appropriate for use as clean backfill for the REC excavations.

For stockpiles of less than 1,000 cubic yards, one sample will be collected for every 250 cubic yards. For stockpiles of 1,000 cubic yards or more, four samples will be collected for the first 1,000 cubic yards, and one additional sample will be collected for every additional 500 cubic yards. For example, one sample would be collected from a 100-cubic-yard stockpile, two samples would be collected from a 500-cubic-yard stockpile, and five samples would be collected from a 1,500-cubic-yard stockpile.

Sampling locations will be determined by dividing the length of the stockpile by the number of required samples and creating sampling areas of equal area. One sample will be collected from each area of the stockpile from the side. Each sample will be collected on the opposite side of the pile from any neighboring samples. Sample labeling, handling, analytical methods, quality assurance/quality control procedures, and database entry requirements will follow the same procedures as the California SIWP (Jacobs 2021a).

The analytes and frequency will be selected in general accordance with Department of Toxic Substances Control guidance. The following analytical methods are anticipated, depending on the fill source:

- Polynuclear aromatic hydrocarbon (EPA Method 8270)
- Total petroleum hydrocarbon extractable (EPA Method 8015M)
- Title 22 Metals (EPA Method 6010)

Anticipated procedures for soil backfill placement and compaction are as follows:

- The soil at the bottom of the excavation area will be compacted to the same requirements as the fill that will be placed above it. Excavations will be free of standing water or loose or disturbed materials before placing any fill.
- Fill material will be placed in maximum 8-inch loose lifts and compacted to not less than 90 percent relative compaction per standard Proctor (ASTM D698), unless otherwise specified. Compaction levels will be verified.
- Backfilled areas will be graded to the appropriate subgrade required for surface restoration. The subgrade will be graded to facilitate proper drainage at the site after the surface is restored.
- If required, topsoil will be placed over backfilled areas and prepared for seeding. A commercially available native seed mix will be used for site restoration.

After backfilling and topsoil placement have been completed, construction waste and temporary BMPs will be removed.

3.2 Removal Action Completion Report

Once the soil removal action is complete and the necessary confirmation sampling results have been reviewed and validated, a soil removal action completion report will be prepared to document the soil removal activities that were performed. The report will include:

- A narrative describing the work performed at each site, including an explanation of unexpected findings and required deviations from the original plan.
- Analytical results from confirmation samples.
- Detailed maps of the location and extent of the soil removal activities.
- Documentation of soil excavated and removed from the sites, including final disposition of excavated soil, and documentation of the amount and source of backfill material.
- Copies of necessary permits.
- Annotated photo documentation of the remediation fieldwork.
- Official correspondence, governmental sign-offs, closure letters received from federal, state, and local agencies, or similar communications to be included as an appendix to the report.

4. J.C. Boyle Dispersed Recreation Area – 2

This section summarizes the background and site-specific removal activities for the site. Detailed descriptions of the site background and of the risk assessment results determined upon evaluation of the analytical results from the site assessment are respectively provided in the Oregon SIWP and SI Report (Jacobs 2021a; Jacobs 2023b). Such information is incorporated into this Oregon RAP by reference.

4.1 Background

A burn pit, surrounded by stressed vegetation on the north bank of the J.C. Boyle Reservoir approximately 0.4 mile east of Spencer Creek, was documented in the *Draft Phase I Environmental Site Assessment of the Parcel B Lands* (AECOM 2020). A review of the photographs in AECOM (2020) indicated that this is a human-made fire ring that may have been spread out after use. The original fire ring appeared to have been 4 or 5 feet in diameter, and the disturbed area was approximately 10 feet by 10 feet, containing ash, charred wood, broken glass, and other debris.

Per the Oregon SI Report, concentrations of lead in soil exceed the ODEQ target RBCs. Concentrations of lead exceeded the leaching to groundwater RBC for soil at one boring. The ERA indicated that potential risks to ecological receptors from soil or groundwater exposure pathways are limited. No chemicals were retained for risk management purposes for ecological receptors.

4.2 Site-Specific Removal Actions

The following site-specific removal actions will be performed at the site:

- Excavate an approximate 1,200-square-foot area to a maximum depth of 4 feet bgs or to first encountered groundwater (Figure 4-1).
- Collect one confirmation soil sample along the northern and southern sidewalls and collect two confirmation soil samples along the eastern and western sidewalls.
- Collect two confirmation soil samples from the excavation floor.
- Collect one or two confirmation soil samples at each at each sidewall sample location, based on depth to refusal or observance of groundwater from the Klamath River. The sidewall soil samples will represent unsaturated soil from ground surface to a depth of 2 feet bgs and from 2 to 4 feet bgs.
- Analyze the soil samples to confirm lead is below the background concentration (34 mg/kg). Table 4-1 summarizes the confirmation sampling plan for the site.
- Upon confirmation that impacted soil has been removed, backfill and restore the site per Section 3.1.21.

Table 4-1. Confirmation Sample and Analysis Plan for Soil at J.C. Boyle Dispersed Recreation Area-2

Location Description	Confirmation Sample Location	Confirmation Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B) ^a	Volatile Organic Compounds (EPA Method SW8260B)	Semivolatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (NWTPH-Gx)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (NWTPH-Dx)	Polynuclear Aromatic Hydrocarbons (EPA Method SW8270C-SIM)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 882A)	
J.C. Boyle Dispersed Recreation Area-2	JBRA-S1	JBRA-S1-2.0-YYYYMMDD	0.0-2.0	X									
		JBRA-S1-4.0-YYYYMMDD	2.0-4.0	X									
	JBRA-S2	JBRA-S2-2.0-YYYYMMDD	0.0-2.0	X									
		JBRA-S2-4.0-YYYYMMDD	2.0-4.0	X									
	JBRA-S3	JBRA-S3-2.0-YYYYMMDD	0.0-2.0	X									
		JBRA-S3-4.0-YYYYMMDD	2.0-4.0	X									
	JBRA-S4	JBRA-S4-2.0-YYYYMMDD	0.0-2.0	X									
		JBRA-S4-4.0-YYYYMMDD	2.0-4.0	X									
	JBRA-S5	JBRA-S5-2.0-YYYYMMDD	0.0-2.0	X									
		JBRA-S5-4.0-YYYYMMDD	2.0-4.0	X									
	JBRA-S6	JBRA-S6-2.0-YYYYMMDD	0.0-2.0	X									
		JBRA-S6-4.0-YYYYMMDD	2.0-4.0	X									
	JBRA-F1	JBRA-F1-0.5-YYYYMMDD	0.0-05	X									
	JBRA-F2	JBRA-F2-0.5-YYYYMMDD	0.0-05	X									

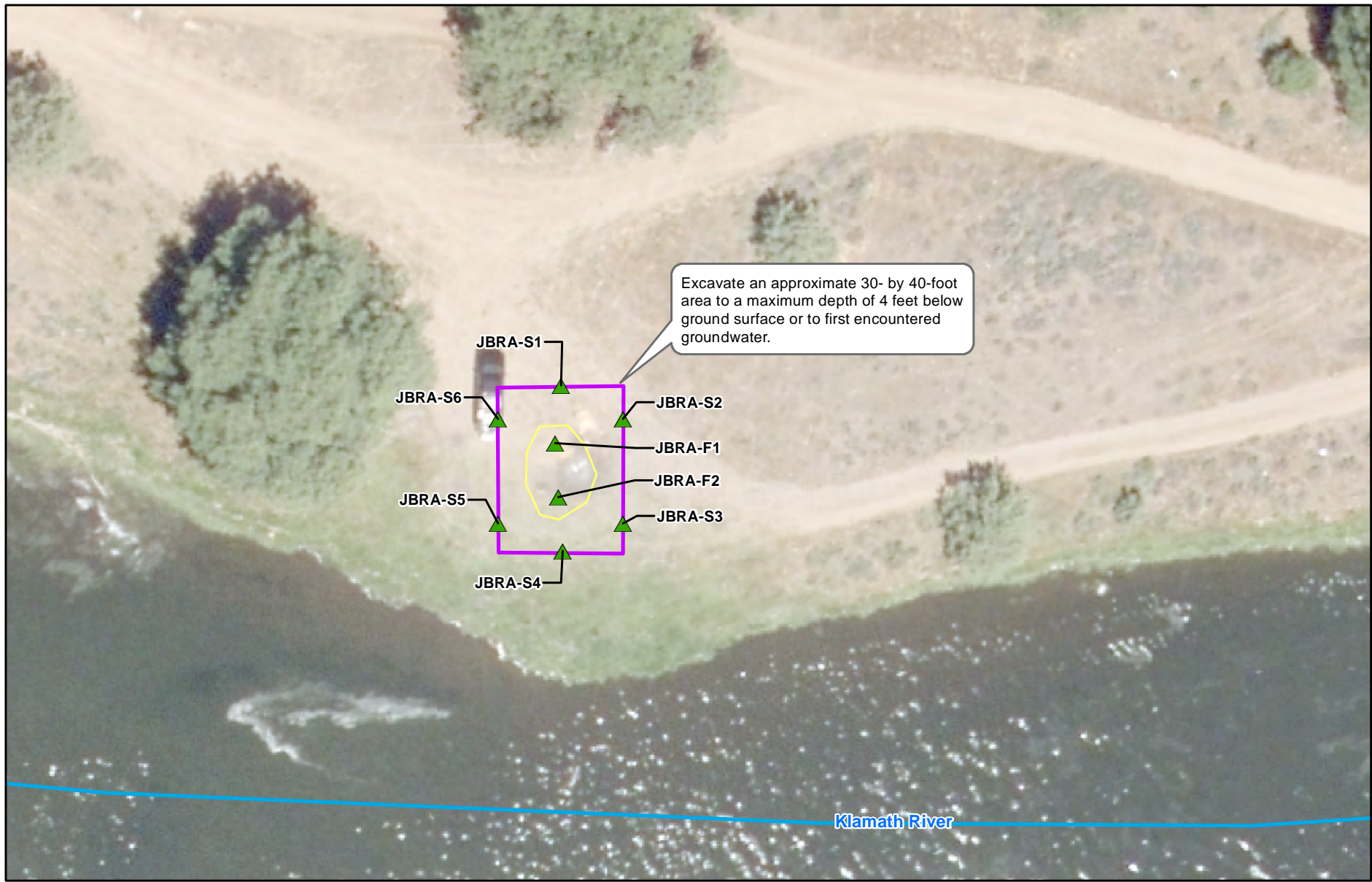
Notes:

^aTitle 22 metals reporting will be limited to analysis for lead.

EPA = U.S. Environmental Protection Agency

ft bgs = feet below ground surface

X = sample to be analyzed



- LEGEND
- Approximate Limits of Visually Impacted Area
 - Excavation Area
 - ▲ Confirmation Soil Sample Location
 - Klamath River

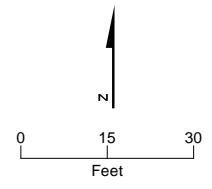


FIGURE 4-1
J.C. Boyle Dispersed Recreation Area-2 Excavation Area
Lower Klamath Hydroelectric Project



5. References

AECOM Technical Services, Inc. (AECOM). 2020. *Draft Phase I Environmental Site Assessment of the Parcel B Lands*. Prepared for Klamath River Renewal Corporation. March.

AECOM Technical Services, Inc. (AECOM). 2022a. Memorandum: *Cultural Resources Review for Environmental Clean-up Sites on PacifiCorp Parcel B Lands: Mobilization 1*. Prepared for Pacific Power – Hydro Resources. February 16.

AECOM Technical Services, Inc. (AECOM). 2022b. Memorandum: *Cultural Resources Review for Environmental Clean-up Sites on PacifiCorp Parcel B Lands: Mobilization 2*. Prepared for Pacific Power – Hydro Resources. March 1.

Jacobs Engineering Group Inc. (Jacobs). 2021a. *California Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Jacobs Engineering Group Inc. (Jacobs). 2021b. *Oregon Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Jacobs Engineering Group Inc. (Jacobs). 2023a. *California Site Investigation Work Plan Supplement No. 1*. Prepared for PacifiCorp. January.

Jacobs Engineering Group Inc. (Jacobs). 2023b. *California Site Investigation Report*. Prepared for PacifiCorp. March.

Jacobs Engineering Group Inc. (Jacobs). 2023c. *Oregon Site Investigation Report*. Prepared for PacifiCorp. March.

Jacobs Engineering Group Inc. (Jacobs). 2023d. *Soil Removal Action Plan for California*. Prepared for PacifiCorp. June.

Lowy, Lloyd, Klamath River Renewal Corporation. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.

Matthews, Chris, Oregon Department of Justice. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.

Oregon Department of Environmental Quality (ODEQ). 2017. *Risk-Based Decision Making for the Remediation of Contaminated Sites*.

Oregon Department of Environmental Quality (ODEQ). 2018. *Risk-Based Concentrations for Individual Chemicals in Soil*.

Oregon Department of Environmental Quality (ODEQ). 2020. *Conducting Ecological Risk Assessments*. September 14.

U.S. Environmental Protection Agency (EPA). 1989. *Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual (Part A)*. EPA Office of Emergency and Remedial Response. Interim Final. EPA/540/1-89/002.

Soil Removal Action Plan for Oregon

U.S. Environmental Protection Agency (EPA). 1997. *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final*.

U.S. Environmental Protection Agency (EPA). 1998. *Final Guidelines for Ecological Risk Assessment*. Risk Assessment Forum, EPA, Washington D.C. EPA/630/R-95/002F. April.

U.S. Environmental Protection Agency (EPA). 2001. *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments*. Office of Solid Waste and Emergency Response – EcoUpdate. EPA 540/ F-01/014. June.

Appendix
Consolidated Comment Matrix

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>California Department of Fish and Wildlife - Office of Spill Prevention and Response/California Department of Water Resources (Comments on the Soil Removal Action Plan for California)</i>					
CA-1	KT	General Comment		<p>The California RAP states that soil cleanup goals are risk-based concentrations that are protective of human health and leaching to groundwater. It is unknown if dilution factors for transport between groundwater and surface water were considered in the risk analysis. CDFW-OSPR reiterates that if sufficient validation is not available for a specific dilution factor, please make the conservative assumption that there is no dilution of contaminants between ground and surface waters. If groundwater at Copco No. 2 Wood-Stave Penstock and Wood Pile (Parcel B REC 7) is hydraulically connected to the water of Klamath River, PacifiCorp/Jacobs must ensure contaminants do not enter State waters at levels deleterious to fish, mammals, plant life or bird life (Fish and Game Code section 5650).</p>	<p>PacifiCorp did not apply a groundwater dilution factor to surface water. The San Francisco Regional Water Quality Control Board (SFRWQCB) environmental screening levels (ESLs) used in this investigation pertaining to soil leaching (SFRWQCB 2019) are protective of freshwater habitat. As stated in Section 3.2 of the California Site Investigation Report: "Soil leaching values for protection of freshwater habitat were evaluated for COPCs at each site." The freshwater aquatic habitat screening levels and sources are listed in Table GW-2 of the 2019 ESL Workbook (SFRWQCB 2019). The most conservative freshwater habitat screening level for groundwater/surface water is used to determine the soil leaching values as presented in Table S-3 of the 2019 ESL Workbook (SFRWQCB 2019). Therefore, contaminants that enter State waters at concentrations less than the screening levels for soil leaching are protective of freshwater habitat, including fish, mammals, plant life, and bird life.</p> <p>Termination of water flow within the penstock has eliminated the water source and disconnected any hydraulic connection between the water accumulated water beneath the penstock and the Klamath River. PacifiCorp expects the soil removal action to demonstrate that: (1) soil beneath the penstock has dried out, thereby removing a hydraulic connection; and (2) site-specific constituents of concern (COCs) with concentrations greater than acceptable soil leaching screening levels have been removed (to be demonstrated based on the analytical results of excavation floor and sidewall confirmation samples).</p> <p>Groundwater was not encountered during sampling and the depth to groundwater is not known at the Wood Pile (Parcel B REC 7). The soil removal action is expected to demonstrate that site-specific COCs with concentrations greater than acceptable soil leaching screening levels have been removed (to be demonstrated based on the analytical results of excavation floor and sidewall confirmation samples).</p> <p>No changes necessary.</p>
CA-2	KT	Soil Removal Action Plan for California	Page 3-1, Section 3, Implementation Plan	<p>The California RAP should include the following plans:</p> <ul style="list-style-type: none"> - Contingency Plan - Site Coordination Plan <p>Please add the above plans into the California RAP and change "Spill Response Plan" to "Spill Prevention and Response Plan."</p>	<p>Section 3.1.18, Contingency Planning has been added.</p> <p>Section 3.1.19, Site Coordination Plan has been added.</p> <p>Section 3.1.12, Spill Response Plan has been changed to "Spill Prevention and Response Plan."</p> <p>The same edits have been made to the Oregon Soil Removal Action Plan.</p>
CA-3	KT	Soil Removal Action Plan for California	Page 3-1, Section 3.1.4, Mobilization and Site Preparation	<p>CDFW requests that a biological monitor be on site during mobilization and throughout all field activities to ensure that wildlife are not impacted by site activities, and that any impacts to special status species are minimized. Please also include the following biological avoidance, minimization, and mitigation measures to be implemented for the protection of special status species that may be present on or near the site during field activities.</p> <ol style="list-style-type: none"> i. CDFW would typically require pre-construction biological surveys by a qualified biologist approved by CDFW, however CDFW assumes that much of KRRC's pre-construction clearance work would overlap with the clean- 	<p>PacifiCorp has added Section 3.1.4, Biological Resources, which reads as follows:</p> <p>"The following biological avoidance, minimization, and mitigation measures will be implemented for the protection of special-status species that may be present on or near the site during field activities:</p> <ul style="list-style-type: none"> ▪ A preconstruction biological assessment will be completed by a qualified biologist to review potential effects on biological resources before removing debris and implementing the soil removal actions at each site. This will include all removal areas, staging and laydown areas, and undeveloped access routes.

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
				<p>up activities. To confirm CDFW's assumption, please identify where all project activities will occur (e.g., access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas). If project activity will occur in an area outside of KRRC's pre-construction clearance work then a survey should be performed.</p> <p>ii. A qualified biologist shall conduct a Biological Resource Education Program briefing to all contractor and subcontractor personnel prior to any site entry. To be considered as qualified, the biologist will be experienced with and knowledgeable about the special status species and habitats present or potentially present on or adjacent to the site. The qualified biologist shall train all personnel on the location of sensitive habitat, identification of all special status species, instructions of procedure when encountering one, and general environmental laws. New employees will attend a briefing by the qualified biologist prior to participating in work activities.</p> <p>iii. If remedial activities occur during the nesting season (February 1 - September 15), a focused survey for nesting birds shall be conducted by a qualified biologist for all access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas 1 to 2 weeks prior to commencement of any project activities or a return to work activities. The qualified biologist must survey the work area and all natural habitats occurring within 500 feet of the work area, to identify active nests. The qualified biologist shall look for new nests at least twice per week during remedial activities that occur during nesting season.</p> <p>iv. If nesting birds are found during surveys, CDFW shall be notified, the locations shall be identified on a map, and no project activity shall occur within 250 feet for raptors and 100 feet for other non-listed birds of an identified active nest until the young have fledged (as determined by a qualified biologist) or until the project proponent receives authorization from CDFW to proceed. If a qualified biologist and CDFW determine the project activity would not be likely to adversely affect the nest, CDFW may authorize the project proponent to proceed. The qualified biologist shall remain on site to monitor the activity of the nesting birds during work activities. If the birds behave normally, the qualified biologist shall monitor them twice per week to ensure the status has not changed. If the birds change their behavior as a result of work activities, the qualified biologist shall continue to monitor the birds as work is modified until the birds act normally. The qualified biologist shall then monitor the birds twice per week to ensure the status has not changed. Through consultation with CDFW, measures will be developed to minimize impacts to nesting birds. Vegetation containing nests that must be removed as a result of project implementation shall be removed during the non-nesting season (September 16 – January 31).</p>	<p>Response to Comment</p> <ul style="list-style-type: none"> ▪ All field team members, including the removal contractor and lower-tier subcontractors, will complete the online KRRC Biological Resource Training program as part of pre-mobilization activities. ▪ A preconstruction nesting survey will be completed by a qualified biologist for sites with remedial activities planned to occur during the nesting season (February 1 – August 31). If nesting birds are found during surveys, the California Department of Fish and Wildlife (CDFW) will be notified, and no Project activity will occur within 250 feet for raptors and 100 feet for other nonlisted birds until a site-specific mitigation and monitoring plan has been developed (including reporting requirements) and agreed upon with CDFW." <p>Note that PacifiCorp adjusted the end date from September 15 as suggested in the comment to August 31 so that the ending of the nesting bird period is consistent between the OR and CA RAPs and the dates in the RAPs are now consistent with the KRRC's approvals and permits.</p> <p>The following bullet was added to Section 3.1.14, Decontamination Procedures:</p> <ul style="list-style-type: none"> ▪ The equipment decontamination area will be located in the designated upland staging area away from drainages. <p>Section 3.1.2, Traffic Control, now reads as follows:</p> <p>"As necessary, traffic management will be implemented to manage the safe entry and exit of vehicles from the site. Equipment and personnel will be confined to the designated access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas. Upland routes covered with pavement, bare ground, or non-native vegetation will be utilized as access routes to and from the excavation sites to the maximum extent practicable."</p> <p>Similar edits have been made to the Oregon Soil Removal Action Plan.</p>

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
				<p>v. Equipment and personnel shall be confined to the designated access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas.</p> <p>vi. The equipment decontamination area shall be located in the designated upland staging area away from drainages.</p> <p>vii. Upland routes covered with pavement, bare ground, or non-native vegetation shall be utilized as access routes to and from the excavation sites, to the maximum extent practicable.</p> <p>The qualified biologist shall complete a monitoring report for each day of monitoring, to include at a minimum: the date, location, weather, biologist's name, remedial activities occurring, special status species observed, species behavior in relation to remedial activities, and any corrective measures taken to protect the species. The biological monitoring reports should be submitted to CDFW for the duration of the remedial activities.</p>	
CA-4	KT	Soil Removal Action Plan for California	Page 3-5, Section 3.1.16, Confirmation Soil Sampling	<p>Please add statements or paragraphs in the section as follows:</p> <p>i. If the data fall outside the limit of specified accuracy, precision, and recovery, or have problems that affect comparability, the laboratory leader must contact the Quality Assurance Officer (QAO) and discuss available options to correct or rectify the situation. The QAO will have final authority on decisions made for correcting or rectifying problems.</p> <p>ii. Quality assurance reports will be prepared annually by the QAO and will include a detailed report of data precision, accuracy, and completeness for each type of analysis. Included in the final laboratory report will be a summary of the practices used to assess data precision, accuracy, and completeness. The QAO will review and approve these reports and include results of performance and system audits, and corrective actions that have occurred.</p> <p>iii. All significant quality assurance problems will be reported to the QAO as soon as possible along with recommendations for corrective action.</p> <p>iv. Any changes in quality assurance procedures, analytical procedures, sampling locations and frequencies, etc., will be submitted in writing to the QAO for approval prior to implementation of the changes.</p>	<p>The following language has been added to Section 3.1.20 consistent with the California Site Investigation Work Plan:</p> <p>"The analytical data provided by the analytical laboratory (accredited under the California Environmental Laboratory Accreditation Program) will undergo quality control checks for useability, then uploaded to a database for use in the analysis and reporting process."</p> <p>Additionally, Jacobs' internal, project-specific Quality Assurance Project Plan will be followed. All analytical data from the laboratory will be validated and evaluated by a qualified project chemist for quality assurance/quality control purposes. The results of the data validation and evaluation will be summarized in a Data Validation Report(s) that will be included in the California and Oregon Soil Removal Action Plans. This is the same process as was done for the California and Oregon Site Investigation Reports.</p> <p>The same language has been added to the Oregon Soil Removal Action Plan.</p>
CA-5	KT	Soil Removal Action Plan for California	Page 3-7, Section 3.1.17, Backfilling and Site Restoration	<p>It is unclear how habitat restoration will be conducted following excavation. The work site should be revegetated with native plants to restore the habitat and to prevent erosion of bare soils/backfill. Please include a description of the habitat restoration methods to be implemented, including seed mix and success criteria, to be used following habitat disturbance associated with the remediation. The habitat restoration plan should be submitted to the regulatory agencies for review and approval prior to implementation. We agree that the Iron Gate Shooting Range need only be stabilized to prevent erosion and dust in the most cost effective manner until KRRC places spoils on the site.</p>	<p>The work sites will be restored and stabilized in accordance with the requirements of the Stormwater Pollution Prevention Plan. This will include backfill and seeding with a native seed mix. The last bullet in Section 3.1.21, Backfilling and Site Restoration, has been modified to read as follows:</p> <ul style="list-style-type: none"> ▪ If required, topsoil will be placed over backfilled areas and prepared for seeding. A commercially available native seed mix will be used for site restoration.

* KT = Kevin Takei/California Department of Fish and Wildlife

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>Klamath River Renewal Corporation (Comments on the Soil Removal Action Plans for California and Oregon)</i>					
KRRC-General-1	LL	General Comment		All hazardous wastes are to be reported under PacifiCorp's EPA ID number	Acknowledged. In part, Section 3.1.11, Transportation Plan, now reads as follows: "Hazardous impacted soil identified for offsite disposal will be transported under a hazardous waste manifest with a PacifiCorp EPA Identification Number to an appropriate disposal facility." The same edit has been made to the Oregon Soil Removal Action Plan.
KRRC-General-2	LL	General Comment		Summaries of previously reviewed documents or materials are subject to such documents or materials in their entirety	Acknowledged. No changes necessary.
KRRC-General 3	LL	General Comment		Statements of future actions (e.g., closure determinations) remain subject to such facts and circumstances as may be known at the time in question	Acknowledged. No changes necessary.
KRRC-General 4	LL	General Comment		Removal activities are subject to coordination with KRRC	Acknowledged. PacifiCorp, Jacobs, and the KRRC's demolition contractors met on June 26 and July 12, 2023, to discuss project specifics. Additional meetings will be held per the Site Coordination Plan (see Comment CA-2 and Section 3.1.19).
KRRC-General 5	LL	General Comment		Removal Action Completion Reports (Section 3.2 in each plan): <ul style="list-style-type: none"> Should also include a narrative description of the work performed at each site, including a description and explanation of any unexpected findings and any deviations from the original plan. Any official correspondence, governmental sign-offs, closure letters received from federal/state/local agencies or similar communications should be included as an appendix to the Report. 	The first bullet of Section 3.2, Removal Action Completion Report, now reads as follows: <ul style="list-style-type: none"> A narrative describing the work performed at each site, including an explanation of unexpected findings and required deviations from the original plan. The last bullet of Section 3.2 now reads as follows: <ul style="list-style-type: none"> Official correspondence, governmental sign-offs, closure letters received from federal, state, and local agencies, or similar communications to be included as an appendix to the report. The same edits have been made to the Oregon Soil Removal Action Plan.
KRRC-General 6	LL	General Comment		KRRC adopts such additional comments as either of the States may have.	Acknowledged. No changes necessary.
KRRC-1	LL	Soil Removal Action Plan for Oregon		No substantive comments. (A couple of typos that I'll send you separately.) [See below.] <ul style="list-style-type: none"> Section 3.1.3 - 1st bullet: "will approval" should probably be "will approve" Section 3.2 – 1st sentence: "... prepared to document that the soil removal activities that were performed ...". Delete the highlighted "that"? 	Acknowledged and received. Typos corrected.
KRRC-2	LL	Soil Removal Action Plan for California		No substantive comments on sites other than the wood-stave penstock.	Acknowledged. No changes necessary.
KRRC-3	LL	Soil Removal Action Plan for California	Wood-Stave Penstock	Regarding the wood-stave penstock: What is the reasoning behind only excavating the wood-stave penstock site to a depth of 1 [foot] bgs?	Per the California SI Report, pentachlorophenol and various polynuclear aromatic hydrocarbon (PAHs) [i.e., benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene] were identified in concentrations greater than acceptable

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
				<ul style="list-style-type: none"> ▪ Is this due to suspected proximity to bedrock or for a different reason? ▪ What level of confidence do we have that 1 [foot] bgs is sufficient to remove all soil contaminated with PCP from the penstock site? <p>This site is above standards for groundwater leaching to nondrinking water for pentachlorophenol (PCP) and is in close proximity to the river.</p>	<p>human health risk levels at soil borings C2WS-02, C2WS-04, C2WS-05, C2WS-06, C2WS-07, C2WS-08, C2WS-13, C2WS-14, C2WS-15, and C2WS-16 (Table D-2 of the CA SI Report).</p> <p>At soil borings C2WS-02, C2WS-04, C2WS-07, C2WS-08, and C2WS-14, unacceptable human health risk levels were identified in soil samples collected from surface grade to a depth of 0.5 foot bgs. Consequently, soil in the vicinity of these borings will be excavated to a depth of 1 foot bgs, and then confirmation soil samples will be collected to confirm that COCs are no longer present at concentrations greater than acceptable human health risk levels. If COCs are detected at concentrations greater than acceptable human health risk levels, over-excavation will be performed, where required and where possible (i.e., when not obstructed due to the presence of bedrock or boulders).</p> <p>At soil borings C2WS-05, C2WS-06, C2WS-13, C2WS-15, and C2WS-16, unacceptable human health risk levels were identified in soil samples collected at depths ranging from 0.5 foot to 1.5 feet bgs (borings C2WS-05, C2WS-06, and C2WS-16), 1.5 to 2.5 feet bgs (boring C2WS-15), and 2.0 to 3.0 feet bgs (boring C2WS-13). It is assumed that rocks and boulders will prevent significant over-excavation in the immediate vicinity of these borings. It is also assumed that the analytical results from confirmation sampling will demonstrate that COCs are no longer present at concentrations above acceptable human health risk levels. If COCs are detected at concentrations greater than acceptable human health risk levels, over-excavation will be performed, where required and where possible (i.e., unobstructed by bedrock or boulders).</p> <p>Figure 4-1 has been revised and Section 4.2 has been reworded as follows: "The following site-specific removal actions will be performed at the penstock with the understanding that boulders, bedrock, or both, may limit the vertical and lateral extents of the excavation:</p> <ul style="list-style-type: none"> ▪ Excavate an approximate 50,000-square-foot area to a minimum depth of 1 foot bgs, or refusal (Figure 4-1). ▪ Based on an evaluation of analytical and risk assessment data from former soil borings C2WS-05, C2WS-06, and C2WS-16 (Jacobs 2023b), excavate an approximate 50- by 50-foot area at Locations 2, 3, and 5 to a depth of 3 feet bgs or refusal (Figure 4-1). ▪ Based on an evaluation of analytical and risk assessment data from former soil boring C2WS-15 (Jacobs 2023b), excavate an approximate 50- by 50-foot area at Location 4 to a depth of 4 feet bgs or refusal (Figure 4-1). ▪ Based on an evaluation of analytical and risk assessment data from former soil boring C2WS-13 (Jacobs 2023b), excavate an approximate 50- by 50-foot area at Location 1 to a depth of 4.5 feet bgs or refusal (Figure 4-1). ▪ Where the initial excavation depth is 1 foot bgs, collect confirmation soil samples along the northern and southern sidewalls. The sidewall samples will be spaced approximately 50 feet apart and will represent soil from ground surface to the bottom of the excavation. Also collect confirmation soil samples from the excavation floor. The floor samples will be spaced approximately 50 feet apart (Figure 4-1; Table 4-1).

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
					<ul style="list-style-type: none"> ▪ Where the initial excavation depths are 3, 4, or 4.5 feet bgs, collect one confirmation soil sample from the excavation floor. ▪ Where the initial excavation depths are 3, 4, or 4.5 feet bgs, collect confirmation soil samples from each excavation sidewall. Collect two soil samples from the respective northern and southern sidewalls of these deeper excavation areas. One sidewall sample will represent soil from ground surface to the midpoint of the excavation, and one sidewall sample will represent soil from the midpoint to the bottom of the excavation. Soil samples from the eastern and western sidewalls will represent soil from 1 foot bgs to the bottom of the excavation. ▪ Analyze the soil samples for pentachlorophenol and the following PAHs: benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene (Table 4-1). ▪ Upon confirmation that impacted soil has been removed, backfill and restore the site per Section 3.1.21.
KRRC-4	LL	Soil Removal Action Plan for California	Section 4.0	<p>[Section] 6.7 of CA SIR states: "Additional investigation at this site following removal of the penstock may be warranted to refine the preliminary excavation area (Figure 6-2)."</p> <ul style="list-style-type: none"> ▪ This appears to have been omitted from Section 4 of the California Soil Removal Action Plan. ▪ Will additional investigations at this site be performed prior to the start of excavation to determine the extent of PCP contamination and refine the preliminary excavation area? ▪ The SIR noted issues with investigative shovel probes at the penstock due to the presence of groundwater in the soil (suspected to be the result of the leaking penstock). 	<p>Additional investigation following removal of the penstock is no longer considered warranted given the overall dam removal and cleanup schedules. PacifiCorp has opted to excavate the area indicated (see Figure 4-1) and properly dispose of the soil offsite rather than iteratively perform additional site investigations with risk assessments and report review cycles. Consequently, the soil removal action will be performed as described in Section 4 of the California Soil Removal Action Plan. Over-excavation and confirmation sampling will also be performed, where required (see Comment KRRC-3 and Section 4.2).</p> <p>No additional changes are necessary.</p>

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
KRRC-5	LL	Soil Removal Action Plans for California and Oregon	As indicated in bulleted comment	<p>We'd like some clarification that PacifiCorp, Jacobs and their contractors will act in a manner that is consistent with KRRC's management plans (e.g., transportation, historic properties, etc.). For example:</p> <ul style="list-style-type: none"> Section 3.1.2 of the SRAP for each State refers to designated routes, staging and storage areas but does indicate that these will be as provided for in KRRC's transportation plan Section 3.1.3 of the SRAP for each State refers to archeological monitoring but does not make clear that any such monitoring must be coordinated with KRRC's cultural resources team Section 3.1.17 of the SRAP for each State refers to a Health and Safety Plan but does not make clear whether this will be KRRC's plan or one developed by Jacobs? If the latter then it must be consistent with KRRC's (See also the "Injuries or Accidents" Section of Table 3-1) The last box in Table 3-1 of the SRAP for each State refers to the unexpected discovery of cultural resources. Again we'd like clarity as noted regarding Section 3.1.3 above. In addition, there's reference to an Inadvertent Discovery Plan that will apply if cultural resources are unexpectedly encountered – again, we'd like better clarity on whether this be KRRC's plan or one developed by Jacobs? If the latter then it must be consistent with KRRC's 	<p>PacifiCorp has been in close coordination with the onsite KRRC team as this removal plan has been developed and will continue to work with the KRRC's team as it is implemented; however, PacifiCorp is relying on the KRRC's team, through these comment periods, to identify areas of substantive conflict between the removal plans and the dam removal management plans. To date, no areas of conflict have been identified by the KRRC. Should an issue or conflict develop during implementation, PacifiCorp will work through that issue with the KRRC team. Responses for each bullet are provided as follows:</p> <ul style="list-style-type: none"> Staging and storage areas are specific to the removal action work and removal contractor needs. These areas have been identified in coordination with the KRRC team onsite (McMillen and Kiewit) and will continue to be coordinated through the execution of the work as indicated in Section 3.1.19, Site Coordination Plan. No additional changes are necessary. The following text has been added to Section 3.1.3: <i>"Should cultural monitoring result in the inadvertent discovery of culturally sensitive resources, the Jacobs team will notify the KRRC's cultural resources team."</i> The text in Section 3.1.17 and Table 3-1, Injuries and Accidents row (Table 3-2 in the California RAP) has been modified to clarify that Jacobs prepared the subject Health and Safety Plans. Table 3-1 (Table 3-2 in the California RAP), Discovery of Cultural Resources or Human Remains, has been updated to indicate that cultural monitoring will be performed by Jacobs. This section already refers to the PacifiCorp's Inadvertent Discovery Plan and coordination with the KRRC's cultural resource team.
KRRC-6	LL	Soil Removal Action Plans for California and Oregon	Section 2, Risk Assessment Summary and Cleanup Goal	<p>We'd like some clarification on risk management and contingency planning as follows:</p> <ul style="list-style-type: none"> Any incident that could lead to a claim affecting KRRC should be promptly reported to KRRC with appropriate reports to follow 	<p>This text has been added to Table 3-1 (Table 3-2 in the California RAP), Contingency Planning for Work Associated with Cleanup of Project Sites.</p>
KRRC-General 7	LL	General		<p>We incorporate any further comments either of the States may have.</p>	<p>Acknowledged. PacifiCorp recognizes that this line duplicates KRRC-General 6. The same comment was received twice and is included here for completeness. No changes necessary.</p>

* LL = Lloyd Lowy

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>Oregon Department of Justice (Comments on the Soil Removal Action Plan for Oregon)</i>					
OR-1	CM	General Comment		<p>As you know, any such comments are not to be construed in any way as an Oregon approval regarding remediation process – all such work must be completed by PacifiCorp as per the relevant property transfer agreements and related agreements notwithstanding any communications as to the process.</p> <p>With that said, we continue to note that your plan makes no mention of any cultural resource monitoring and inadvertent discovery plan. By separate email you have indicated that such plans will be in place. Please confirm. Also, the plan for water for dust abatement will likely require hauling from offsite and/or an OWRD permit for any local pumping.</p>	<p>The cleanup locations have all been reviewed in relation to the potential for cultural resources to be present. Some sites have been precleared and will require no cultural resources monitoring. Others are in proximity to known cultural sites and will require monitoring during cleanup. Regardless of the presence of monitors, PacifiCorp's inadvertent discovery plan will remain in place for all work.</p> <p>Section 3.1.3, Cultural Resources has been added to the Oregon Soil Removal Action Plan.</p> <p>Given the limited amount of work and relatively small work areas in Oregon, water for dust control is not expected to be necessary. If it is necessary, water will either be obtained via permit from the Oregon Water Resources Department or from PacifiCorp's J.C. Boyle Development per an existing water right.</p>

* CM = Chris Matthews



**Lower Klamath Hydroelectric Project
(FERC No. P-14803)**

Soil Removal Action Plan for California

Final

September 2023



Lower Klamath Hydroelectric Project (FERC No. P-14803)

Project No: D3737600
Document Title: Soil Removal Action Plan for California
Document No.: 230426190738_f146411b
Revision: Final
Date: August 2023
Client Name: PacifiCorp, Demian Ebert, Klamath Program Manager, 503-813-6625
Project Manager: Emilio Candanoza, Jacobs, 541-768-3509

Jacobs Engineering Group Inc.

2020 SW Fourth Avenue
Suite 300
Portland, Oregon 97201
United States
T +1.503.235.5000
www.jacobs.com

© Copyright 2023 Jacobs Engineering Group Inc. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright.

Limitation: This document has been prepared on behalf of, and for the exclusive use of Jacobs' client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this document by any third party.

Contents

Acronyms and Abbreviations.....	iii
1. Introduction	1-1
1.1 Background	1-1
1.2 Removal Action Plan Objectives	1-2
1.3 Investigative Standard and Future Site Uses.....	1-2
1.4 Report Organization.....	1-2
2. Risk Assessment Summary and Cleanup Goals	2-1
2.1 Risk Assessment Summary.....	2-1
2.1.1 Human Health Risk Assessment.....	2-1
2.1.2 Ecological Risk Assessment.....	2-2
2.2 Cleanup Goals	2-3
3. Implementation Plan.....	3-1
3.1 Removal Action Work Plan.....	3-1
3.1.1 Site Security and Access	3-1
3.1.2 Traffic Control.....	3-1
3.1.3 Cultural Resources	3-1
3.1.4 Biological Resources	3-1
3.1.5 Permit Requirements.....	3-2
3.1.6 Mobilization and Site Preparation	3-2
3.1.7 Equipment.....	3-3
3.1.8 General Excavation Procedure	3-3
3.1.9 Excavation Sloping.....	3-5
3.1.10 Waste Handling and Disposal.....	3-5
3.1.11 Transportation Plan.....	3-5
3.1.12 Spill Prevention and Response Plan	3-6
3.1.13 Fugitive Dust Monitoring.....	3-6
3.1.14 Decontamination Procedures.....	3-6
3.1.15 Stormwater Management Plan.....	3-6
3.1.16 Supplemental Environmental Controls	3-6
3.1.17 Health and Safety Plan.....	3-7
3.1.18 Contingency Planning	3-7
3.1.19 Site Coordination Plan.....	3-9
3.1.20 Confirmation Soil Sampling	3-9
3.1.21 Backfilling and Site Restoration	3-11
3.2 Removal Action Completion Report.....	3-12
4. Copco No. 2 Wood-Stave Penstock	4-1
4.1 Background	4-1
4.2 Site-Specific Removal Actions.....	4-1
5. Copco No. 2 Wood Pile No. 2	5-1
5.1 Background	5-1

5.2	Site-Specific Removal Actions	5-1
6.	Copco No. 2 Powerhouse Transformer C Fire	6-1
6.1	Background	6-1
6.2	Site-Specific Removal Actions	6-1
7.	Copco No. 2 Burn Pit	7-1
7.1	Background	7-1
7.2	Site-Specific Removal Actions	7-1
8.	Iron Gate Shooting Range	8-1
8.1	Background	8-1
8.2	Site-Specific Removal Actions	8-1
9.	Iron Gate Hatchery Burn Pit	9-1
9.1	Background	9-1
9.2	Site-Specific Removal Actions	9-1
10.	References	10-1

Appendix

Consolidated Comment Matrix

Tables

1-1	Future Site Uses, Risk Drivers, and Constituents of Concern	1-3
2-1	Cleanup Goals for Constituents of Concern	2-5
3-1	Site-Specific Initial Excavation Volumes	3-4
3-2	Contingency Planning for Work Associated with Cleanup of Project Sites	3-7
4-1	Confirmation Sample and Analysis Plan for Soil at Copco No. 2 Wood-Stave Penstock	4-3
5-1	Confirmation Sample and Analysis Plan for Soil at Copco No. 2 Wood Pile No. 2	5-3
6-1	Confirmation Sample and Analysis Plan for Soil at Copco No. 2 Transformer C Fire	6-3
7-1	Confirmation Sample and Analysis Plan for Soil at Copco No. 2 Burn Pit	7-3
8-1	Confirmation Sample and Analysis Plan for Soil at Iron Gate Shooting Range	8-3
9-1	Confirmation Sample and Analysis Plan for Soil at Iron Gate Hatchery Burn Pit	9-2

Figures

1-1	Recognized Environmental Conditions	1-5
1-2	Copco No. 2 Dam Recognized Environmental Conditions	1-7
1-3	Iron Gate Dam Recognized Environmental Conditions	1-9
2-1	Flowchart of Possible Next Steps	2-3
3-1	Confirmation Sampling Evaluation	3-10
4-1	Copco No. 2 Wood-Stave Penstock Excavation Areas	4-5
5-1	Copco No. 2 Wood Pile Excavation Area	5-5
6-1	Copco No. 2 Powerhouse Transformer Fire Excavation Area	6-5
7-1	Copco No. 2 Burn Pit Excavation Areas	7-5
8-1	Iron Gate Shooting Range Excavation Area	8-5
9-1	Iron Gate Hatchery Burn Pit Excavation Area	9-3

Acronyms and Abbreviations

2,3,7,8-TCDD TEQ	2,3,7,8-Tetrachlorodibenzo-P-dioxin toxic equivalent
AECOM	AECOM Technical Services, Inc.
Agreement	Property Transfer Agreement entered into by PacifiCorp, Klamath River Renewal Corporation, and the States of California and Oregon
bgs	below ground surface
BMP	best management practice
California RAP	<i>Soil Removal Action Plan for California</i>
California SI Report	<i>California Site Investigation Report</i>
California SIWP	<i>California Site Investigation Work Plan</i>
CDFW	California Department of Fish and Wildlife
CGP	California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities
COC	constituent(s) of concern
COPC	constituent(s) of potential concern
DRO	diesel range organics
DTSC	Department of Toxic Substances Control
EcoPRG	ecological preliminary remedial goal
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
ERA	ecological risk assessment
ESA	environmental site assessment
ESL	ecological screening level
FERC	Federal Energy Regulatory Commission
Jacobs	Jacobs Engineering Group Inc.
KRRC	Klamath River Renewal Corporation
mg/kg	milligram(s) per kilogram(s)
ODEQ	Oregon Department of Environmental Quality
Oregon SIWP	<i>Oregon Site Investigation Work Plan</i>
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
Project	Lower Klamath Hydroelectric Project
REC	recognized environmental condition
SAP	Sampling and Analysis Plan

Soil Removal Action Plan for California

SVOC	semivolatile organic compound
SWPPP	stormwater pollution prevention plan
TPH	total petroleum hydrocarbon
TPH-d	total petroleum hydrocarbons, diesel-range organics
TPH-g	total petroleum hydrocarbons, gasoline-range organics
TPH-mo	total petroleum hydrocarbons, motor oil
VOC	volatile organic compound

1. Introduction

PacifiCorp retained Jacobs Engineering Group Inc. (Jacobs) to prepare this *Soil Removal Action Plan for California* (California RAP) for the Lower Klamath Hydroelectric Project (Project). The purpose of the California RAP is to document how soil removal activities will be performed at six recognized environmental conditions (RECs) within the Copco No. 2 and Iron Gate developments in California.

Five of the six RECs (the term “site” is used interchangeably with REC in this plan) were originally identified during Phase I environmental site assessments (Phase I ESAs) conducted by AECOM Technical Services, Inc. (AECOM) on behalf of the Klamath River Renewal Corporation (KRRRC) and were subsequently identified in Exhibit C of a Property Transfer Agreement (Agreement) between PacifiCorp, KRRRC, and the States of California and Oregon. PacifiCorp elected to include the Copco No. 2 Powerhouse Transformer C Fire site, when assessing the Exhibit C sites under the *California Site Investigation Work Plan* (California SIWP) (Jacobs 2021a) to confirm the presence or absence of constituents of potential concern (COPCs) or the extent of COPCs previously identified. The sites addressed under this California RAP are as follows (Figures 1-1 to 1-3):

- 1) Copco No. 2 Wood-Stave Penstock
- 2) Copco No. 2 Wood Pile (Parcel B REC 7)
- 3) Copco No. 2 Powerhouse Transformer C Fire (not included in Exhibit C of the Agreement)
- 4) Copco No. 2 Burn Pit (Parcel B REC 6)
- 5) Iron Gate Shooting Range (Parcel B REC 9)
- 6) Iron Gate Hatchery Burn Pit

This California RAP will additionally be utilized should any sites addressed under the *California Site Investigation Work Plan Supplement No. 1* (Jacobs 2023a) require a soil removal action.

PacifiCorp intends that approval of this California RAP will constitute endorsement of the plan from KRRRC and the State of California. Following implementation of the RAP and completion of documentation affirming that the cleanup goals defined in this RAP have been met, the RECs will be ready for closure. As used in this California RAP, site closure refers to a closure action agreed upon by PacifiCorp, KRRRC, and California and documented in a Memorandum of Resolution.

1.1 Background

The California SIWP provides detailed background information on the Copco No. 1, Copco No. 2, and Iron Gate Dam developments, further defines the Exhibit C RECs, and contains a discussion of the surrounding lands, local geology, and historical practices (Jacobs 2021a). The California SIWP was approved by KRRRC (Lowy, pers. comm. 2021) and the State of California. A separate *Oregon Site Investigation Work Plan* (Oregon SIWP) was developed for the J.C. Boyle Development and its single REC, the J.C. Boyle Dispersed Recreation Area – 2 (Jacobs 2021b). The Oregon SIWP was approved by KRRRC (Lowy, pers. comm. 2021) and the State of Oregon (Matthews, pers. comm. 2021).

The findings of the various site assessments were documented in the *California Site Investigation Report* (California SI Report) (Jacobs 2023b), in the *Oregon Site Investigation Report* (Jacobs 2023c), and in accordance with Section 4 of each SIWP. A separate *Soil Removal Action Plan for Oregon* was prepared for the J.C. Boyle Dispersed Recreation Area – 2 (Jacobs 2023d).

The California SI Report recommended soil removal actions for the RECs identified in this California RAP. The California SI Report also recommended closure for several Exhibit C sites based on the results of the site investigations and subsequent evaluation of the analytical data.

1.2 Removal Action Plan Objectives

The primary objectives of this California RAP are as follows for each site:

- Identify the general field activities that will be performed in support of the soil removal actions.
- Identify the unique, site-specific field activities that will be performed in support of the soil removal actions.
- Identify the confirmation soil sampling requirements for each REC upon removal of the initial soil volumes recommended in the California SI Report.
- Identify the remedial action objectives and define the process that will be used to demonstrate the remedial action objectives have been met.

1.3 Investigative Standard and Future Site Uses

The initial contaminants of potential concern (COPCs) for each site were determined based on the Investigative Standard, as defined in Section 1.5 of the California SIWP (Jacobs 2021a), on expectations for the type of site identified, and where applicable, on identified COPCs from prior site assessments. All fieldwork and data evaluations were additionally carried out in accordance with the Investigative Standard. The COPCs, intended future site uses, and exposure pathways for each site were approved by KRRC and the State of California. The exposure pathways were used to determine the screening levels developed in Section 3.3 of the California SIWP and to evaluate the analytical results in Sections 5 through 13 of the California SI Report (Jacobs 2023b). The associated information in these documents is incorporated into this California RAP by reference.

The constituents of concern (COC) for each site (Table 1-1) were established in the California SI Report and are the basis for the soil removal actions and confirmation sampling under this California RAP. The COCs were determined based on 1) the future site uses; 2) utilization of the Investigative Standard when investigating the site under the California SIWP and evaluating the analytical data under the California SI Report; and 3) the results of the risk assessments (human health, leaching to groundwater, and ecological) that were performed in the California SI Report (summarized in Section 2 of this California RAP).

When working under this California RAP, confirmation soil samples will be collected in accordance with the Investigative Standard presented in the California SIWP and SI Report.

1.4 Report Organization

This California RAP contains the following sections and appendix:

- **Section 1 – Introduction:** States the purpose of the California RAP, provides background information on the evolution of the RECs and determination of the COCs for each site, specifies the California RAP objectives, and describes the investigative standards and future site uses.
- **Section 2 – Risk Assessment Summary and Cleanup Goals:** Describes the risk assessment approach and summarizes cleanup goals.
- **Section 3 – Implementation Plan:** Provides a general overview of how the soil removal actions will be conducted.
- **Sections 4 to 9 – Backgrounds and Site-Specific Removal Actions by Site:** Summarize the background and site-specific removal actions for each REC.
- **Section 10 – References:** Provides a bibliographic listing of documents cited in this California RAP.
- **Appendix – Consolidated Comment Matrix:** Contains consolidated review comments and responses from KRRC, California, and Oregon related to this California RAP.

Table 1-1. Future Site Uses, Risk Drivers, and Constituents of Concern

Site/REC	Future Site Use	Risk Driver	Constituents of Concern
Copco No. 2 Wood-Stave Penstock	Passive Recreation/Natural Habitat	Human Health and Leaching to Groundwater	PCP and PAHs (BaP, BbF, DahA)
Copco No. 2 Wood Pile No. 2	Passive Recreation/Natural Habitat	Leaching to Groundwater	PCP
Copco No. 2 Powerhouse Transformer C Fire	Active Recreation	Human Health	DRO, PAHs (BaP, DahA), PCBs (Aroclor 1262)
Copco No. 2 Burn Pit	Backhoe Parking Area	Passive Recreation/Natural Habitat	DRO
	Burn Pit		Dioxin (2,3,7,8-TCDD TEQ) and Naphthalene
	Concrete Rubble Area		PAHs (BaA, BaP, BbF, DahA, 1cdP)
Iron Gate Shooting Range	Passive Recreation/Natural Habitat	Human Health	Lead
Iron Gate Hatchery Burn Pit	Passive Recreation/Natural Habitat	Exceeds Background	Arsenic

Notes:

BaA = benzo(a)anthracene

BaP = benzo(a)pyrene

BbF = benzo(b)fluoranthene

DahA = dibenzo(a,h)anthracene

DRO = diesel range organics

1cdP = indeno(1,2,3-cd)pyrene

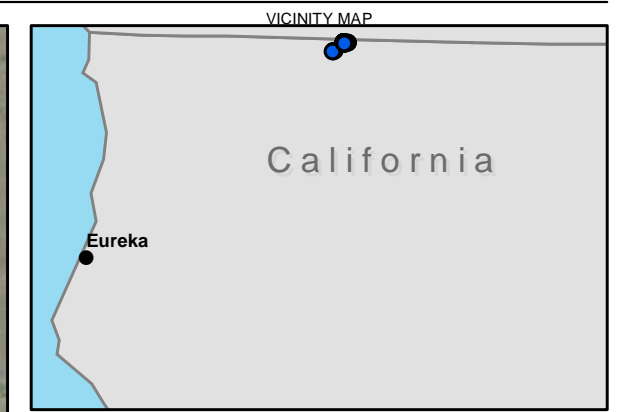
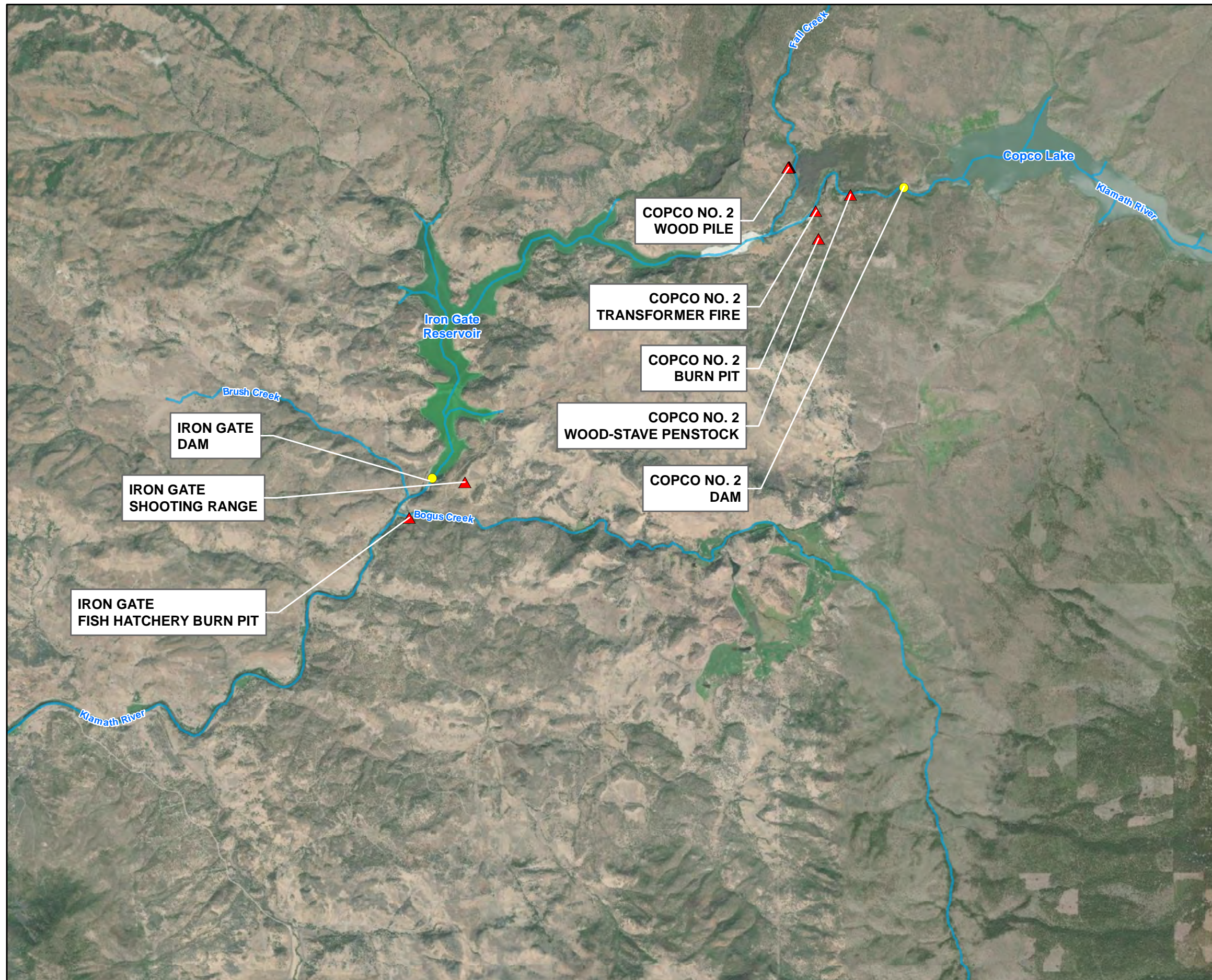
mg/kg = milligrams per kilogram

PAHs = polyaromatic hydrocarbons

PCB = polychlorinated biphenyl

PCP = pentachlorophenol

REC = recognized environmental concern



- LEGEND**
- ▲ Recognized Environmental Condition
 - Dam to be Removed
 - River/Creek

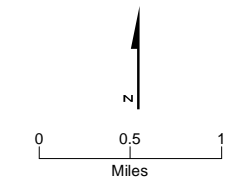
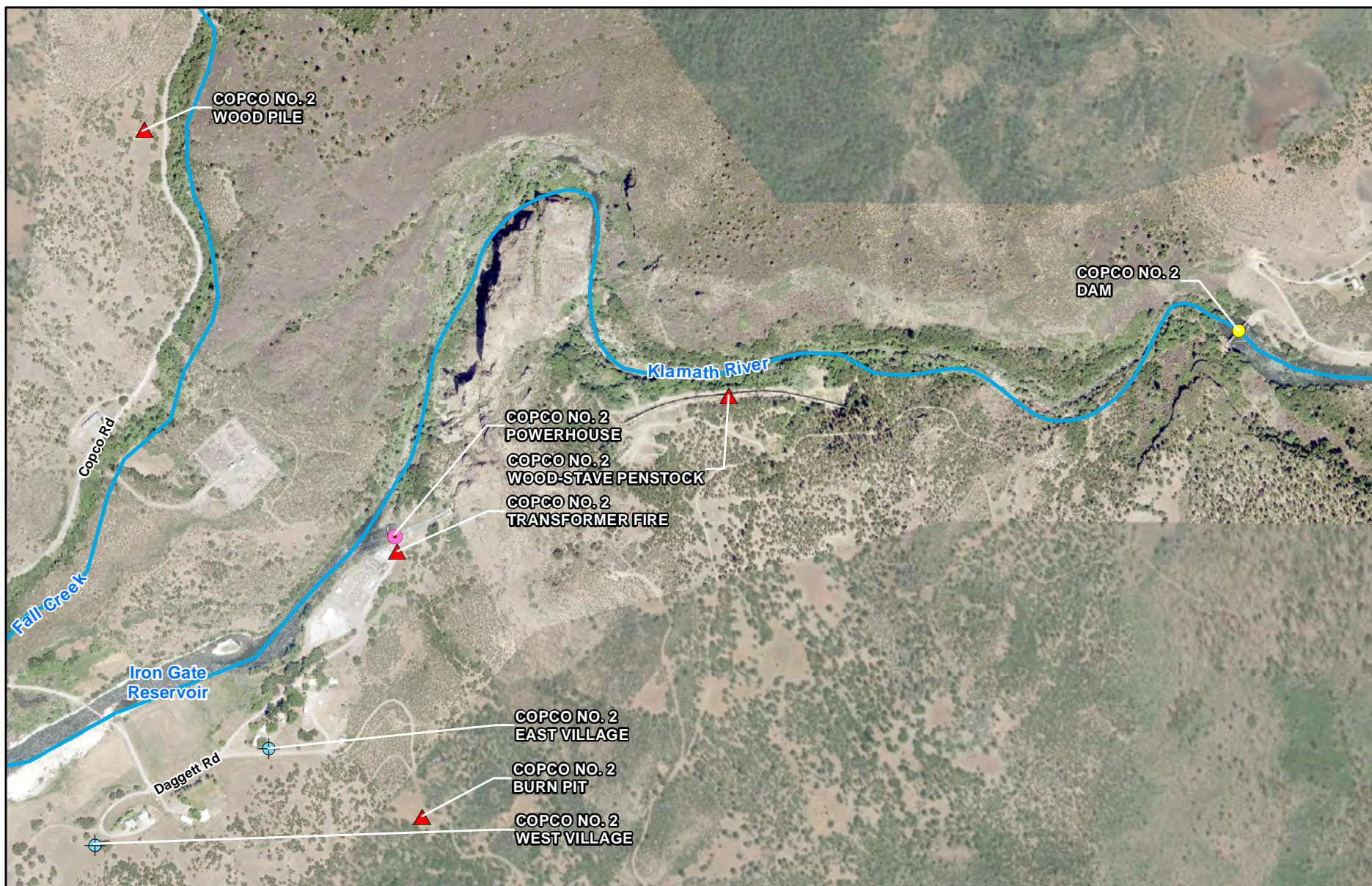


FIGURE 1-1
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



LEGEND

- ▲ Recognized Environmental Condition
- Dam to be Removed
- Powerhouse to be Removed
- ⊕ Village
- River/Creek

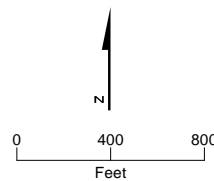
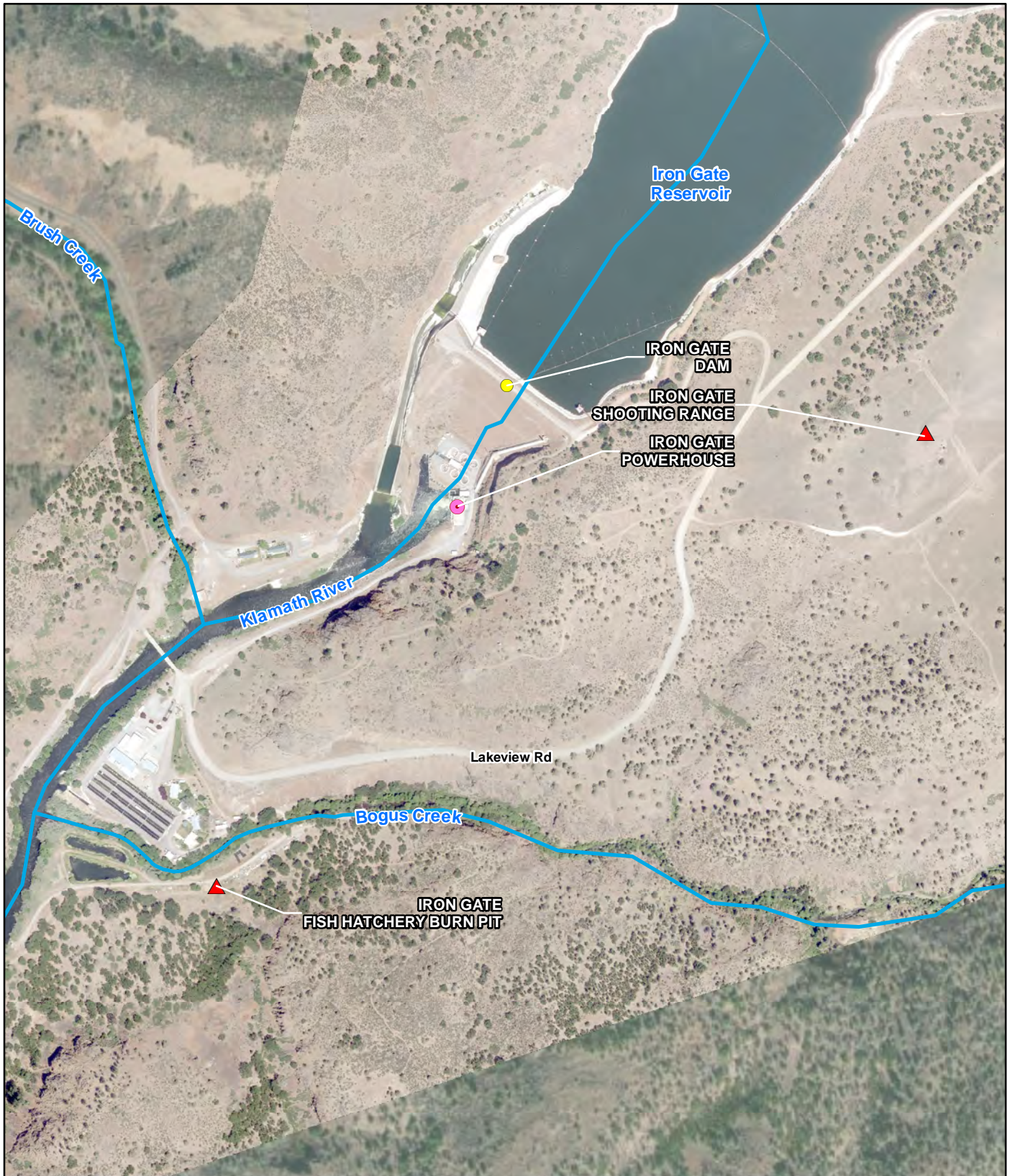


FIGURE 1-2
Copco No. 2 Dam
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project



LEGEND

- ▲ Recognized Environmental Condition
- Dam to be Removed
- Powerhouse to be Removed
- River/Creek

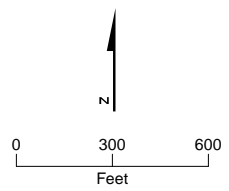


FIGURE 1-3
Iron Gate Dam
Recognized Environmental Conditions
Lower Klamath Hydroelectric Project

2. Risk Assessment Summary and Cleanup Goals

This section summarizes the risk assessment conducted in 2022 (Jacobs 2023b) and the cleanup goals derived from the risk assessment results.

2.1 Risk Assessment Summary

This section describes the general risk assessment approach used to evaluate human health risk, leaching to groundwater, and ecological risk from COPCs in soil at all sites, and human health risk from COPCs in groundwater at three sites. Risk managers used the results of this analysis to support risk management decisions for each site. The detailed risk assessment approach and results are described in further detail in the California SI Report (Jacobs 2023b).

2.1.1 Human Health Risk Assessment

A streamlined human health risk assessment (HHRA) was conducted for each site to evaluate human health risk to applicable receptors from exposure to contaminants in soil and groundwater. The HHRA provides information that can support risk-management decision making, including the need for further action.

This HHRA was conducted in a manner consistent with the following California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) guidance:

- *Human Health Risk Assessment Note Number 2 - Soil Remedial Goals for Dioxins and Dioxin-like Compounds for Consideration at California Hazardous Waste Sites* (DTSC 2017)
- *Human Health Risk Assessment Note Number 1 – Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Hazardous Waste Sites and Permitted Facilities* (DTSC 2019)
- *Human Health Risk Assessment Note Number 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities* (DTSC 2022a)
- *Human Health Risk Assessment Note Number 4 – Guidance for Screening Level Human Health Risk Assessments* (DTSC 2022b)

The HHRA framework consists of the following four basic steps (EPA 1989):

- 1) **Data Evaluation:** The first step consists of reviewing and evaluating available data, identifying COPCs in media at each site.
- 2) **Exposure Assessment:** The second step involves evaluating potential exposure pathways for COPCs and the potential human populations that could be exposed to them, either now or in the future. In this step, exposure point concentrations (EPCs) are estimated from measured or modeled concentrations, and pathway-specific exposure parameters and assumptions are evaluated.
- 3) **Toxicity Assessment:** The third step comprises compiling toxicity values that characterize potential adverse health effects from exposure to COPCs and that are used to estimate potential risks to human health.
- 4) **Risk Characterization:** The fourth step combines the results of the previous three steps to quantitatively characterize potential risks to human health associated with exposure to COPCs at the RECs evaluated. Potential cancer risk and adverse noncancer health effects are estimated. Uncertainties in risk characterization are discussed.

2.1.2 Ecological Risk Assessment

A streamlined ecological risk assessment (ERA) was completed for each site to evaluate potential risks to ecological receptors from contaminants in soils under current and potential future land use conditions. The results of the streamlined ERA were used in conjunction with the HHRA and leaching to groundwater evaluation to provide risk managers with information needed to support risk management decisions.

The streamlined ERAs were performed in general accordance with U.S. Environmental Protection Agency (EPA) and DTSC guidance as follows:

- *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments* (EPA 2001)
- *Guidelines for Ecological Risk Assessment* (EPA 1998)
- *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final* (EPA 1997)
- *Guidance for Ecological Risk Assessment at Hazardous Waste Sites and Permitted Facilities* (DTSC 1996)

The streamlined ERAs were conducted in a phased approach as follows:

- **Step 1 – Screening Evaluation:** The screening evaluation consists of a very conservative (i.e., protective of the most sensitive ecological receptors) screen of sample-specific detected results for the site compared to available background threshold values and the No Effect Ecological Screening Level (No Effect ESL). Chemicals with observed concentrations that do not exceed the No Effect ESLs are considered to not pose a potential risk to ecological receptors and are eliminated from further evaluation. Chemicals with detected concentrations exceeding the No Effect ESLs are carried forward to Step 2 (Refined Evaluation).
- **Step 2 – Refined Evaluation:** The refined evaluation consists of a comparison of sample-specific results against a refined screening level that is based on a lowest observed adverse effect level for wildlife. The chemicals with observed concentrations that do not exceed the Low Effect ESL are considered to not pose a significant risk to ecological receptors. Chemicals with detections exceeding the Low Effect ESL are carried forward to Step 3 (Site-Specific Evaluation).
- **Step 3 – Site-Specific Evaluation:** The site-specific evaluation consists of a comparison of sample-specific detected results against site-specific ecological preliminary remedial goals (EcoPRGs) developed for avian and mammalian receptors that may potentially be found at the sites. Chemicals with observed concentrations exceeding the EcoPRGs are carried forward to Step 4 (Weight of Evidence Evaluation).
- **Step 4 – Weight of Evidence Evaluation:** The weight of evidence evaluates multiple lines of qualitative and quantitative evidence to place the potential risks into context of site-specific conditions. These lines of evidence include the results from Steps 1 through 3, comparisons to regional background concentrations, potential for ecological receptors to use the site, available habitat, and expected future use of the site. The results of the weight of evidence evaluation are used to inform risk managers of chemicals considered to pose a potential risk to ecological receptors so that remedial decisions can be made for the site.

The streamlined ERAs were conducted under the following assumptions and constraints. These are typical for ERAs performed for both public and private entities:

- Evaluation of current exposures is derived from existing conditions.
- The abiotic medium of primary ecological concern is soil.

- Measured chemical concentrations are assumed to be at steady-state levels.
- Chemicals never detected or not analyzed for in soil samples are not evaluated.
- Each chemical measured in collected samples is considered to have similar bioavailability as the chemical form used in the toxicity studies that are used to estimate potential for risk.
- Toxicological information used represents information currently available from literature and database searches.

2.2 Cleanup Goals

As described above and in the California SI Report (Jacobs 2023b), results of the HHRA and ESAs were used to make risk management decisions. For sites where the risk was determined to be unacceptable, PacifiCorp has chosen to remove the impacted soil (Figure 2-1).

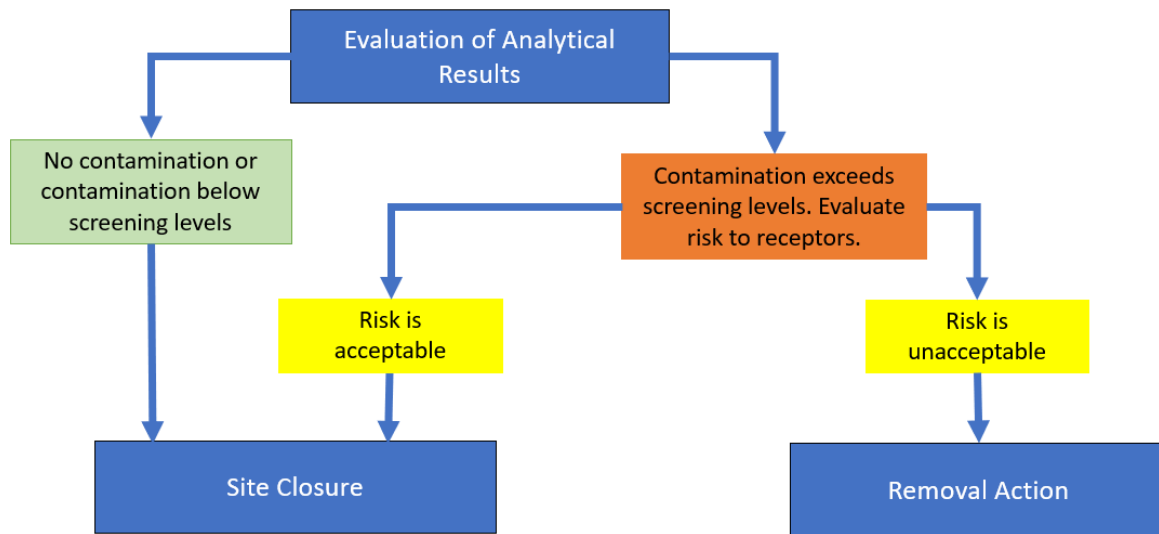


Figure 2-1. Flowchart of Possible Next Steps

Six sites have COCs retained from the risk assessment. The cleanup goals are the risk-based concentrations for human health and leaching to groundwater as presented in the California SI Report (Jacobs 2023b), except for arsenic where background concentration is used for the cleanup goal (Table 2-1).

Subsequent sections of this California RAP describe the approach to ensuring that the removal action objectives are met for each site.

Table 2-1. Cleanup Goals for Constituents of Concern

Site/REC	Constituents of Concern after Risk Assessments	Cleanup Goals
Copco No. 2 Wood-Stave Penstock	PCP and PAHs (benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene)	PCP: 1.5 mg/kg (leaching) BaP: 0.11 mg/kg (HH) BbF: 1.1 mg/kg (HH) DahA: 0.028 mg/kg (HH)
Copco No. 2 Wood Pile	PCP	PCP: 0.098 mg/kg (leaching)
Copco No. 2 Powerhouse Transformer Fire	DRO, PCB (Aroclor 1262) and PAHs (benzo(a)pyrene, dibenzo(a,h)anthracene)	DRO: 960 mg/kg (HH) BaP: 0.11 mg/kg (HH) DahA: 0.028 mg/kg (HH) Aroclor 1262: 0.24 mg/kg (HH)
Copco No. 2 Burn Pit - Backhoe	DRO	DRO: 960 mg/kg (HH)
Copco No. 2 Burn Pit - Burn Pit	Dioxin (2,3,7,8-TCDD), naphthalene	2,3,7,8-TCDD TEQ: 4.8E-6 mg/kg (HH) Naphthalene: 0.042 mg/kg (leaching)
Copco No. 2 Burn Pit - Concrete Rubble	PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene)	BaA: 1.1 mg/kg (HH) BaP: 0.11 mg/kg (HH) BbF: 1.1 mg/kg (HH) DahA: 0.028 mg/kg (HH) Indeno(1,2,3-cd)pyrene: 1.1 mg/kg (HH)
Iron Gate Shooting Range	Lead	Lead: 80 mg/kg (HH)
Iron Gate Hatchery Burn Pit	Arsenic	Arsenic: 19 mg/kg (background)

Notes:

BaA = benzo(a)anthracene

BaP = benzo(a)pyrene

BbF = benzo(b)fluoranthene

DahA = dibenzo(a,h)anthracene

DRO = diesel range organics

HH = human health

IcdP = indeno(1,2,3-cd)pyrene

mg/kg = milligrams per kilogram

PAHs = polyaromatic hydrocarbons

PCB = polychlorinated biphenyl

PCP = pentachlorophenol

REC = recognized environmental concern

3. Implementation Plan

This section presents the general plan for addressing impacted shallow soil at the various sites. Site-specific removal activities are detailed in Sections 4 through 9.

3.1 Removal Action Work Plan

This subsection outlines the typical administrative controls, permit requirements, and sequence of work for removal (i.e., excavation) activities at the various sites.

3.1.1 Site Security and Access

During all removal activities, access will be restricted to authorized personnel only. Contractors will follow the site access and sign-in procedures established by KRRC or their representative.

3.1.2 Traffic Control

As necessary, traffic management will be implemented to manage the safe entry and exit of vehicles from the site. Equipment and personnel will be confined to the designated access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas. Upland routes covered with pavement, bare ground, or non-native vegetation will be utilized as access routes to and from the excavation sites to the maximum extent practicable.

3.1.3 Cultural Resources

Cultural resources are known to exist in the vicinity of the three dam developments and surrounding lands. As part of the original site investigations and prior to any field activities, AECOM conducted a review of potential effects on historic and archaeological resources at each proposed sampling site (AECOM 2022a, 2022b). The goal was to ensure that soil sampling and cleanup activities do not adversely affect National Register of Historic Places-eligible archaeological or historic resources. The AECOM review recommended that archaeological monitoring be provided during soil sampling at six sites in California. Archaeological monitoring was performed by Jacobs when implementing the California SIWP at those six sites. Only three of those sites have been brought forward for cleanup. Therefore, archaeological monitoring will again be performed by Jacobs when implementing this California RAP at the following sites:

- Copco No. 2 Wood-Stave Penstock
- Copco No. 2 Wood Pile
- Iron Gate Hatchery Burn Pit

Should cultural monitoring result in the inadvertent discovery of culturally sensitive resources, the Jacobs team will notify the KRRC's cultural resources team.

3.1.4 Biological Resources

The following biological avoidance, minimization, and mitigation measures will be implemented for the protection of special-status species that may be present on or near the site during field activities:

- A preconstruction biological assessment will be completed by a qualified biologist to review potential effects on biological resources before removing debris and implementing the soil removal actions at each site. This will include removal areas, staging and laydown areas, and undeveloped access routes.

- All field team members, including the removal contractor and lower-tier subcontractors, will complete the online KRRC Biological Resource Training program as part of premobilization activities.
- A preconstruction nesting survey will be completed by a qualified biologist for sites with remedial activities planned to occur during the nesting season (February 1 – August 31). If nesting birds are found during surveys, the California Department of Fish and Wildlife (CDFW) will be notified, and no Project activity will occur within 250 feet for raptors and 100 feet for other nonlisted birds until a site-specific mitigation and monitoring plan has been developed (including reporting requirements) and agreed upon with CDFW.

3.1.5 Permit Requirements

Necessary permits and notifications for removal activities, transportation, stormwater control, and air quality (including notifications to Siskiyou County, if needed) will be obtained prior to the start of removal activities. Copies of the permits will be onsite and will be made available for inspection during working hours. The anticipated permits will include the following components, at a minimum:

- A courtesy copy of the California RAP will be provided to Siskiyou County Environmental Health prior to execution of the work. Additionally, a courtesy copy of the Soil Removal Action Completion Report (described in Section 3.2) will be provided to Siskiyou County at the completion of the Project.
- Dust control management measures and lead exposure monitoring will be implemented. Section 3.1.13 provides additional information regarding compliance with these rules.
- A stormwater pollution prevention plan (SWPPP) will be prepared to meet the requirements of the California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (CGP). A Notice of Intent and Permit Registration Document will be submitted and CGP permit requirements will be implemented.

3.1.6 Mobilization and Site Preparation

Mobilization activities will include the delivery and setup of equipment, materials, and tools required to perform the soil removal actions at the various sites. Resources necessary to excavate soil and perform soil removal activities will be mobilized; these resources include personnel and all subcontractors, equipment, materials, supplies, and support facilities. The support facilities will include a secure material and equipment storage area and any other facilities needed to support work activities.

Site preparation activities will include: 1) establishing work zones; 2) implementing stormwater best management practices (BMPs) as required by the CGP; 3) defining baseline topography and excavation areas by a licensed surveyor; and 4) clearing and grubbing of surface vegetation in the defined excavation area.

Underground Service Alert will be notified at least 48 hours before field activities commence to mark subsurface utilities within and surrounding the planned work areas. A third-party utility locator service provider will also be utilized to identify utilities within and surrounding the planned work area. Field maps showing the results of the utility survey will be completed in the field. If any utilities are identified during the survey, they will be identified on the ground by spray painting along the utility centerline. The field markings will be color-coded to identify the type of utility according to the American Public Works Association uniform color code.

Topographical surveying was not completed at the sites. As part of site preparation activities, topographical base maps will be developed for the excavations. The base maps will be developed by a surveyor licensed in the State of California. The baseline surveys will be used in conjunction with progress and as-built surveys to determine the volumes of soil removed from each excavation site.

Jacobs, in consultation with PacifiCorp and KRRC, will also designate an area for establishing a secure central storage and equipment laydown yard. If needed, additional temporary laydown or stockpile areas will be identified for each site. The storage and laydown areas will be secured with temporary fencing.

Project mobilization will additionally include:

- Confirming that all applicable and necessary permits have been secured (Section 3.1.5).
- Setting up temporary facilities and utilities, such as portable toilets and hand and eye washing stations.
- Identifying and clearly demarcating work zones, including the exclusion, decontamination, and support zones, at each site. The exclusion zone will include all areas of excavation, contaminated soil staging areas, and the truck loading area. The decontamination zone will be used for decontaminating personnel, equipment, and vehicles prior to exiting the site. The support zone will be used to temporarily store equipment, vehicles, and clean soil and to accommodate Project personnel.
- Identifying and clearly marking contaminated soil staging areas, if needed.
- Preparing the decontamination area in a designated area approved by the construction manager.
- Establishing traffic routes from the work zones to the decontamination areas to minimize the spread of potentially impacted soils.
- Positioning all health and safety equipment and supplies for use, if needed.

3.1.7 Equipment

The excavation contractor will determine the equipment needed on a case-by-case basis for each site. The required equipment will depend on actual site conditions and access needs. A list of possible equipment is as follows:

- Front end loaders
- Bulldozers
- Hydraulic excavators (i.e., backhoes)
- Water truck
- Dump trucks
- Temporary fencing
- Other equipment, based on field needs.

Equipment and personnel will be confined to the designated access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas.

3.1.8 General Excavation Procedure

Site-specific initial excavation volumes have been estimated based on the data collected in the California SI Report (Table 3-1). Excavation will be conducted in the following general sequence:

- 1) Staging and access paths will be developed for equipment to be used during the soil removal process. Roads will be maintained, and tire decontamination will be implemented to prevent offsite tracking.
- 2) Underground utility clearances will be conducted by means of the local one call service and a private utility location contractor, as necessary.
- 3) The construction manager will identify appropriate locations for fugitive dust monitoring and arrange for monitoring that complies with health and safety requirements.
- 4) Excavation offset stakes will be used to mark the planned limits of excavation.

Soil Removal Action Plan for California

- 5) Designated areas will be excavated to a predetermined depth.
- 6) Excavated soil will primarily be loaded directly into haul trucks. At the contractor's option, soil may be stockpiled at a designated stockpile location (Section 3.1.6).
- 7) Excavation operations will be managed following the BMPs described in the Project-specific SWPPP.
- 8) To prevent unauthorized access, a temporary 6-foot-high fence will be installed around an open excavation until the excavation is backfilled.
- 9) Excavated soil will be loaded into trucks and will be properly manifested, truck tires will be decontaminated, and dirt clods will be removed from exterior surfaces such as frame rails.
- 10) Soil will be transported offsite for disposal at an approved and permitted facility.
- 11) Post-excavation confirmation soil samples will be collected (Section 3.1.20) to determine whether cleanup goals have been achieved (Section 2.2).

Table 3-1. Site-Specific Initial Excavation Volumes

Site/REC	Approximate Aerial Extent of Excavation (square feet)	Approximate Depth of Excavation (feet)	Approximate Bank Volume to be Excavated (cubic yards)	No. Confirmation Sidewall Sample Locations	No. Confirmation Floor Sample Locations
Copco No. 2 Wood-Stave Penstock	50,000	1 (also five subareas to 3, 4, and 4.5 feet)	1,852	71	25
Copco No. 2 Wood Pile No. 2	1,500 (25- by 60-foot)	6	333	6 (3 sample intervals)	2
Copco No. 2 Powerhouse Transformer C Fire	200 (10- by 20-foot)	2	15	4	1
Copco No. 2 Burn Pit - Backhoe Parking Area	640 (20- by 32-foot)	1	24	8	2
Copco No. 2 Burn Pit - Burn Pit	1,520 (38- by 40-foot)	4	225	8 (2 sample intervals)	2
Copco No. 2 Burn Pit - Concrete Rubble Area	156 (12- by 13-foot)	1	6	4	1
Iron Gate Shooting Range – Long Range Target	8,250 (75- by 110-foot)	2	611	14	12
Iron Gate Shooting Range – Short Range Target & Berm	2,500 (50- by 50-foot)	1	114	10	10
Iron Gate Hatchery Burn Pit	1,155 (33- by 35-foot)	0.5	21	4	1
Total No. Initial Confirmation Soil Samples				129	56

3.1.9 Excavation Sloping

Occupational Safety and Health Administration Regulations, Title 29 *Code of Federal Regulations* 1926, Subpart P, and *California Code of Regulations* Title 8, Section 5192 that govern safety and health regulations for construction will be adhered to and enforced during the soil removal action.

3.1.10 Waste Handling and Disposal

Waste soil (investigation-derived waste) generated from each of the sites during the site investigation was determined to be nonhazardous and was disposed of accordingly (Jacobs 2023b). It is currently assumed that the excavated soil will be managed under the waste profiles generated during the site investigations performed in 2022. Where additional data are needed to characterize soils, the site investigation will be used as a starting point for waste profiling.

When possible, waste soil from the excavations will be direct loaded into haul trucks for offsite disposal. For sequencing reasons, stockpiling of waste soil may be necessary. Waste soil stockpiles will be constructed and managed using BMPs identified in the SWPPP. It is currently assumed that wastewater will be primarily generated from decontamination of sampling equipment and that such waste will be managed under the waste profiles generated during the site investigations performed in 2022.

Soil to be disposed of offsite will be transported via haul trucks to an approved disposal facility. Prior to transportation of contaminated materials, a soil data and certification sheet will be completed as part of the waste acceptance requirement.

Personal protection equipment (e.g., latex gloves) will be identified in the waste profile for soil and will be disposed of with waste soil. General construction debris and municipal waste will be disposed of as general waste at a municipal landfill.

3.1.11 Transportation Plan

Nonhazardous impacted soil that is disposed of offsite will be transported to an appropriate disposal facility. Appropriate licensed and permitted disposal facilities may include:

- Waste Management, Hillsboro Landfill, 3205 SE Minter Bridge Road, Hillsboro, Oregon
- Oil Re-Refining Company (Orrco) – Portland Facility, 4150 N. Suttle Rd., Portland, Oregon

Hazardous impacted soil identified for offsite disposal will be transported under a hazardous waste manifest with a PacifiCorp EPA Identification Number to an appropriate disposal facility. Appropriate licensed and permitted disposal facilities may include:

- Waste Management, Kettleman Hills Facility, 35251 Old, Skyline Road, Kettleman City, California
- U.S. Ecology Nevada Inc., Highway 95 S, Beatty, Nevada

All transportation activities will be performed in strict compliance with applicable regulations and ordinances. The hauling contractor(s) used to transport contaminated waste will be fully licensed, bonded, and permitted by EPA and the State of California. Department of Transportation and California Highway Patrol safety regulations will be followed.

Transportation equipment will be chosen to safely transport the expected volumes of soil, taking into consideration the types of roads to be traveled and their loading capacity. Trucks will use only preplanned and authorized routes. A detailed log of the loads hauled from the site will be maintained. The waste will be off-loaded for treatment or disposal in a manner consistent with current federal, state, and local regulations.

To minimize the need to decontaminate the truck tires, the construction manager will direct the haul trucks so that they remain on clean areas to the extent possible. During loading, dust emissions will be monitored by the construction manager and mitigated, if necessary, by the excavation contractor. The transportation and disposal contractor will ensure that the hauling trucks will be equipped to fully cover and contain all soil and debris during transportation, thereby preventing spillage or dust emissions.

3.1.12 Spill Prevention and Response Plan

A Spill Prevention and Response Plan will be prepared for responding to and handling onsite spills. All contractors will adhere to the provisions of the Spill Prevention and Response Plan to ensure continued protection of the public safety and the environment.

3.1.13 Fugitive Dust Monitoring

Dust control management measures, including water spraying, will be implemented during soil removal and excavation activities. Only nonpotable water is expected to be used for dust control. The use of dust suppression amendments (Simple Green, Envirotech Vapor Suppressant, or equivalent) will be evaluated on a case-by-case basis prior to use if water alone is not adequate.

For removal of soil at the Iron Gate Shooting Range, specific procedures will be included in the Health and Safety Plan (described in Section 3.1.17) to address lead-containing soils. These procedures will include personal air monitoring and work area boundary monitoring.

3.1.14 Decontamination Procedures

To prevent the unintentional offsite transfer of impacted soil or the spreading of residual impacted soil onsite by construction equipment and personnel, the following decontamination procedures will be implemented:

- The equipment decontamination area will be located in the designated upland staging area away from drainages.
- All equipment wheels/tires will be cleaned over gravel track out pads by appropriate methods.
- Personal protective equipment, such as disposable coveralls and booties, will be removed and stored in the contamination reduction zone.
- All personal protective equipment will be disposed of as discussed in Section 3.1.10.

3.1.15 Stormwater Management Plan

A SWPPP will be prepared prior to construction activities and will be implemented throughout the Project duration. BMPs will be inspected and maintained as needed. SWPPP recordkeeping will be implemented throughout the Project duration.

3.1.16 Supplemental Environmental Controls

Other environmental controls may be required in the event that anticipated conditions at the site change. The soil removal actions will be conducted in a manner that will adapt to changing conditions, with appropriate mitigation measures to be developed as needed.

3.1.17 Health and Safety Plan

A Health and Safety Plan will be prepared by Jacobs to address procedures and potential hazards associated with the proposed soil removal action activities. The Jacobs Health and Safety Plan will be prepared to provide pertinent information concerning COPCs, levels of personnel protection, personal protective equipment upgrade action criteria for air monitoring results, monitoring equipment, and physical hazards and safeguards associated with the anticipated field activities. In the event that unanticipated conditions occur, the Jacobs Health and Safety Plan will be modified appropriately.

3.1.18 Contingency Planning

Contingency planning traditionally addresses elements of an action that could not go as planned during project implementation. Should such an event occur, the contingency plan is implemented to deal with the situations. For this California RAP, PacifiCorp has identified several potential elements that could create complications for the cleanup work (Table 3-2). The relative probability of occurrence for each element has not been evaluated; however, PacifiCorp's ongoing coordination with the KRRC team in planning the work reduces the likelihood of some of the more controllable elements occurring (Table 3-2). Somewhat controllable elements related directly to the work include, for example, staffing and landfill issues. The relative risk of elements related to the work should be reduced by coordination and communication among the Project team, with the KRRC, and with other stakeholders, as necessary. Other elements are related to climate or emergency situations (for example, weather and wildfire) and are less controllable but can still be planned for with contingency measures.

Table 3-2. Contingency Planning for Work Associated with Cleanup of Project Sites

Element	Contingency Plan
Contractor or subcontractor equipment or staffing availability	PacifiCorp has been working closely with the contractor to ensure they have the resources available to complete the work. Should that become an issue, additional subcontractors may be brought onto the Project to ensure timely completion of the work.
Injuries or accidents	Any personnel injury, accident, or damage to equipment during the execution of the work will be handled in accordance with the Jacobs Project-specific Health and Safety Plan.
Spill containment and response	Should there be an inadvertent spill or release, the Project-specific Spill Prevention and Response Plan will be followed for initial containment, stabilization, and notification of the KRRC and appropriate state and/or federal agencies.
Changes in waste disposal landfill restrictions	Waste characterization has been conducted as part of the California SI Report. PacifiCorp will likely be collecting new or additional waste characterization samples for review and acceptance by the designated landfills. Additionally, samples will be collected from the Iron Gate Shooting Range to complete waste characterization for this site. In a worst-case scenario, spoils may need to be stockpiled while characterization process and acceptance by the landfill is complete.
Confirmation samples exceeding ESLs	If confirmation samples exceed the target ESLs for a given site and contaminant, PacifiCorp will return to the site, excavate additional soil, and repeat the confirmation sampling per the pattern described in the California RAP. This is an iterative process that could require multiple excavations and testing if contamination is more widely distributed than was indicated in the California SI Report.

Table 3-2. Contingency Planning for Work Associated with Cleanup of Project Sites

Element	Contingency Plan
Discovery of COCs different than what has been documented at a site	The discovery of contaminants present at levels not identified in the California SI Report could result in the recharacterization of waste, changes in disposal methods, or the need for other handling requirements. Any shift in observed subsurface conditions during excavation that could be linked to contamination should result in a stoppage of work so additional investigation can occur. This investigation could lead to changes in the extent of excavation, materials handling, personal protective equipment requirements, or disposal locations.
Access to a Project site is restricted by KRRC work	PacifiCorp is coordinating the work described in this California RAP with the KRRC; however, it is possible that the KRRC's schedule of work changes such that access to a specific location is not possible. In such a case, the contractor will have the flexibility to adjust their schedule and work at other locations until access to an area is available. In a worst-case scenario, the contractor may have to remobilize if there is not another available work location and the site will be inaccessible for an extended period of time.
Wildfire forces evacuation of the area or wildfire smoke creates unsafe work conditions	Safety of PacifiCorp's staff and contractors is of paramount importance. Wildfire-forced evacuations or wildfire smoke that prevents the safe continuation of work are scenarios that have recently occurred in the area and could occur at any time during the work. These are situations for which contingency planning is limited to evacuation routes and appropriate personal protective equipment. In both situations, the contractor will remobilize staff to the site when conditions are safe for continued work. In these cases, schedule delays are likely to be unavoidable.
Discovery of previously undiscovered or unknown contaminants	The approach to managing and addressing the discovery of previously unknown areas of contamination or contaminants is addressed in Section 2.5 of the <i>California Site Investigation Work Plan Supplement No. 1</i> (Jacobs 2023a).
Adverse weather (heat/cold)	The work areas on the Lower Klamath Project could be subject to extreme temperatures (either hot or cold) that shorten the available amount of time the contractor can work or otherwise create an unsafe working condition. The contractor will comply with all regulations regarding work periods as related to temperature. Adjustments to start times (for example, earlier in the day to avoid heat) could help minimize delays associated with uncontrollable climatic events.
Adverse weather (rainfall)	Precipitation itself is not typically an element that would challenge the Project. However, some of the sites are not easily accessible if the soils become saturated. This could be an issue if the work is delayed into the winter or areas are subject to extreme thunderstorms. In such cases, the contractor will either have to shift work to another accessible area or simply wait for ground conditions to improve. Any stockpiles and work sites would need to be actively managed during this period in accordance with the requirements of the SWPPP to ensure they remain stable and do not erode into the surrounding areas.

Table 3-2. Contingency Planning for Work Associated with Cleanup of Project Sites

Element	Contingency Plan
Discovery of cultural resources or human remains	Inadvertent discovery of cultural resources or human remains could result in a delay of excavation while the discovery is evaluated, the appropriate agencies and tribes are consulted, and permission to proceed with work is obtained. This risk has been minimized through prescreening of the work sites. A Jacobs cultural resources monitor will be present at those locations where it is possible to encounter resources or remains and PacifiCorp's Inadvertent Discovery Plan will be followed for all work areas. Coordination with the KRRC's cultural resources team onsite could also help minimize the risk of delay if resources or remains are discovered. If a discovery does occur, the contractor may need to move to a different work area while the significance of a find is addressed and approvals to move forward are obtained.
Potential Claims	Any incident that could lead to a claim affecting KRRC should be promptly reported to KRRC with appropriate reports to follow.

3.1.19 Site Coordination Plan

PacifiCorp recognizes that the areas around Copco, Iron Gate, and J.C. Boyle are active construction sites and as such, careful coordination with the KRRC is required. This coordination has already started and will continue as the contractor mobilization date approaches. The Site Coordination Plan calls for pre-activity meetings between PacifiCorp and the KRRC. The purpose of the meetings is to identify contractor laydown, staging areas, and stockpile locations, set work-hour restrictions, define secured access and badging requirements, and establish scheduling constraints. To date, two pre-activity coordination meetings have been held, the first on June 26, 2023, and the second on July 12, 2023.

During fieldwork execution, the key point of contact between PacifiCorp and the KRRC will be PacifiCorp's Representative (PacifiCorp Rep). At a minimum, the PacifiCorp Rep will communicate the planned work, site location(s), access, and haul routes to the KRRC team during daily meetings. At the daily meetings, any issues raised by the KRRC team will either be addressed directly by the PacifiCorp Rep or will result in a specific follow-up meeting. Specific coordination meetings or site visits for select sites may be required. Those additional coordination meetings or site visits will be scheduled on a case-by-case basis.

In the event of an unforeseen situation that is caused by or creates an emergency situation, the contractor and onsite PacifiCorp Rep would communicate with emergency services, PacifiCorp management, and the KRRC as appropriate. Depending on the situation, a call to 9-1-1 to activate emergency responders would occur first, followed by a call to PacifiCorp's Hydro Control Center, the PacifiCorp Project Manager, and the contractor's own management team. The calls to the Hydro Control Center and PacifiCorp's Project Manager would lead to follow-up calls to others on the PacifiCorp team as appropriate (e.g., compliance, operations, safety, or management staff) and the KRRC.

3.1.20 Confirmation Soil Sampling

In general, confirmation soil samples will be collected from the floor of the excavation and from each excavation sidewall. If bedrock is observed within an excavation floor or sidewall, excavation work will be terminated and a confirmation soil sample will be collected, if appropriate. One confirmation soil sample will be collected from each 750-square-foot section of excavation floor and one confirmation soil sample will be collected from each 25-foot linear section of sidewall. At the sidewall locations, one representative

soil sample will be collected from each 2-foot interval (i.e., 0- to 2-foot, 2- to 4-foot, and 4- to 6-foot intervals). At each REC, additional equally spaced confirmation samples may be collected to ensure that each site has an adequate number of samples available to calculate the site-specific EPC.

Confirmation soil samples will be collected in 4- or 8-ounce glass jars and from the bucket of the excavator/backhoe if the excavation depth exceeds 4 feet below ground surface (bgs). When it is safe to enter excavations shallower than 4 feet bgs, confirmation soil samples will be collected directly into glass jars or by using a decontaminated metal or disposable trowel. Confirmation soil samples for volatile organic compound (VOC) analysis will be collected as per the existing and approved Sampling and Analysis Plan (SAP) (see Appendix A of the SIWP; Jacobs 2021a).

Hand-held soil sampling equipment will be decontaminated prior to the collection of each confirmation soil sample. Prior to sampling, any loose material or soil will be gently brushed off the surface of the excavation, and care will be taken to collect the sample from an undisturbed area.

Confirmation soil samples will be analyzed for the COCs at each site (Table 2-1). The laboratory analyses will be performed using the analytical methods and detection limits specified in the SAP (see Appendix A of the SIWP; Jacobs 2021a). The analytical data provided by the analytical laboratory (accredited under the California Environmental Laboratory Accreditation Program) will undergo quality control checks for useability, then uploaded to a database for use in the analysis and reporting process.

The analytical results for the confirmation samples will be compared to the cleanup goals (Table 2-1) for decision making as follows (Figure 3-1):

- If all samples are below the COC cleanup goals, no further excavation is required.
- If the calculated sitewide COC EPCs (see Section 2.1.1) are below the cleanup goals, no further excavation is required.
- If there are multiple or substantial exceedances, additional excavation may be required.

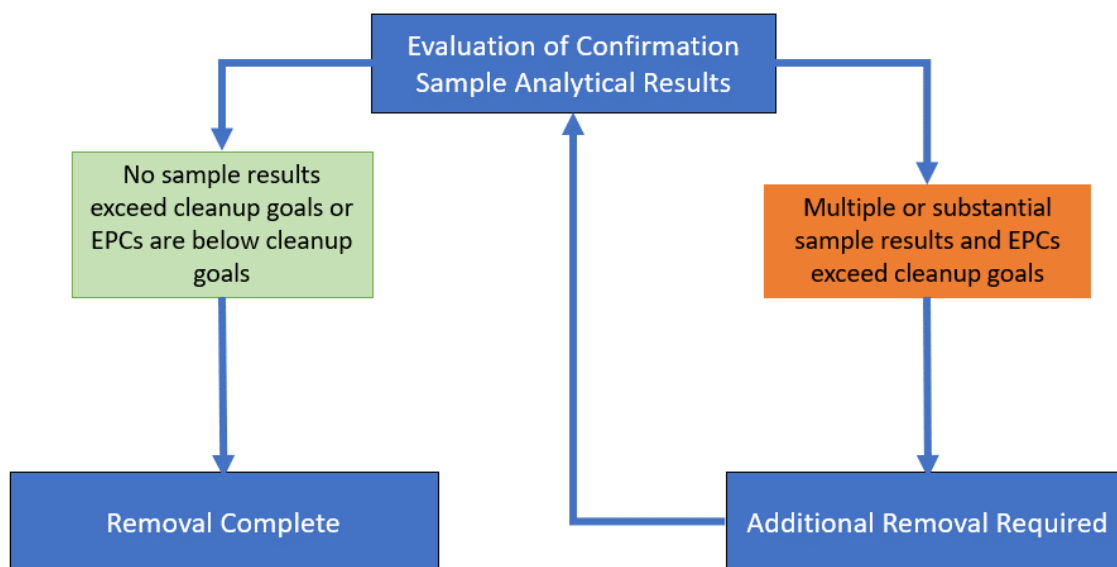


Figure 3-1. Confirmation Sampling Evaluation

Multiple or substantial exceedances will result in deepening and expanding of the excavation. In general, it is anticipated that excavations will be iteratively deepened and expanded in 0.5- to 1-foot increments, or observation of bedrock. Upon expanding the excavation, one step-out confirmation soil sample will be collected for every 750 square feet of newly exposed excavation floor and for every 25 linear feet of newly exposed sidewall. When multiple COCs are detected at concentrations greater than cleanup goals, cumulative effects will be estimated by summing the ratios of the concentration to cleanup goal for carcinogenic and noncarcinogenic COCs (i.e., the sum of the ratios exceeds 1) to determine if additional soil removal is required.

3.1.21 Backfilling and Site Restoration

PacifiCorp has made initial inquiries to KRRC regarding sourcing of clean backfill soil from onsite construction work associated with dam removal. The intent is to use available soil from ongoing dam-removal work to backfill site excavations resulting from soil removal actions.

Prior to use of this backfill material, these stockpiles will be tested to confirm that constituent concentrations are appropriate for use as clean backfill for the REC excavations.

For stockpiles of less than 1,000 cubic yards, one sample will be collected for every 250 cubic yards. For stockpiles of 1,000 cubic yards or more, four samples will be collected for the first 1,000 cubic yards, and one additional sample will be collected for every additional 500 cubic yards. For example, one sample would be collected from a 100-cubic-yard stockpile, two samples would be collected from a 500-cubic-yard stockpile, and five samples would be collected from a 1,500-cubic-yard stockpile.

Sampling locations will be determined by dividing the length of the stockpile by the number of required samples and creating sampling areas of equal area. One sample will be collected from each area of the stockpile from the side. Each sample will be collected on the opposite side of the pile from any neighboring samples. Sample labeling, handling, analytical methods, quality assurance/quality control procedures, and database entry requirements will follow the same procedures as the California SIWP (Jacobs 2021a).

The analytes and frequency will be selected in general accordance with DTSC guidance. The following analytical methods are anticipated, depending on the fill source:

- PAHs (U.S. Environmental Protection Agency [EPA] Method 8270)
- Total petroleum hydrocarbon (TPH)-extractable (EPA Method 8015M)
- Title 22 Metals (EPA Method 6010)

Anticipated procedures for soil backfill placement and compaction are as follows:

- The soil at the bottom of the excavation area will be compacted to the same requirements as the fill that will be placed above it. Excavations will be free of standing water or loose or disturbed materials before placing any fill.
- Fill material will be placed in maximum 8-inch loose lifts and compacted to not less than 90 percent relative compaction per standard Proctor (ASTM D698), unless otherwise specified. Compaction levels will be verified.
- Backfilled areas will be graded to the appropriate subgrade required for surface restoration. The subgrade will be graded to facilitate proper drainage at the site after the surface is restored.
- If required, topsoil will be placed over backfilled areas and prepared for seeding. A commercially available native seed mix will be used for site restoration.

After backfilling, topsoil placement, and seeding have been completed, construction waste and temporary BMPs will be removed.

3.2 Removal Action Completion Report

Once the soil removal action is complete and the necessary confirmation sampling results have been reviewed and validated, a Soil Removal Action Completion Report will be prepared to document the soil removal activities that were performed. The report will include:

- A narrative describing the work performed at each site, including an explanation of unexpected findings and required deviations from the original plan.
- Analytical results from confirmation samples.
- Detailed maps of the location and extent of the soil removal activities.
- Documentation of soil excavated and removed from the sites, including final disposition of excavated soil, and documentation of the amount and source of backfill material.
- Copies of necessary permits.
- Annotated photo documentation of the remediation fieldwork.
- Official correspondence, governmental sign-offs, closure letters received from federal, state, and local agencies, or similar communications to be included as an appendix to the report.

4. Copco No. 2 Wood-Stave Penstock

This section summarizes the background and site-specific removal activities for the Copco No. 2 Wood-Stave Penstock (penstock). Detailed descriptions of the site background and of the risk assessment results determined upon evaluation of the analytical results from the site assessment are respectively provided in the California SIWP and SI Report (Jacobs 2021a; Jacobs 2023b). Such information is incorporated into this California RAP by reference.

4.1 Background

The penstock was identified as a REC based on Phase II ESA (AECOM 2020b) soil sampling results that indicated the presence of arsenic and lead at concentrations above background for the Cascade Range based on Oregon Department of Environmental Quality (ODEQ) guidance (ODEQ 2013) and the presence of various semivolatile organic compounds (SVOCs) (anthracene, benzo[a]anthracene, benzo[b]fluoranthene, carbazole, chrysene, Creosote, fluoranthene, indeno[1,2,3-cd]pyrene, pentachlorophenol, phenanthrene) likely from the treated wood (AECOM 2020b).

Per the California SI Report, pentachlorophenol and various polynuclear aromatic hydrocarbon (PAHs) [i.e., benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene] were identified as present in concentrations above acceptable human health risk levels at this site. Concentrations of pentachlorophenol in site soil also exceed soil leaching screening levels protective of nondrinking water resources. Consequently, soil from beneath Copco No. 2 Wood-Stave Penstock was recommended for excavation and offsite disposal. Soil removal activities will not address accumulated water from beneath the penstock because:

- The accumulated water will not be present after the penstock is dewatered and removed.
- The HHRA demonstrated that the shallow water below the penstock does not pose an unacceptable risk to construction workers.
- The accumulated water beneath the penstock, is not considered potable water source.

4.2 Site-Specific Removal Actions

The following site-specific removal actions will be performed at the penstock with the understanding that boulders, bedrock, or both, may limit the vertical and lateral extents of the excavation:

- Excavate an approximate 50,000-square-foot area to a minimum depth of 1 foot bgs or refusal (Figure 4-1).
- Based on an evaluation of analytical and risk assessment data from former soil borings C2WS-05, C2WS-06, and C2WS-16 (Jacobs 2023b), excavate an approximate 50- by 50-foot area at Locations 2, 3, and 5 to a depth of 3 feet bgs or refusal (Figure 4-1).
- Based on an evaluation of analytical and risk assessment data from former soil boring C2WS-15 (Jacobs 2023b), excavate an approximate 50- by 50-foot area at Location 4 to a depth of 4 feet bgs or refusal (Figure 4-1).
- Based on an evaluation of analytical and risk assessment data from former soil boring C2WS-13 (Jacobs 2023b), excavate an approximate 50- by 50-foot area at Location 1 to a depth of 4.5 feet bgs or refusal (Figure 4-1).
- Where the initial excavation depth is 1 foot bgs, collect confirmation soil samples along the northern and southern sidewalls. The sidewall samples will be spaced approximately 50 feet apart and will

represent soil from ground surface to the bottom of the excavation. Also collect confirmation soil samples from the excavation floor. The floor samples will be spaced approximately 50 feet apart (Figure 4-1; Table 4-1).

- Where the initial excavation depths are 3, 4, or 4.5 feet bgs, collect one confirmation soil sample from the excavation floor.
- Where the initial excavation depths are 3, 4, or 4.5 feet bgs, collect confirmation soil samples from each excavation sidewall. Collect two soil samples from the respective northern and southern sidewalls of these deeper excavation areas. One sidewall sample will represent soil from ground surface to the midpoint of the excavation, and one sidewall sample will represent soil from the midpoint to the bottom of the excavation. Soil samples from the eastern and western sidewalls will represent soil from 1 foot bgs to the bottom of the excavation.
- Analyze the soil samples for pentachlorophenol and the following PAHs: benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene (Table 4-1).
- Upon confirmation that impacted soil has been removed, backfill and restore the site per Section 3.1.21.

Table 4-1. Confirmation Sample and Analysis Plan for Soil at Copco No. 2 Wood-Stave Penstock

Location Description	Confirmation Sample Location	Confirmation Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds (VOCs) ^a (EPA Method SW8260B)	Semivolatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (EPA Method SW8015M)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (EPA Method SW8015M)	Polynuclear Aromatic Hydrocarbons (PAHs) ^b (EPA Method SW8270C-SIM)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 882A)
Copco No. 2 Wood-Stave Penstock	C2WS-S1	C2WS-S1-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S2	C2WS-S2-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S3	C2WS-S3-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S4	C2WS-S4-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S5	C2WS-S5-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S6	C2WS-S6-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S7	C2WS-S7-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S8	C2WS-S8-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S9	C2WS-S9-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S10	C2WS-S10-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S11	C2WS-S11-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S12	C2WS-S12-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S13	C2WS-S13-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S14	C2WS-S14-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S15	C2WS-S15-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S16	C2WS-S16-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S17	C2WS-S17-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S18	C2WS-S18-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S19	C2WS-S19-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S20	C2WS-S20-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S21	C2WS-S21-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S22	C2WS-S22-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S23	C2WS-S23-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S24	C2WS-S24-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S25	C2WS-S25-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S26	C2WS-S26-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S27	C2WS-S27-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S28	C2WS-S28-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S29	C2WS-S29-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S30	C2WS-S30-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S31	C2WS-S31-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S32	C2WS-S32-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S33	C2WS-S33-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S34	C2WS-S34-1.0-YYYYMMDD	0.0-1.0		X						X	
C2WS-S35	C2WS-S35-1.0-YYYYMMDD	0.0-1.0		X						X		
C2WS-S36	C2WS-S36-1.0-YYYYMMDD	0.0-1.0		X						X		
C2WS-S37	C2WS-S37-1.0-YYYYMMDD	0.0-1.0		X						X		
C2WS-S38	C2WS-S38-1.0-YYYYMMDD	0.0-1.0		X						X		
C2WS-S39	C2WS-S39-1.0-YYYYMMDD	0.0-1.0		X						X		
C2WS-S40	C2WS-S40-1.0-YYYYMMDD	0.0-1.0		X						X		

Table 4-1. Confirmation Sample and Analysis Plan for Soil at Copco No. 2 Wood-Stave Penstock

Location Description	Confirmation Sample Location	Confirmation Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds (VOCs) ^a (EPA Method SW8260B)	Semivolatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (EPA Method SW8015M)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (EPA Method SW8015M)	Polynuclear Aromatic Hydrocarbons (PAHs) ^b (EPA Method SW8270C-SIM)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 882A)
Copco No. 2 Wood Stave Penstock (continued)	C2WS-S41	C2WS-S41-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S42	C2WS-S42-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S43	C2WS-S43-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S44	C2WS-S44-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S45	C2WS-S45-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S46	C2WS-S46-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S47	C2WS-S47-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S48	C2WS-S48-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S49	C2WS-S49-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S50	C2WS-S50-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WS-S51	C2WS-S51-1.0-YYYYMMDD	0.0-1.0		X						X	
	C2WF-F1	C2WF-F1-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WF-F2	C2WF-F2-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WS-S52 ^a	C2WS-S52-2.0-YYYYMMDD	0.0-2.0		X						X	
	C2WS-S52 ^a	C2WS-S52-4.5-YYYYMMDD	2.0-4.5		X						X	
	C2WS-S53 ^a	C2WS-S53-2.0-YYYYMMDD	0.0-2.0		X						X	
	C2WS-S53 ^a	C2WS-S53-4.5-YYYYMMDD	2.0-4.5		X						X	
	C2WS-F3 ^a	C2WF-F3-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WS-S54 ^a	C2WS-S54-4.5-YYYYMMDD	1.0-4.5		X						X	
	C2WS-S55 ^a	C2WS-S55-4.5-YYYYMMDD	1.0-4.5		X						X	
	C2WF-F4	C2WF-F4-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WF-F5	C2WF-F5-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WF-F6	C2WF-F6-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WF-F7	C2WF-F7-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WS-S56 ^b	C2WS-S56-1.5-YYYYMMDD	0.0-1.5		X						X	
	C2WS-S56 ^b	C2WS-S56-3.0-YYYYMMDD	1.5-3.0		X						X	
	C2WS-S56 ^b	C2WS-S57-1.5-YYYYMMDD	0.0-1.5		X						X	
	C2WS-S56 ^b	C2WS-S57-3.0-YYYYMMDD	1.5-3.0		X						X	
	C2WF-F8 ^b	C2WF-F8-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WS-S56 ^b	C2WS-S58-3.0-YYYYMMDD	1.0-3.0		X						X	
	C2WS-S56 ^b	C2WS-S59-3.0-YYYYMMDD	1.0-3.0		X						X	
	C2WF-F9	C2WF-F9-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WF-F10	C2WF-F10-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WF-F11	C2WF-F11-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WF-F12	C2WF-F12-0.25-YYYYMMDD	0.0-0.25		X						X	
C2WF-F13	C2WF-F13-0.25-YYYYMMDD	0.0-0.25		X						X		
C2WS-S60 ^c	C2WS-S60-1.5-YYYYMMDD	0.0-1.5		X						X		
C2WS-S60 ^c	C2WS-S60-3.0-YYYYMMDD	1.5-3.0		X						X		
C2WS-S61 ^c	C2WS-S61-1.5-YYYYMMDD	0.0-1.5		X						X		
C2WS-S61 ^c	C2WS-S61-3.0-YYYYMMDD	1.5-3.0		X						X		
C2WF-F14 ^c	C2WF-F14-0.25-YYYYMMDD	0.0-0.25		X						X		
C2WS-S63 ^c	C2WS-S62-3.0-YYYYMMDD	1.0-3.0		X						X		
C2WS-S63 ^c	C2WS-S63-3.0-YYYYMMDD	1.0-3.0		X						X		
C2WF-F15	C2WF-F15-0.25-YYYYMMDD	0.0-0.25		X						X		

Table 4-1. Confirmation Sample and Analysis Plan for Soil at Copco No. 2 Wood-Stave Penstock

Location Description	Confirmation Sample Location	Confirmation Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds (VOCs) ^a (EPA Method SW8260B)	Semivolatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (EPA Method SW8015M)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (EPA Method SW8015M)	Polynuclear Aromatic Hydrocarbons (PAHs) ^b (EPA Method SW8270C-SIM)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 882A)
Copco No. 2 Wood Stave Penstock (continued)	C2WF-F16	C2WF-F16-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WS-S64 ^d	C2WS-S64-2.0-YYYYMMDD	0.0-2.0		X						X	
	C2WS-S64 ^d	C2WS-S64-4.0-YYYYMMDD	2.0-4.0		X						X	
	C2WS-S65 ^d	C2WS-S65-2.0-YYYYMMDD	0.0-2.0		X						X	
	C2WS-S65 ^d	C2WS-S65-4.0-YYYYMMDD	2.0-4.0		X						X	
	C2WF-F17 ^d	C2WF-F17-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WS-S66 ^d	C2WS-S66-4.0-YYYYMMDD	1.0-4.0		X						X	
	C2WS-S67 ^d	C2WS-S67-4.0-YYYYMMDD	1.0-4.0		X						X	
	C2WF-F18	C2WF-F18-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WF-F19	C2WF-F19-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WF-F20	C2WF-F20-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WS-S68 ^e	C2WS-S68-1.5-YYYYMMDD	0.0-1.5		X						X	
	C2WS-S68 ^e	C2WS-S68-3.0-YYYYMMDD	1.5-3.0		X						X	
	C2WS-S69 ^e	C2WS-S69-1.5-YYYYMMDD	0.0-1.5		X						X	
	C2WS-S69 ^e	C2WS-S69-3.0-YYYYMMDD	1.5-3.0		X						X	
	C2WF-F21 ^e	C2WF-F21-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WS-S70 ^e	C2WS-S70-3.0-YYYYMMDD	1.0-3.0		X						X	
	C2WS-S71 ^e	C2WS-S71-3.0-YYYYMMDD	1.0-3.0		X						X	
	C2WF-F22	C2WF-F22-0.25-YYYYMMDD	0.0-0.25		X						X	
	C2WF-F23	C2WF-F23-0.25-YYYYMMDD	0.0-0.25		X						X	
C2WF-F24	C2WF-F24-0.25-YYYYMMDD	0.0-0.25		X						X		
C2WF-F25	C2WF-F25-0.25-YYYYMMDD	0.0-0.25		X						X		

Notes:

^a For VOCs, reporting will be limited to analysis for pentachlorophenol.

^b For PAHs, reporting will be limited to analysis for benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene.

^c Location 1 centered on the coordinates of former boring C2WS-13.

^d Location 2 centered on the coordinates of former boring C2WS-05.

^e Location 3 centered on the coordinates of former boring C2WS-06

^f Location 4 centered on the coordinates of former boring C2WS-15

^g Location 5 centered on the coordinates of former boring C2WS-16

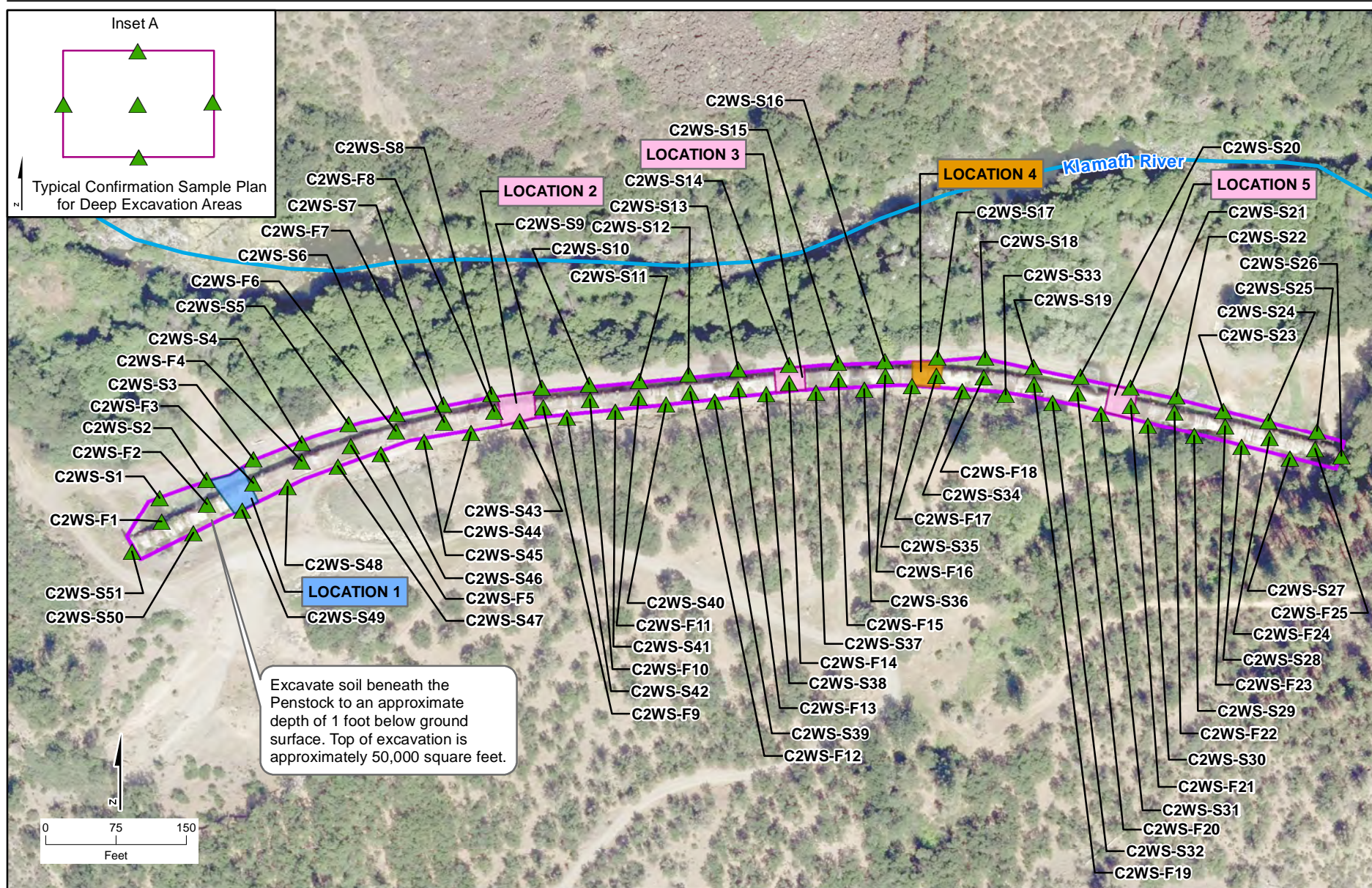
EPA = U.S. Environmental Protection Agency

ft bgs = feet below ground surface

PAH = polynuclear aromatic hydrocarbon

VOC = volatile organic compound

X = sample to be analyzed



LEGEND

- Klamath River
- ▲ Confirmation Soil Sample Location
- Excavation Area to 1 foot below ground surface (bgs)
- Attempt soil removal to 3 feet bgs over a 50- by 50-foot area centered on former soil borings C2WS-05, C2WS-06, and C2WS-16. See Inset A.
- Attempt soil removal to 4 feet bgs over a 50- by 50-foot area centered on former soil boring C2WS-15. See Inset A.
- Attempt soil removal to 4.5 feet bgs over a 50- by 50-foot area centered on former soil boring C2WS-13. See Inset A.

FIGURE 4-1
Copco No. 2 Wood-Stave Penstock Excavation Areas
Lower Klamath Hydroelectric Project

5. Copco No. 2 Wood Pile No. 2

This section summarizes the background and site-specific removal activities for the Copco No. 2 Wood Pile No. 2 (Wood Pile No. 2). Detailed descriptions of the site background and of the risk assessment results determined upon evaluation of the analytical results from the site assessment are respectively provided in the California SIWP and SI Report (Jacobs 2021a; Jacobs 2023b). Such information is incorporated into this California RAP by reference.

5.1 Background

The *Draft Phase I Environmental Site Assessment of the Parcel B Lands* (AECOM 2020a) identified three utility pole stockpiles approximately three-quarters of a mile northeast of the intersection of Copco Road and Daggett Road. The utility poles were stockpiled because they had been removed from service and have subsequently been removed from the site and disposed of in an appropriate manner by PacifiCorp.

Per the California SI Report, a data gap caused uncertainty in the HHRA because pentachlorophenol was not vertically or laterally delineated in soil beneath Wood Pile No. 2. Consequently, soil from beneath Wood Pile No. 2 was recommended for excavation and offsite disposal.

5.2 Site-Specific Removal Actions

The following site-specific removal actions will be performed at Wood Pile No. 2:

- Excavate an approximate 25- by 60-foot area to a depth of 6 feet bgs or refusal (Figure 5-1).
- Collect one confirmation soil sample along the eastern and western sidewalls and collect two confirmation soil samples along the northern and southern sidewalls.
- Collect two confirmation soil samples from the excavation floor.
- Collect three confirmation soil samples at each sidewall sample location. The sidewall soil samples will represent soil from ground surface to a depth of 2 feet bgs, from 2 to 4 feet bgs, and from 4 to 6 feet bgs (Table 5-1).
- Analyze the soil samples to confirm that pentachlorophenol is no longer present at concentrations greater than the associated cleanup goals (Table 2-1).
- Upon confirmation that impacted soil has been removed, backfill and restore the site per Section 3.1.21.

Table 5-1. Confirmation Sample and Analysis Plan for Soil at Copco No. 2 Wood Pile

Location Description	Confirmation Sample Location	Confirmation Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds as Pentachlorophenol (EPA Method SW8260B)	Semi-volatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (EPA Method SW8015M)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (EPA Method SW8015M)	Polynuclear Aromatic Hydrocarbons (EPA Method SW8270C-SIM)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 882A)	
Copco No. 2 Wood Pile	C2WP-S1	C2WP-S1-2.0-YYYYMMDD	0.0-2.0		X								
		C2WP-S1-4.0-YYYYMMDD	2.0-4.0		X								
		C2WP-S1-6.0-YYYYMMDD	4.0-6.0		X								
	C2WP-S2	C2WP-S2-2.0-YYYYMMDD	0.0-2.0		X								
		C2WP-S2-4.0-YYYYMMDD	2.0-4.0		X								
		C2WP-S2-6.0-YYYYMMDD	4.0-6.0		X								
	C2WP-S3	C2WP-S3-2.0-YYYYMMDD	0.0-2.0		X								
		C2WP-S3-4.0-YYYYMMDD	2.0-4.0		X								
		C2WP-S3-6.0-YYYYMMDD	4.0-6.0		X								
	C2WP-S4	C2WP-S4-2.0-YYYYMMDD	0.0-2.0		X								
		C2WP-S4-4.0-YYYYMMDD	2.0-4.0		X								
		C2WP-S4-6.0-YYYYMMDD	4.0-6.0		X								
	C2WP-S5	C2WP-S5-2.0-YYYYMMDD	0.0-2.0		X								
		C2WP-S5-4.0-YYYYMMDD	2.0-4.0		X								
		C2WP-S5-6.0-YYYYMMDD	4.0-6.0		X								
	C2WP-S6	C2WP-S6-2.0-YYYYMMDD	0.0-2.0		X								
		C2WP-S6-4.0-YYYYMMDD	2.0-4.0		X								
		C2WP-S6-6.0-YYYYMMDD	4.0-6.0		X								
	C2WP-F1	C2WP-F1-0.25-YYYYMMDD	0.0-0.25		X								
	C2WP-F2	C2WP-F2-0.25-YYYYMMDD	0.0-0.25		X								

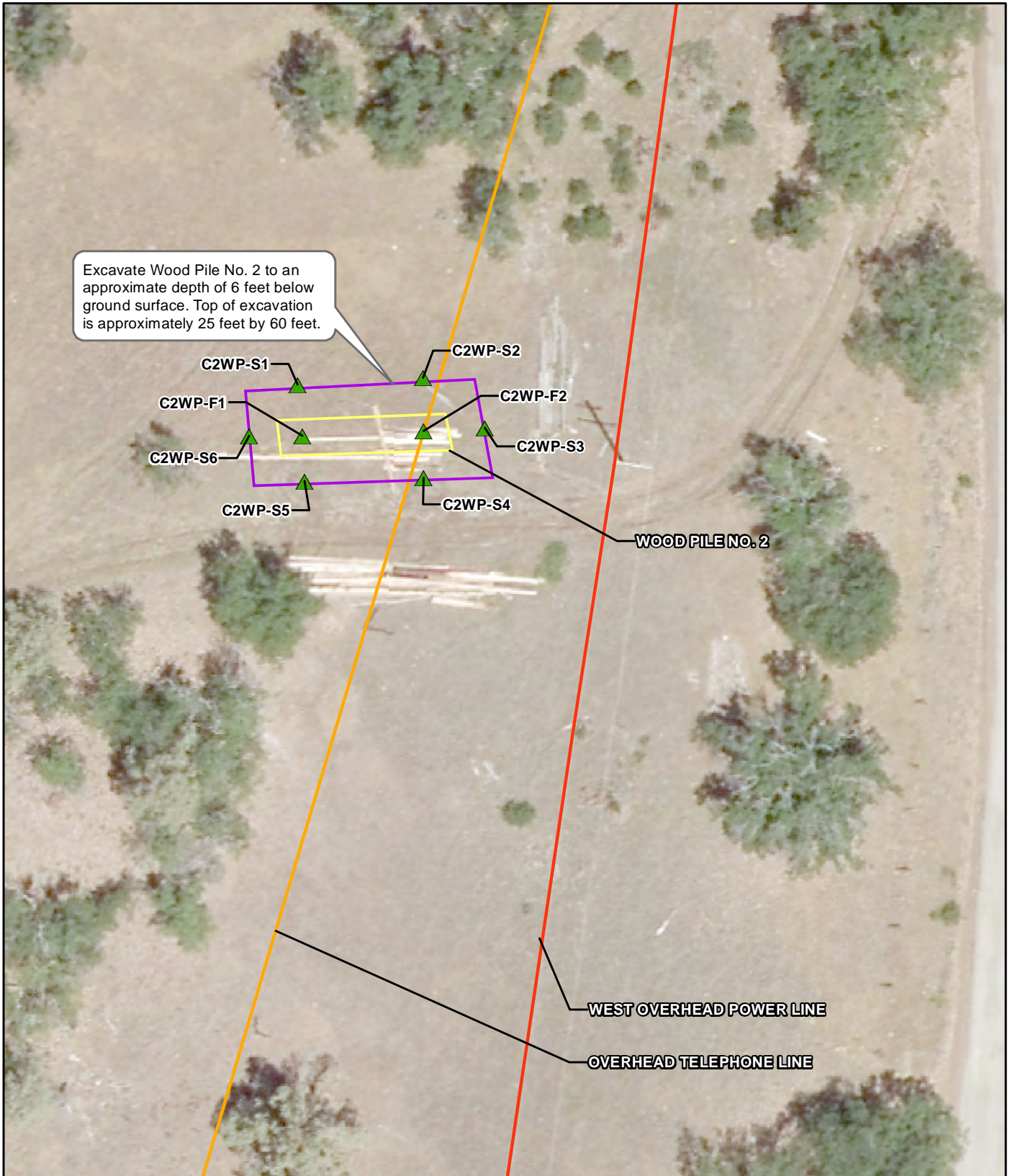
Notes:

EPA = U.S. Environmental Protection Agency

ft bgs = feet below ground surface

NA = not applicable

X = sample to be analyzed



Excavate Wood Pile No. 2 to an approximate depth of 6 feet below ground surface. Top of excavation is approximately 25 feet by 60 feet.

LEGEND

- Approximate Limits of Visually Impacted Area
- Excavation Area
- Overhead Power Line
- Overhead Telephone Line
- ▲ Confirmation Soil Sample Location

Note:
Overhead power and telephone lines are depicted on the ground to show the clearance of excavation equipment.

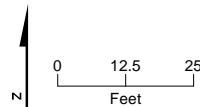


FIGURE 5-1
Copco No. 2 Wood Pile Excavation Area
Lower Klamath Hydroelectric Project

6. Copco No. 2 Powerhouse Transformer C Fire

This section summarizes the background and site-specific removal activities for the Copco No. 2 Powerhouse Transformer C Fire. Detailed descriptions of the site background and of the risk assessment results determined upon evaluation of analytical results from the site assessment are respectively provided in the California SIWP and SI Report (Jacobs 2021a; Jacobs 2023b). Such information is incorporated into this California RAP by reference.

6.1 Background

In May 2006, the aboveground Transformer C located in front of the south side of the Copco No. 2 Powerhouse caught fire, resulting in a release of approximately 715 gallons of transformer oil to the gravel catch basin and surrounding area. Soil in the immediate vicinity of the site was assessed in July 2006 (Parametrix 2006), and the soil sampling results were submitted to the Siskiyou County Department of Public Health by PacifiCorp (PacifiCorp 2006). The Siskiyou County Department of Public Health stated in a follow-up letter to PacifiCorp on September 21, 2006, that no further site investigation was required and that the Department concurred with PacifiCorp's plan to assess soil beneath the transformers when they were dismantled and to characterize the site soils for proper disposal (PacifiCorp 2006). Because there are no records confirming removal of total petroleum hydrocarbon (TPH)-impacted soil when the transformers were dismantled, PacifiCorp decided to collect soil samples as outlined in the California SIWP (Jacobs 2021a).

Per the California SI Report, diesel range organics (DRO) were identified as present in concentrations above acceptable risk levels for human health and leaching to groundwater. Also identified in concentrations above acceptable human health risk levels were various PAHs (i.e., benzo(a)pyrene and dibenzo(a,h)anthracene) and polychlorinated biphenyls (PCBs) (i.e., Aroclor 1262) in soil near the southeast corner of the Powerhouse (Figure 6-1). Consequently, soil removal with offsite disposal was recommended for this area.

6.2 Site-Specific Removal Actions

The following site-specific removal actions will be performed at the Copco No. 2 Transformer C Fire site after the Copco No. 2 Powerhouse utilities have been de-energized:

- Excavate an approximate 10- by 20-foot area to a depth of 2 feet bgs or refusal (Figure 6-1).
- Collect one confirmation soil sample along each sidewall and collect one confirmation soil sample from the excavation floor. The sidewall soil samples will represent soil from ground surface to a depth of 2 feet bgs (Table 6-1).
- Analyze the soil samples to confirm that DRO, Aroclor 1262, and benzo(a)pyrene and dibenzo(a,h)anthracene are no longer present at concentrations greater than the associated cleanup goals (Table 2-1).
- Upon confirmation that impacted soil has been removed, backfill and restore the site per Section 3.1.21.

Table 6-1. Confirmation Sample and Analysis Plan for Soil at Copco No. 2 Transformer C Fire

Location Description	Confirmation Sample Location	Confirmation Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds (EPA Method SW8260B)	Semivolatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (EPA Method SW8015M)	Total Petroleum Hydrocarbons as Diesel (EPA Method SW8015M)	Polynuclear Aromatic Hydrocarbons ^a (EPA Method SW8270C-SIM)	Polychlorinated Biphenyls (PCBs) as Aroclor 1262 (EPA Method SW846 882A)
Copco No. 2 Transformer Fire	C2TF-S1	C2TF-S1-2.0-YYYYMMDD	0.0-2.0							X	X	X
	C2TF-S2	C2TF-S2-2.0-YYYYMMDD	0.0-2.0							X	X	X
	C2TF-S3	C2TF-S3-2.0-YYYYMMDD	0.0-2.0							X	X	X
	C2TF-S4	C2TF-S4-2.0-YYYYMMDD	0.0-2.0							X	X	X
	C2TF-F1	C2TF-F1-0.25-YYYYMMDD	0.0-0.25							X	X	X

Notes:

^a PAH reporting will be limited to benzo(a)pyrene and dibenzo(a,h)anthracene.

EPA = U.S. Environmental Protection Agency






ft bgs = feet below ground surface

PAH = polynuclear aromatic hydrocarbon

X = sample to be analyzed



LEGEND

-  Former Transformer
-  Excavation Area
-  Powerhouse
-  Confirmation Soil Sample Location
-  Klamath River

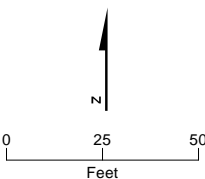


FIGURE 6-1
Copco No. 2 Powerhouse Transformer Fire Excavation Area
 Lower Klamath Hydroelectric Project

7. Copco No. 2 Burn Pit

This section summarizes the background and site-specific removal activities for the Copco No. 2 Burn Pit. Detailed descriptions of the site background and of the risk assessment results determined after evaluation of the analytical results from the site assessment are respectively provided in the California SIWP and SI Report (Jacobs 2021a; Jacobs 2023b). Such information is incorporated into this California RAP by reference.

7.1 Background

The *Draft Phase I Environmental Site Assessment of the Parcel B Lands* (AECOM 2020a) identified an approximate 10- by 10-foot burn pit south of the Copco No. 2 Powerhouse and up the hill from Copco 2 Village. Wood pallets, tree branches and limbs, and other debris were observed to be piled on the burn pit. A pile of soil was located on the northwest edge of the burn pit. Additional site features included a backhoe and an area of concrete rubble.

Per the California SI Report, concentrations of DRO in surface soil, where a backhoe had been parked, exceeded acceptable human health risk levels. Concentrations of some PAHs in surface soil within the concrete rubble area also exceeded acceptable human health risk levels. The lateral extent of PAHs also was not delineated within the concrete rubble area. At the burn pit, concentrations of a dioxin (i.e., 2,3,7,8-Tetrachlorodibenzo-P-dioxin [2,3,7,8-TCDD]) toxic equivalent (TEQ) exceeded risk-based criteria for human health and ecological receptors, and the vertical extent of 2,3,7,8-TCDD TEQ was not delineated. Concentrations of naphthalene at the burn pit exceeded acceptable soil leaching criteria, and the vertical extent of naphthalene was not delineated. Consequently, soil removal with offsite disposal was recommended for these areas.

7.2 Site-Specific Removal Actions

The following site-specific removal actions will be performed at the Copco No. 2 burn pit:

- At the backhoe parking location, excavate an approximate 20- by 32-foot area to a depth of 1 foot bgs or refusal (Figure 7-1). Collect one confirmation soil sample along each sidewall and collect one confirmation soil sample from the excavation floor (Table 7-1). The sidewall soil samples will represent soil from ground surface to a depth of 1 foot bgs. Analyze the soil samples to confirm that DRO concentrations are less than the cleanup goal of 960 milligrams per kilogram (mg/kg).
- At the concrete rubble area, excavate an approximate 12- by 13-foot area to a depth of 1 foot bgs or refusal (Figure 7-1). Collect one confirmation soil sample along each sidewall and collect one confirmation soil sample from the excavation floor (Table 7-1). The sidewall soil samples will represent soil from ground surface to a depth of 1 foot bgs. Analyze the soil samples for PAHs to confirm that benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene concentrations are less than the associated cleanup goals (Table 2-1).
- At the burn pit, excavate an approximate 38- by 40-foot area to a depth of 4 feet bgs or refusal (Figure 7-1). Collect confirmation soil samples from one location along the northwestern and southeastern sidewalls, from two locations along the northeastern and southwestern sidewalls, and from two locations on the excavation floor (Table 7-1). The sidewall soil samples will represent soil from ground surface to a depth of 2 feet bgs and from a depth of 2 to 4 feet bgs. Analyze the soil samples for dioxins and PAHs to confirm that 2,3,7,8-TCDD TEQ and naphthalene concentrations are less than the associated cleanup goals (Table 2-1).
- Upon confirmation that impacted soil has been removed, backfill and restore the site per Section 3.1.21.

Table 7-1. Confirmation Sample and Analysis Plan for Soil at Copco No. 2 Burn Pit

Location Description	Confirmation Sample Location	Confirmation Sample ID	Depth (ft bgs)	Title 22 metals total (EPA Method 6010B), Mercury by (SW7471A)	Volatile Organic Compounds (EPA Method SW8260B)	Semivolatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (EPA Method SW8015M)	Total Petroleum Hydrocarbons as Diesel (EPA Method SW8015M)	Polynuclear Aromatic Hydrocarbons ^{a,b} (EPA Method SW8270C-SIM)	Polychlorinated Biphenyls (PCBs) as Aroclor 1262 (EPA Method SW846 882A)
Copco No. 2 Burn Pit - Backhoe Parking Location	C2BP-S1	C2BP-S1-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-S2	C2BP-S2-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-S3	C2BP-S3-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-S4	C2BP-S4-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-S5	C2BP-S5-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-S6	C2BP-S6-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-S7	C2BP-S7-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-S8	C2BP-S8-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-F1	C2BP-F1-0.25-YYYYMMDD	0.0-0.25							X		
C2BP-F2	C2BP-F2-0.25-YYYYMMDD	0.0-0.25							X			
Copco No. 2 Burn Pit - Burn Pit Area	C2BP-S9	C2BP-S9-2.0-YYYYMMDD	0.0-2.0								X	X
		C2BP-S9-4.0-YYYYMMDD	2.0-4.0								X	X
	C2BP-S10	C2BP-S10-2.0-YYYYMMDD	0.0-2.0								X	X
		C2BP-S10-4.0-YYYYMMDD	2.0-4.0								X	X
	C2BP-S11	C2BP-S11-2.0-YYYYMMDD	0.0-2.0								X	X
		C2BP-S11-4.0-YYYYMMDD	2.0-4.0								X	X
	C2BP-S12	C2BP-S12-2.0-YYYYMMDD	0.0-2.0								X	X
		C2BP-S12-4.0-YYYYMMDD	2.0-4.0								X	X
	C2BP-S13	C2BP-S13-2.0-YYYYMMDD	0.0-2.0								X	X
		C2BP-S13-4.0-YYYYMMDD	2.0-4.0								X	X
	C2BP-S14	C2BP-S14-2.0-YYYYMMDD	0.0-2.0								X	X
		C2BP-S14-4.0-YYYYMMDD	2.0-4.0								X	X
	C2BP-S15	C2BP-S15-2.0-YYYYMMDD	0.0-2.0								X	X
		C2BP-S15-4.0-YYYYMMDD	2.0-4.0								X	X
	C2BP-S16	C2BP-S16-2.0-YYYYMMDD	0.0-2.0								X	X
C2BP-S16-4.0-YYYYMMDD		2.0-4.0								X	X	
C2BP-F3	C2BP-F3-0.25-YYYYMMDD	0.0-0.25								X	X	
C2BP-F4	C2BP-F4-0.25-YYYYMMDD	0.0-0.25								X	X	
Copco No. 2 Burn Pit - Concrete Rubble Area	C2BP-S17	C2BP-S17-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-S18	C2BP-S18-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-S19	C2BP-S19-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-S20	C2BP-S20-1.0-YYYYMMDD	0.0-1.0							X		
	C2BP-F5	C2BP-F5-0.25-YYYYMMDD	0.0-0.25							X		

Notes:

^a For the Burn Pit Area, PAH reporting will be limited to analysis for naphthalene.

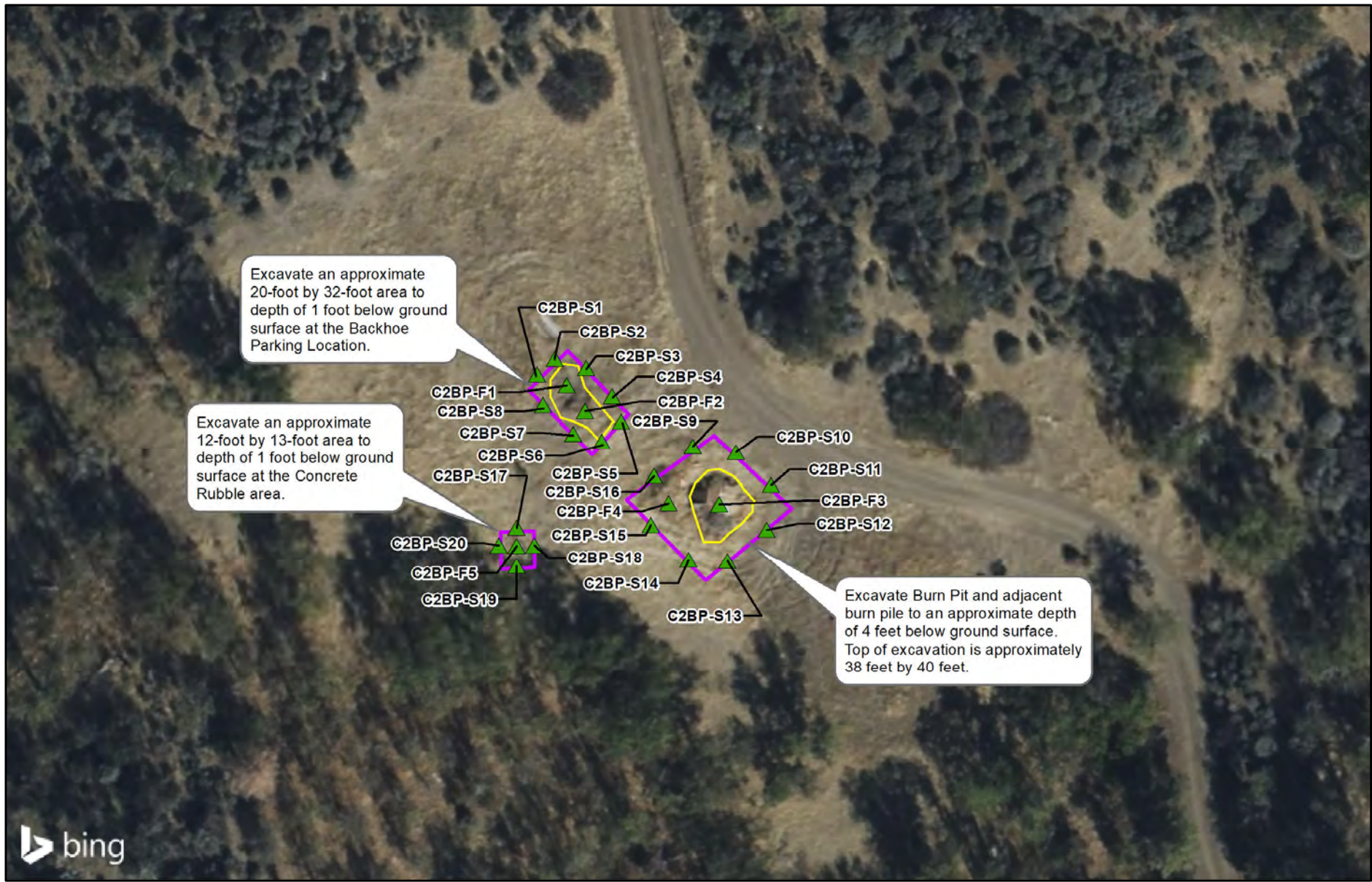
^b For the Concrete Rubble Area, PAH reporting will be limited to analysis for benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

EPA = U.S. Environmental Protection Agency

ft bgs = feet below ground surface

PAH = polynuclear aromatic hydrocarbon

X = sample to be analyzed



LEGEND

- Approximate Limits of Visually Impacted Area
- Excavation Area
- ▲ Confirmation Soil Sample Location

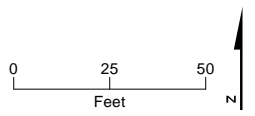


FIGURE 7-1
Copco No. 2 Burn Pit Excavation Areas
Lower Klamath Hydroelectric Project

8. Iron Gate Shooting Range

This section summarizes the background and site-specific removal activities for the Iron Gate Shooting Range. Detailed descriptions of the site background and of the risk assessment results determined upon evaluation of the analytical results from the site assessment are respectively provided in the California SIWP and SI Report (Jacobs 2021a; Jacobs 2023b). Such information is incorporated into this California RAP by reference.

8.1 Background

An informal shooting range is located approximately 2,000 feet east of the Iron Gate Dam. Lead concentrations in soil were found to exceed human health criteria at soil borings IGSR-03, IGSR-19, and IGSR-21 and were also found to exceed ecological risk criteria at these borings and at boring IGSR-02. This shooting range is used occasionally by the general public and is not subject to daily use by multiple shooters. The shooting range will be closed when the Iron Gate Dam is demolished. The results and conclusions of this sampling event are likely indicative of site conditions after the shooting range is closed.

8.2 Site-Specific Removal Actions

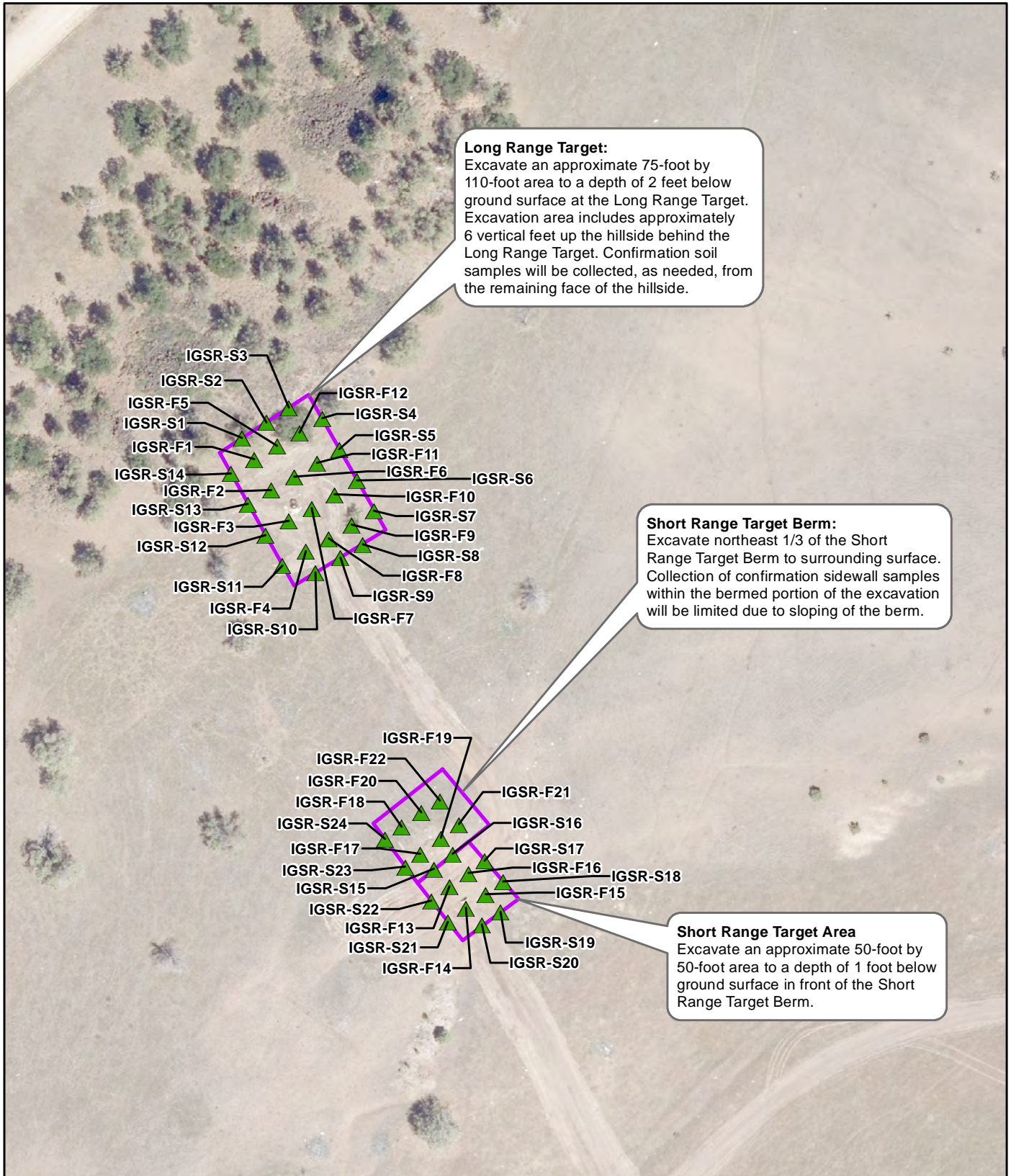
The following site-specific removal actions will be performed at the Iron Gate Shooting Range:

- Excavate to a depth of 2 feet bgs or refusal in a 75- by 110-foot area at the long-range target and 6 vertical feet up the hillside behind the target (Figure 8-1).
- Excavate the northeast one-third of the berm at the short-range target to match the surrounding ground surface (Figure 8-1).
- Excavate to a depth of 1 foot bgs or refusal in a 50- by 50-foot area in front of the short-range target berm (Figure 8-1).
- Stockpile the excavated soil and sample it for lead to confirm that lead concentrations are nonhazardous. Once the analysis is complete, dispose of the soil at the appropriate disposal facility.
- Collect 24 confirmation samples along excavation sidewalls and 22 confirmation samples from the excavation floor to verify lead concentrations in remaining soil are less than 34 mg/kg (Table 8-1).
- Upon confirmation that impacted soil has been removed, grade out and seed the remaining berm and adjacent areas to stabilize the areas in anticipation of KRRC's placement of the Iron Gate Dam spoils in this area.

Table 8-1. Confirmation Sample and Analysis Plan for Soil at Iron Gate Shooting Range

Location Description	Confirmation Sample Location	Confirmation Sample ID	Depth (ft bgs)	Title 22 Metals Total (EPA Method 6010B), Mercury by (SW7471A) ^a	Volatile Organic Compounds (EPA Method SW8260B)	Semivolatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (EPA Method SW8015M)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (EPA Method SW8015M)	Polynuclear Aromatic Hydrocarbons (EPA Method SW8270C-SIM)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 882A)	STLC ^b (when TLC results are 10x STLC limit)	TCLP ^b (when TLC results are 20x TCLP limit)	Ignitability (EPA Method 1030), Reactivity (SW 846 CH7), Corrosivity (SW-846 9045)
Iron Gate Shooting Range	IGSR-S1	IGSR-S1-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S2	IGSR-S2-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S3	IGSR-S3-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S4	IGSR-S4-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S5	IGSR-S5-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S6	IGSR-S6-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S7	IGSR-S7-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S8	IGSR-S8-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S9	IGSR-S9-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S10	IGSR-S10-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S11	IGSR-S11-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S12	IGSR-S12-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S13	IGSR-S13-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S14	IGSR-S14-2.0-YYYYMMDD	0.0-2.0	X									X	X	
	IGSR-S15	IGSR-S15-1.0-YYYYMMDD	0.0-1.0	X									X	X	
	IGSR-S16	IGSR-S16-1.0-YYYYMMDD	0.0-1.0	X									X	X	
	IGSR-S17	IGSR-S17-1.0-YYYYMMDD	0.0-1.0	X									X	X	
	IGSR-S18	IGSR-S18-1.0-YYYYMMDD	0.0-1.0	X									X	X	
	IGSR-S19	IGSR-S19-1.0-YYYYMMDD	0.0-1.0	X									X	X	
	IGSR-S20	IGSR-S20-1.0-YYYYMMDD	0.0-1.0	X									X	X	
	IGSR-S21	IGSR-S21-1.0-YYYYMMDD	0.0-1.0	X									X	X	
	IGSR-S22	IGSR-S22-1.0-YYYYMMDD	0.0-1.0	X									X	X	
	IGSR-S23	IGSR-S23-1.0-YYYYMMDD	0.0-1.0	X									X	X	
	IGSR-S24	IGSR-S24-1.0-YYYYMMDD	0.0-1.0	X									X	X	
Iron Gate Shooting Range	IGSR-F1	IGSR-F1-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F2	IGSR-F2-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F3	IGSR-F3-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F4	IGSR-F4-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F5	IGSR-F5-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F6	IGSR-F6-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F7	IGSR-F7-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F8	IGSR-F8-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F9	IGSR-F9-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F10	IGSR-F10-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F11	IGSR-F11-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F12	IGSR-F12-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F13	IGSR-F13-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F14	IGSR-F14-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F15	IGSR-F15-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F16	IGSR-F16-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F17	IGSR-F13-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F18	IGSR-F14-0.5-YYYYMMDD	0.0-0.5	X									X	X	
	IGSR-F19	IGSR-F15-0.5-YYYYMMDD	0.0-0.5	X									X	X	
IGSR-F20	IGSR-F16-0.5-YYYYMMDD	0.0-0.5	X									X	X		
IGSR-F21	IGSR-F21-0.5-YYYYMMDD	0.0-0.5	X									X	X		
IGSR-F22	IGSR-F22-0.5-YYYYMMDD	0.0-0.5	X									X	X		

Notes:
^a Title 22 metals reporting will be limited to analysis for lead.
^b Hold extractions pending total results (TTLIC).
 EPA = U.S. Environmental Protection Agency
 ft bgs = feet below ground surface
 NA = not applicable
 STLC = soluble threshold limit concentration
 TCLP = toxicity characteristic leaching procedure
 TTLIC = total threshold limit concentration
 X = sample to be analyzed



Long Range Target:
 Excavate an approximate 75-foot by 110-foot area to a depth of 2 feet below ground surface at the Long Range Target. Excavation area includes approximately 6 vertical feet up the hillside behind the Long Range Target. Confirmation soil samples will be collected, as needed, from the remaining face of the hillside.

Short Range Target Berm:
 Excavate northeast 1/3 of the Short Range Target Berm to surrounding surface. Collection of confirmation sidewall samples within the bermed portion of the excavation will be limited due to sloping of the berm.

Short Range Target Area
 Excavate an approximate 50-foot by 50-foot area to a depth of 1 foot below ground surface in front of the Short Range Target Berm.

LEGEND

- Excavation Area
- ▲ Confirmation Soil Sample Location

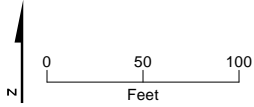


FIGURE 8-1
Iron Gate Shooting Range Excavation Areas
Lower Klamath Hydroelectric Project

9. Iron Gate Hatchery Burn Pit

This section summarizes the background and site-specific removal activities for the Iron Gate Hatchery Burn Pit. Detailed descriptions of the site background and of the risk assessment results determined upon evaluation of the analytical results from the site assessment are respectively provided in the California SIWP and SI Report (Jacobs 2021a; Jacobs 2023b). Such information is incorporated into this California RAP by reference.

9.1 Background

An approximate 20- by 20-foot burn pit is located approximately 100 feet south of Bogus Creek and approximately 400 feet east of the Iron Gate Hatchery settling ponds. In February 2018, a soil investigation was conducted to assess the presence of potential contaminants that may have been introduced from the burning of wood pallets and other wastes at the site (AECOM 2019). Three soil borings were advanced to a depth of 1.5 feet bgs within the burn pit, and two soil samples were collected from each boring. The soil samples were analyzed for CAM 17 metals, mercury, total petroleum hydrocarbons, diesel-range organics (TPH-d), total petroleum hydrocarbons, gasoline-range organics (TPH-g), total petroleum hydrocarbons, motor oil (TPH-mo), VOCs, SVOCs, and PCBs. Concentrations of metals were determined to be less than background concentrations for the Cascade Range (ODEQ 2013); VOCs, SVOCs, and PCBs were not detected. TPH-d, TPH-g, and TPH-mo were detected at concentrations that were less than the San Francisco Regional Water Quality Control Board (2019) environmental screening levels. Because dioxins and furans were not analyzed under the Phase II performed by AECOM (2019) and because the burn pit may have been utilized after the Phase II was performed, additional sampling was recommended in the California SIWP.

Per the California SI Report, arsenic is present in site soil at concentrations that exceed acceptable human health risk levels from surface grade to a depth of 0.5 foot bgs in the burn pit and in the berm pushed up at the back of the burn pit. Consequently, soil removal with offsite disposal was recommended for the burn pit and surrounding berm.

9.2 Site-Specific Removal Actions

The following site-specific removal actions will be performed at the Iron Gate Hatchery Burn Pit:

- Excavate an approximate 33- by 35-foot area to a depth of 0.5 foot bgs or refusal (Figure 9-1).
- Collect confirmation soil samples from one location along each sidewall and collect one confirmation soil sample from the excavation floor (Table 9-1). The sidewall soil sample locations will represent soil from ground surface to a depth of 0.5 foot bgs.
- Analyze the soil samples for arsenic to verify that arsenic concentrations in remaining soil are less than 19 mg/kg (Table 2-1).
- Upon confirmation that impacted soil has been removed, backfill and restore the site per Section 3.1.21.

Table 9-1. Confirmation Sample and Analysis Plan for Soil at Iron Gate Hatchery Burn Pit

Location Description	Confirmation Sample Location	Confirmation Sample ID	Depth (ft bgs)	Arsenic (EPA Method 6010B)	Volatile Organic Compounds (EPA Method SW8260B)	Semivolatile Organic Compounds (EPA Method SW8270C)	Dioxins and Furans (EPA Method SW846 8290A)	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) (EPA Method SW8260B)	Total Petroleum Hydrocarbons as Gasoline (EPA Method SW8015M)	Total Petroleum Hydrocarbons as Diesel and Motor Oil (EPA Method SW8015M)	Polynuclear Aromatic Hydrocarbons (EPA Method SW8270C-SIM)	Polychlorinated Biphenyls (PCBs) (EPA Method SW846 882A)
Iron Gate Hatchery Burn Pit	IGBP-S1	IGBP-S1-0.5-YYYYMMDD	0.0-0.5	X								
	IGBP-S2	IGBP-S2-0.5-YYYYMMDD	0.0-0.5	X								
	IGBP-S3	IGBP-S3-0.5-YYYYMMDD	0.0-0.5	X								
	IGBP-S4	IGBP-S4-0.5-YYYYMMDD	0.0-0.5	X								
	IGBP-F1	IGBP-F1-0.25-YYYYMMDD	0.0-0.25	X								

Notes:

EPA = U.S. Environmental Protection Agency

ft bgs = feet below ground surface

X = sample to be analyzed



LEGEND

- Approximate Limits of Visually Impacted Area
- Excavation Area
- ▲ Confirmation Soil Sample Location
- Bogus Creek

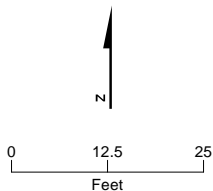


FIGURE 9-1
Iron Gate Hatchery Burn Pit Excavation Area
Lower Klamath Hydroelectric Project

10. References

AECOM Technical Services, Inc. (AECOM). 2019. *Burn Pit at Iron Gate Hatchery Phase II Soil Investigation*. Prepared for Klamath River Renewal Corporation. September.

AECOM Technical Services, Inc. (AECOM). 2020a. *Draft Phase I Environmental Site Assessment of the Parcel B Lands*. Prepared for Klamath River Renewal Corporation. March.

AECOM Technical Services, Inc. (AECOM). 2020b. *Draft Wood-Stave Penstock and Soil Investigation*. Prepared for Klamath River Renewal Corporation. January.

AECOM Technical Services, Inc. (AECOM). 2022a. Memorandum: *Cultural Resources Review for Environmental Clean-up Sites on PacifiCorp Parcel B Lands: Mobilization 1*. Prepared for Pacific Power – Hydro Resources. February 16.

AECOM Technical Services, Inc. (AECOM). 2022b. Memorandum: *Cultural Resources Review for Environmental Clean-up Sites on PacifiCorp Parcel B Lands: Mobilization 2*. Prepared for Pacific Power – Hydro Resources. March 1.

Department of Toxic Substances Control (DTSC). 1996. *Guidance for Ecological Risk Assessment at Hazardous Waste Sites and Permitted Facilities*. California Environmental Protection Agency. July 4.

Department of Toxic Substances Control (DTSC). 2017. *Human Health Risk Assessment Note Number 2 – Soil Remedial Goals for Dioxins and Dioxin-like Compounds for Consideration at California Hazardous Waste Sites*. California Environmental Protection Agency. April.

Department of Toxic Substances Control (DTSC). 2019. *Human Health Risk Assessment Note 1 – Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Hazardous Waste Sites and Permitted Facilities*. California Environmental Protection Agency. April 9.

Department of Toxic Substances Control (DTSC). 2022a. *Human Health Risk Assessment Note 3 – DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities*. California Environmental Protection Agency. May.

Department of Toxic Substances Control (DTSC). 2022b. *Human Health Risk Assessment Note 4 – Guidance for Screening Level Human Health Risk Assessments*. California Environmental Protection Agency. March 29.

Jacobs Engineering Group Inc. (Jacobs). 2021a. *California Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Jacobs Engineering Group Inc. (Jacobs). 2021b. *Oregon Site Investigation Work Plan*. Prepared for PacifiCorp. November.

Jacobs Engineering Group Inc. (Jacobs). 2023a. *California Site Investigation Work Plan Supplement No. 1*. Prepared for PacifiCorp. January.

Jacobs Engineering Group Inc. (Jacobs). 2023b. *California Site Investigation Report*. Prepared for PacifiCorp. March.

California Site Investigation Report

Jacobs Engineering Group Inc. (Jacobs). 2023c. *Oregon Site Investigation Report*. Prepared for PacifiCorp. March.

Jacobs Engineering Group Inc. (Jacobs). 2023d. *Soil Removal Action Plan for Oregon*. Prepared for PacifiCorp. June.

Lowy, Lloyd, Klamath River Renewal Corporation. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.

Matthews, Chris, Oregon Department of Justice. 2021. Personal communication (email) with Demian Ebert, PacifiCorp. November 5.

Oregon Department of Environmental Quality (ODEQ). 2013. *Development of Oregon Background Metals Concentrations in Soil*. Technical Report. March. Accessed June 2021.
<https://www.oregon.gov/deq/FilterDocs/DebORbackgroundMetal.pdf>.

PacifiCorp. 2006. *Copco No. 2 Powerhouse Phase II Environmental Site Assessment*. Letter to Siskiyou County Health Department. September 8.

Parametrix. 2006. *Technical Memorandum: Summary of Findings for Phase II ESA, Copco No. 2 Powerhouse*. August 29.

San Francisco Regional Water Quality Control Board. 2019. *Environmental Screening Levels*. Interim Final. January.

U.S. Environmental Protection Agency (EPA). 1989. *Risk Assessment Guidance for Superfund: Volume I, Human Health Evaluation Manual (Part A)*. EPA Office of Emergency and Remedial Response. Interim Final. EPA/540/1-89/002.

U.S. Environmental Protection Agency (EPA). 1997. *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final*.

U.S. Environmental Protection Agency (EPA). 1998. *Final Guidelines for Ecological Risk Assessment*. Risk Assessment Forum, EPA, Washington D.C. EPA/630/R-95/002F. April.

U.S. Environmental Protection Agency (EPA). 2001. *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments*. Office of Solid Waste and Emergency Response – EcoUpdate. EPA 540/ F-01/014. June.

Appendix
Consolidated Comment Matrix

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>California Department of Fish and Wildlife - Office of Spill Prevention and Response/California Department of Water Resources (Comments on the Soil Removal Action Plan for California)</i>					
CA-1	KT	General Comment		<p>The California RAP states that soil cleanup goals are risk-based concentrations that are protective of human health and leaching to groundwater. It is unknown if dilution factors for transport between groundwater and surface water were considered in the risk analysis. CDFW-OSPR reiterates that if sufficient validation is not available for a specific dilution factor, please make the conservative assumption that there is no dilution of contaminants between ground and surface waters. If groundwater at Copco No. 2 Wood-Stave Penstock and Wood Pile (Parcel B REC 7) is hydraulically connected to the water of Klamath River, PacifiCorp/Jacobs must ensure contaminants do not enter State waters at levels deleterious to fish, mammals, plant life or bird life (Fish and Game Code section 5650).</p>	<p>PacifiCorp did not apply a groundwater dilution factor to surface water. The San Francisco Regional Water Quality Control Board (SFRWQCB) environmental screening levels (ESLs) used in this investigation pertaining to soil leaching (SFRWQCB 2019) are protective of freshwater habitat. As stated in Section 3.2 of the California Site Investigation Report: "Soil leaching values for protection of freshwater habitat were evaluated for COPCs at each site." The freshwater aquatic habitat screening levels and sources are listed in Table GW-2 of the 2019 ESL Workbook (SFRWQCB 2019). The most conservative freshwater habitat screening level for groundwater/surface water is used to determine the soil leaching values as presented in Table S-3 of the 2019 ESL Workbook (SFRWQCB 2019). Therefore, contaminants that enter State waters at concentrations less than the screening levels for soil leaching are protective of freshwater habitat, including fish, mammals, plant life, and bird life.</p> <p>Termination of water flow within the penstock has eliminated the water source and disconnected any hydraulic connection between the water accumulated water beneath the penstock and the Klamath River. PacifiCorp expects the soil removal action to demonstrate that: (1) soil beneath the penstock has dried out, thereby removing a hydraulic connection; and (2) site-specific constituents of concern (COCs) with concentrations greater than acceptable soil leaching screening levels have been removed (to be demonstrated based on the analytical results of excavation floor and sidewall confirmation samples).</p> <p>Groundwater was not encountered during sampling and the depth to groundwater is not known at the Wood Pile (Parcel B REC 7). The soil removal action is expected to demonstrate that site-specific COCs with concentrations greater than acceptable soil leaching screening levels have been removed (to be demonstrated based on the analytical results of excavation floor and sidewall confirmation samples).</p> <p>No changes necessary.</p>
CA-2	KT	Soil Removal Action Plan for California	Page 3-1, Section 3, Implementation Plan	<p>The California RAP should include the following plans:</p> <ul style="list-style-type: none"> - Contingency Plan - Site Coordination Plan <p>Please add the above plans into the California RAP and change "Spill Response Plan" to "Spill Prevention and Response Plan."</p>	<p>Section 3.1.18, Contingency Planning has been added.</p> <p>Section 3.1.19, Site Coordination Plan has been added.</p> <p>Section 3.1.12, Spill Response Plan has been changed to "Spill Prevention and Response Plan."</p> <p>The same edits have been made to the Oregon Soil Removal Action Plan.</p>
CA-3	KT	Soil Removal Action Plan for California	Page 3-1, Section 3.1.4, Mobilization and Site Preparation	<p>CDFW requests that a biological monitor be on site during mobilization and throughout all field activities to ensure that wildlife are not impacted by site activities, and that any impacts to special status species are minimized. Please also include the following biological avoidance, minimization, and mitigation measures to be implemented for the protection of special status species that may be present on or near the site during field activities.</p> <ul style="list-style-type: none"> i. CDFW would typically require pre-construction biological surveys by a qualified biologist approved by CDFW, however CDFW assumes that much of KRRC's pre-construction clearance work would overlap with the clean- 	<p>PacifiCorp has added Section 3.1.4, Biological Resources, which reads as follows:</p> <p>"The following biological avoidance, minimization, and mitigation measures will be implemented for the protection of special-status species that may be present on or near the site during field activities:</p> <ul style="list-style-type: none"> ▪ A preconstruction biological assessment will be completed by a qualified biologist to review potential effects on biological resources before removing debris and implementing the soil removal actions at each site. This will include all removal areas, staging and laydown areas, and undeveloped access routes.

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
				<p>up activities. To confirm CDFW's assumption, please identify where all project activities will occur (e.g., access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas). If project activity will occur in an area outside of KRRC's pre-construction clearance work then a survey should be performed.</p> <p>ii. A qualified biologist shall conduct a Biological Resource Education Program briefing to all contractor and subcontractor personnel prior to any site entry. To be considered as qualified, the biologist will be experienced with and knowledgeable about the special status species and habitats present or potentially present on or adjacent to the site. The qualified biologist shall train all personnel on the location of sensitive habitat, identification of all special status species, instructions of procedure when encountering one, and general environmental laws. New employees will attend a briefing by the qualified biologist prior to participating in work activities.</p> <p>iii. If remedial activities occur during the nesting season (February 1 - September 15), a focused survey for nesting birds shall be conducted by a qualified biologist for all access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas 1 to 2 weeks prior to commencement of any project activities or a return to work activities. The qualified biologist must survey the work area and all natural habitats occurring within 500 feet of the work area, to identify active nests. The qualified biologist shall look for new nests at least twice per week during remedial activities that occur during nesting season.</p> <p>iv. If nesting birds are found during surveys, CDFW shall be notified, the locations shall be identified on a map, and no project activity shall occur within 250 feet for raptors and 100 feet for other non-listed birds of an identified active nest until the young have fledged (as determined by a qualified biologist) or until the project proponent receives authorization from CDFW to proceed. If a qualified biologist and CDFW determine the project activity would not be likely to adversely affect the nest, CDFW may authorize the project proponent to proceed. The qualified biologist shall remain on site to monitor the activity of the nesting birds during work activities. If the birds behave normally, the qualified biologist shall monitor them twice per week to ensure the status has not changed. If the birds change their behavior as a result of work activities, the qualified biologist shall continue to monitor the birds as work is modified until the birds act normally. The qualified biologist shall then monitor the birds twice per week to ensure the status has not changed. Through consultation with CDFW, measures will be developed to minimize impacts to nesting birds. Vegetation containing nests that must be removed as a result of project implementation shall be removed during the non-nesting season (September 16 – January 31).</p>	<p>Response to Comment</p> <ul style="list-style-type: none"> ▪ All field team members, including the removal contractor and lower-tier subcontractors, will complete the online KRRC Biological Resource Training program as part of premobilization activities. ▪ A preconstruction nesting survey will be completed by a qualified biologist for sites with remedial activities planned to occur during the nesting season (February 1 – August 31). If nesting birds are found during surveys, the California Department of Fish and Wildlife (CDFW) will be notified, and no Project activity will occur within 250 feet for raptors and 100 feet for other nonlisted birds until a site-specific mitigation and monitoring plan has been developed (including reporting requirements) and agreed upon with CDFW." <p>Note that PacifiCorp adjusted the end date from September 15 as suggested in the comment to August 31 so that the ending of the nesting bird period is consistent between the OR and CA RAPs and the dates in the RAPs are now consistent with the KRRC's approvals and permits.</p> <p>The following bullet was added to Section 3.1.14, Decontamination Procedures:</p> <ul style="list-style-type: none"> ▪ The equipment decontamination area will be located in the designated upland staging area away from drainages. <p>Section 3.1.2, Traffic Control, now reads as follows:</p> <p>"As necessary, traffic management will be implemented to manage the safe entry and exit of vehicles from the site. Equipment and personnel will be confined to the designated access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas. Upland routes covered with pavement, bare ground, or non-native vegetation will be utilized as access routes to and from the excavation sites to the maximum extent practicable."</p> <p>Similar edits have been made to the Oregon Soil Removal Action Plan.</p>

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
				<p>v. Equipment and personnel shall be confined to the designated access routes, staging and storage areas, stockpile areas, decontamination areas, and work areas.</p> <p>vi. The equipment decontamination area shall be located in the designated upland staging area away from drainages.</p> <p>vii. Upland routes covered with pavement, bare ground, or non-native vegetation shall be utilized as access routes to and from the excavation sites, to the maximum extent practicable.</p> <p>The qualified biologist shall complete a monitoring report for each day of monitoring, to include at a minimum: the date, location, weather, biologist's name, remedial activities occurring, special status species observed, species behavior in relation to remedial activities, and any corrective measures taken to protect the species. The biological monitoring reports should be submitted to CDFW for the duration of the remedial activities.</p>	
CA-4	KT	Soil Removal Action Plan for California	Page 3-5, Section 3.1.16, Confirmation Soil Sampling	<p>Please add statements or paragraphs in the section as follows:</p> <p>i. If the data fall outside the limit of specified accuracy, precision, and recovery, or have problems that affect comparability, the laboratory leader must contact the Quality Assurance Officer (QAO) and discuss available options to correct or rectify the situation. The QAO will have final authority on decisions made for correcting or rectifying problems.</p> <p>ii. Quality assurance reports will be prepared annually by the QAO and will include a detailed report of data precision, accuracy, and completeness for each type of analysis. Included in the final laboratory report will be a summary of the practices used to assess data precision, accuracy, and completeness. The QAO will review and approve these reports and include results of performance and system audits, and corrective actions that have occurred.</p> <p>iii. All significant quality assurance problems will be reported to the QAO as soon as possible along with recommendations for corrective action.</p> <p>iv. Any changes in quality assurance procedures, analytical procedures, sampling locations and frequencies, etc., will be submitted in writing to the QAO for approval prior to implementation of the changes.</p>	<p>The following language has been added to Section 3.1.20 consistent with the California Site Investigation Work Plan:</p> <p>"The analytical data provided by the analytical laboratory (accredited under the California Environmental Laboratory Accreditation Program) will undergo quality control checks for useability, then uploaded to a database for use in the analysis and reporting process."</p> <p>Additionally, Jacobs' internal, project-specific Quality Assurance Project Plan will be followed. All analytical data from the laboratory will be validated and evaluated by a qualified project chemist for quality assurance/quality control purposes. The results of the data validation and evaluation will be summarized in a Data Validation Report(s) that will be included in the California and Oregon Soil Removal Action Plans. This is the same process as was done for the California and Oregon Site Investigation Reports.</p> <p>The same language has been added to the Oregon Soil Removal Action Plan.</p>
CA-5	KT	Soil Removal Action Plan for California	Page 3-7, Section 3.1.17, Backfilling and Site Restoration	<p>It is unclear how habitat restoration will be conducted following excavation. The work site should be revegetated with native plants to restore the habitat and to prevent erosion of bare soils/backfill. Please include a description of the habitat restoration methods to be implemented, including seed mix and success criteria, to be used following habitat disturbance associated with the remediation. The habitat restoration plan should be submitted to the regulatory agencies for review and approval prior to implementation. We agree that the Iron Gate Shooting Range need only be stabilized to prevent erosion and dust in the most cost effective manner until KRRC places spoils on the site.</p>	<p>The work sites will be restored and stabilized in accordance with the requirements of the Stormwater Pollution Prevention Plan. This will include backfill and seeding with a native seed mix. The last bullet in Section 3.1.21, Backfilling and Site Restoration, has been modified to read as follows:</p> <ul style="list-style-type: none"> ▪ If required, topsoil will be placed over backfilled areas and prepared for seeding. A commercially available native seed mix will be used for site restoration.

* KT = Kevin Takei/California Department of Fish and Wildlife

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>Klamath River Renewal Corporation (Comments on the Soil Removal Action Plans for California and Oregon)</i>					
KRRC-General-1	LL	General Comment		All hazardous wastes are to be reported under PacifiCorp's EPA ID number	Acknowledged. In part, Section 3.1.11, Transportation Plan, now reads as follows: "Hazardous impacted soil identified for offsite disposal will be transported under a hazardous waste manifest with a PacifiCorp EPA Identification Number to an appropriate disposal facility." The same edit has been made to the Oregon Soil Removal Action Plan.
KRRC-General-2	LL	General Comment		Summaries of previously reviewed documents or materials are subject to such documents or materials in their entirety	Acknowledged. No changes necessary.
KRRC-General 3	LL	General Comment		Statements of future actions (e.g., closure determinations) remain subject to such facts and circumstances as may be known at the time in question	Acknowledged. No changes necessary.
KRRC-General 4	LL	General Comment		Removal activities are subject to coordination with KRRC	Acknowledged. PacifiCorp, Jacobs, and the KRRC's demolition contractors met on June 26 and July 12, 2023, to discuss project specifics. Additional meetings will be held per the Site Coordination Plan (see Comment CA-2 and Section 3.1.19).
KRRC-General 5	LL	General Comment		Removal Action Completion Reports (Section 3.2 in each plan): <ul style="list-style-type: none"> ▪ Should also include a narrative description of the work performed at each site, including a description and explanation of any unexpected findings and any deviations from the original plan. ▪ Any official correspondence, governmental sign-offs, closure letters received from federal/state/local agencies or similar communications should be included as an appendix to the Report. 	The first bullet of Section 3.2, Removal Action Completion Report, now reads as follows: <ul style="list-style-type: none"> ▪ A narrative describing the work performed at each site, including an explanation of unexpected findings and required deviations from the original plan. The last bullet of Section 3.2 now reads as follows: <ul style="list-style-type: none"> ▪ Official correspondence, governmental sign-offs, closure letters received from federal, state, and local agencies, or similar communications to be included as an appendix to the report. The same edits have been made to the Oregon Soil Removal Action Plan.
KRRC-General 6	LL	General Comment		KRRC adopts such additional comments as either of the States may have.	Acknowledged. No changes necessary.
KRRC-1	LL	Soil Removal Action Plan for Oregon		No substantive comments. (A couple of typos that I'll send you separately.) [See below.] <ul style="list-style-type: none"> ▪ Section 3.1.3 - 1st bullet: "will approval" should probably be "will approve" ▪ Section 3.2 – 1st sentence: "... prepared to document that the soil removal activities that were performed ...". Delete the highlighted "that"? 	Acknowledged and received. Typos corrected.
KRRC-2	LL	Soil Removal Action Plan for California		No substantive comments on sites other than the wood-stave penstock.	Acknowledged. No changes necessary.
KRRC-3	LL	Soil Removal Action Plan for California	Wood-Stave Penstock	Regarding the wood-stave penstock: What is the reasoning behind only excavating the wood-stave penstock site to a depth of 1 [foot] bgs?	Per the California SI Report, pentachlorophenol and various polynuclear aromatic hydrocarbon (PAHs) [i.e., benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene] were identified in concentrations greater than acceptable

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
				<ul style="list-style-type: none"> ▪ Is this due to suspected proximity to bedrock or for a different reason? ▪ What level of confidence do we have that 1 [foot] bgs is sufficient to remove all soil contaminated with PCP from the penstock site? <p>This site is above standards for groundwater leaching to nondrinking water for pentachlorophenol (PCP) and is in close proximity to the river.</p>	<p>human health risk levels at soil borings C2WS-02, C2WS-04, C2WS-05, C2WS-06, C2WS-07, C2WS-08, C2WS-13, C2WS-14, C2WS-15, and C2WS-16 (Table D-2 of the CA SI Report).</p> <p>At soil borings C2WS-02, C2WS-04, C2WS-07, C2WS-08, and C2WS-14, unacceptable human health risk levels were identified in soil samples collected from surface grade to a depth of 0.5 foot bgs. Consequently, soil in the vicinity of these borings will be excavated to a depth of 1 foot bgs, and then confirmation soil samples will be collected to confirm that COCs are no longer present at concentrations greater than acceptable human health risk levels. If COCs are detected at concentrations greater than acceptable human health risk levels, over-excavation will be performed, where required and where possible (i.e., when not obstructed due to the presence of bedrock or boulders).</p> <p>At soil borings C2WS-05, C2WS-06, C2WS-13, C2WS-15, and C2WS-16, unacceptable human health risk levels were identified in soil samples collected at depths ranging from 0.5 foot to 1.5 feet bgs (borings C2WS-05, C2WS-06, and C2WS-16), 1.5 to 2.5 feet bgs (boring C2WS-15), and 2.0 to 3.0 feet bgs (boring C2WS-13). It is assumed that rocks and boulders will prevent significant over-excavation in the immediate vicinity of these borings. It is also assumed that the analytical results from confirmation sampling will demonstrate that COCs are no longer present at concentrations above acceptable human health risk levels. If COCs are detected at concentrations greater than acceptable human health risk levels, over-excavation will be performed, where required and where possible (i.e., unobstructed by bedrock or boulders).</p> <p>Figure 4-1 has been revised and Section 4.2 has been reworded as follows: "The following site-specific removal actions will be performed at the penstock with the understanding that boulders, bedrock, or both, may limit the vertical and lateral extents of the excavation:</p> <ul style="list-style-type: none"> ▪ Excavate an approximate 50,000-square-foot area to a minimum depth of 1 foot bgs, or refusal (Figure 4-1). ▪ Based on an evaluation of analytical and risk assessment data from former soil borings C2WS-05, C2WS-06, and C2WS-16 (Jacobs 2023b), excavate an approximate 50- by 50-foot area at Locations 2, 3, and 5 to a depth of 3 feet bgs or refusal (Figure 4-1). ▪ Based on an evaluation of analytical and risk assessment data from former soil boring C2WS-15 (Jacobs 2023b), excavate an approximate 50- by 50-foot area at Location 4 to a depth of 4 feet bgs or refusal (Figure 4-1). ▪ Based on an evaluation of analytical and risk assessment data from former soil boring C2WS-13 (Jacobs 2023b), excavate an approximate 50- by 50-foot area at Location 1 to a depth of 4.5 feet bgs or refusal (Figure 4-1). ▪ Where the initial excavation depth is 1 foot bgs, collect confirmation soil samples along the northern and southern sidewalls. The sidewall samples will be spaced approximately 50 feet apart and will represent soil from ground surface to the bottom of the excavation. Also collect confirmation soil samples from the excavation floor. The floor samples will be spaced approximately 50 feet apart (Figure 4-1; Table 4-1).

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
					<ul style="list-style-type: none"> ▪ Where the initial excavation depths are 3, 4, or 4.5 feet bgs, collect one confirmation soil sample from the excavation floor. ▪ Where the initial excavation depths are 3, 4, or 4.5 feet bgs, collect confirmation soil samples from each excavation sidewall. Collect two soil samples from the respective northern and southern sidewalls of these deeper excavation areas. One sidewall sample will represent soil from ground surface to the midpoint of the excavation, and one sidewall sample will represent soil from the midpoint to the bottom of the excavation. Soil samples from the eastern and western sidewalls will represent soil from 1 foot bgs to the bottom of the excavation. ▪ Analyze the soil samples for pentachlorophenol and the following PAHs: benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene (Table 4-1). ▪ Upon confirmation that impacted soil has been removed, backfill and restore the site per Section 3.1.21.
KRRC-4	LL	Soil Removal Action Plan for California	Section 4.0	<p>[Section] 6.7 of CA SIR states: "Additional investigation at this site following removal of the penstock may be warranted to refine the preliminary excavation area (Figure 6-2)."</p> <ul style="list-style-type: none"> ▪ This appears to have been omitted from Section 4 of the California Soil Removal Action Plan. ▪ Will additional investigations at this site be performed prior to the start of excavation to determine the extent of PCP contamination and refine the preliminary excavation area? ▪ The SIR noted issues with investigative shovel probes at the penstock due to the presence of groundwater in the soil (suspected to be the result of the leaking penstock). 	<p>Additional investigation following removal of the penstock is no longer considered warranted given the overall dam removal and cleanup schedules. PacifiCorp has opted to excavate the area indicated (see Figure 4-1) and properly dispose of the soil offsite rather than iteratively perform additional site investigations with risk assessments and report review cycles. Consequently, the soil removal action will be performed as described in Section 4 of the California Soil Removal Action Plan. Over-excavation and confirmation sampling will also be performed, where required (see Comment KRRC-3 and Section 4.2).</p> <p>No additional changes are necessary.</p>

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
KRRC-5	LL	Soil Removal Action Plans for California and Oregon	As indicated in bulleted comment	<p>We'd like some clarification that PacifiCorp, Jacobs and their contractors will act in a manner that is consistent with KRRC's management plans (e.g., transportation, historic properties, etc.). For example:</p> <ul style="list-style-type: none"> Section 3.1.2 of the SRAP for each State refers to designated routes, staging and storage areas but does indicate that these will be as provided for in KRRC's transportation plan Section 3.1.3 of the SRAP for each State refers to archeological monitoring but does not make clear that any such monitoring must be coordinated with KRRC's cultural resources team Section 3.1.17 of the SRAP for each State refers to a Health and Safety Plan but does not make clear whether this will be KRRC's plan or one developed by Jacobs? If the latter then it must be consistent with KRRC's (See also the "Injuries or Accidents" Section of Table 3-1) The last box in Table 3-1 of the SRAP for each State refers to the unexpected discovery of cultural resources. Again we'd like clarity as noted regarding Section 3.1.3 above. In addition, there's reference to an Inadvertent Discovery Plan that will apply if cultural resources are unexpectedly encountered – again, we'd like better clarity on whether this be KRRC's plan or one developed by Jacobs? If the latter then it must be consistent with KRRC's 	<p>PacifiCorp has been in close coordination with the onsite KRRC team as this removal plan has been developed and will continue to work with the KRRC's team as it is implemented; however, PacifiCorp is relying on the KRRC's team, through these comment periods, to identify areas of substantive conflict between the removal plans and the dam removal management plans. To date, no areas of conflict have been identified by the KRRC. Should an issue or conflict develop during implementation, PacifiCorp will work through that issue with the KRRC team. Responses for each bullet are provided as follows:</p> <ul style="list-style-type: none"> Staging and storage areas are specific to the removal action work and removal contractor needs. These areas have been identified in coordination with the KRRC team onsite (McMillen and Kiewit) and will continue to be coordinated through the execution of the work as indicated in Section 3.1.19, Site Coordination Plan. No additional changes are necessary. The following text has been added to Section 3.1.3: <i>"Should cultural monitoring result in the inadvertent discovery of culturally sensitive resources, the Jacobs team will notify the KRRC's cultural resources team."</i> The text in Section 3.1.17 and Table 3-1, Injuries and Accidents row (Table 3-2 in the California RAP) has been modified to clarify that Jacobs prepared the subject Health and Safety Plans. Table 3-1 (Table 3-2 in the California RAP), Discovery of Cultural Resources or Human Remains, has been updated to indicate that cultural monitoring will be performed by Jacobs. This section already refers to the PacifiCorp's Inadvertent Discovery Plan and coordination with the KRRC's cultural resource team.
KRRC-6	LL	Soil Removal Action Plans for California and Oregon	Section 2, Risk Assessment Summary and Cleanup Goal	<p>We'd like some clarification on risk management and contingency planning as follows:</p> <ul style="list-style-type: none"> Any incident that could lead to a claim affecting KRRC should be promptly reported to KRRC with appropriate reports to follow 	<p>This text has been added to Table 3-1 (Table 3-2 in the California RAP), Contingency Planning for Work Associated with Cleanup of Project Sites.</p>
KRRC-General 7	LL	General		<p>We incorporate any further comments either of the States may have.</p>	<p>Acknowledged. PacifiCorp recognizes that this line duplicates KRRC-General 6. The same comment was received twice and is included here for completeness. No changes necessary.</p>

* LL = Lloyd Lowy

COMMENT MATRIX for the Stakeholder Review Draft Dated June 2023
Lower Klamath Hydroelectric Project Soil Removal Action Plans for California and Oregon
FERC No. P-14803
September 2023

No.	Reviewer Initials*	Item Under Review	Section and Page No. / DWG No.	Comment	Response to Comment
<i>Oregon Department of Justice (Comments on the Soil Removal Action Plan for Oregon)</i>					
OR-1	CM	General Comment		<p>As you know, any such comments are not to be construed in any way as an Oregon approval regarding remediation process – all such work must be completed by PacifiCorp as per the relevant property transfer agreements and related agreements notwithstanding any communications as to the process.</p> <p>With that said, we continue to note that your plan makes no mention of any cultural resource monitoring and inadvertent discovery plan. By separate email you have indicated that such plans will be in place. Please confirm. Also, the plan for water for dust abatement will likely require hauling from offsite and/or an OWRD permit for any local pumping.</p>	<p>The cleanup locations have all been reviewed in relation to the potential for cultural resources to be present. Some sites have been precleared and will require no cultural resources monitoring. Others are in proximity to known cultural sites and will require monitoring during cleanup. Regardless of the presence of monitors, PacifiCorp's inadvertent discovery plan will remain in place for all work.</p> <p>Section 3.1.3, Cultural Resources has been added to the Oregon Soil Removal Action Plan.</p> <p>Given the limited amount of work and relatively small work areas in Oregon, water for dust control is not expected to be necessary. If it is necessary, water will either be obtained via permit from the Oregon Water Resources Department or from PacifiCorp's J.C. Boyle Development per an existing water right.</p>

* CM = Chris Matthews